

DOCUMENT RESUME

ED 366 422

PS 021 927

TITLE ECEAP Longitudinal Study and Annual Report 1992: An Evaluation of Child and Family Development through Comprehensive Preschool Services.

INSTITUTION Northwest Regional Educational Lab., Portland, Oreg.

SPONS AGENCY Washington State Dept. of Community Development, Olympia.

PUB DATE Apr 93

CONTRACT 3-92-334001

NOTE 54p.

PUB TYPE Reports - Evaluative/Feasibility (142) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.

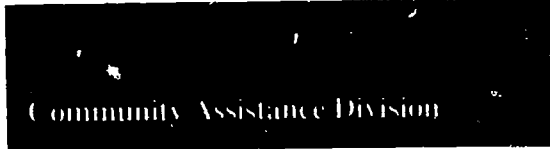
DESCRIPTORS Annual Reports; *At Risk Persons; Child Development; Child Health; Child Welfare; *Early Intervention; *Family Programs; Longitudinal Studies; Parent Child Relationship; Parent Participation; *Preschool Children; *Preschool Education; Program Effectiveness; Program Evaluation; State Programs

IDENTIFIERS *Early Childhood Education and Assistance Prog WA

ABSTRACT

The Early Childhood Education and Assistance Program (ECEAP) provides 4-year-old children from low-income families with a comprehensive preschool experience that emphasizes their developmental, health, and nutritional needs, involves their parents, and responds to their family's social service needs. This annual report on the ECEAP discusses the development and implementation of the program and measures children's performance over time in four key areas: (1) cognitive and physical development; (2) social and emotional well-being; (3) health and nutrition; and (4) family well-being and empowerment. Results are compared with those of children who do not participate in the ECEAP, showing that participation in ECEAP has a strong, positive impact on children. Two appendixes list the names, addresses, and telephone numbers of ECEAP advisory committee members and contractors. (MDM)

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1992 ECEAP Longitudinal Study and Annual Report

An Evaluation of Child and Family Development Through Comprehensive Preschool Services

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1992 ECEAP Longitudinal Study and Annual Report

An Evaluation of Child and Family Development Through Comprehensive Preschool Services

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April 1993

Credits

The Early Childhood Education and Assistance Program (ECEAP) Longitudinal Study is a community effort. Thirty-two local ECEAP contractors and their staff and hundreds of elementary school administrators, teachers, and support staff collect data on children and families participating in the study. They often go to great lengths to locate and interview families each year. The individuals who conduct the data collection take on this extra responsibility in order to ensure that Washington State documents the success of this comprehensive family and child school readiness program. Their assistance is crucial and very much appreciated.

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Highlights of ECEAP Longitudinal Study Findings

The Early Childhood Education and Assistance Program (ECEAP) provides low-income four-year-old children with a comprehensive preschool experience which pays particular attention to their developmental, health, and nutritional needs, involves their parents, and responds to their family's social service needs. A legislatively mandated evaluation of ECEAP, now in its fourth year, indicates that participation in ECEAP has a strong, positive impact on children. Highlights of study findings to date include:

- Children's language skills, conceptual abilities, motor skills, and receptive vocabulary improved dramatically. In three areas—language, concepts, and motor skills—ECEAP children's development surpassed the national average for their age group.
- The strongest gains in cognitive and physical development were made by children whose parents were working or planning to pursue more education; whose parents participated in their child's preschool experience; and whose parents expected their child to complete high school or a higher education program.
- At the start of kindergarten, ECEAP children had significantly higher language, concepts, and motor scores than peers who had not participated in a comprehensive preschool program and who come from significantly more advantaged homes.
- Teachers observed that children made significant gains in motivation/achievement during their participation in ECEAP. Parents reported that, during their ECEAP year, children's maturity increased significantly and insecurity, shyness, and difficult behaviors decreased significantly.
- ECEAP parents reported that nearly 40 percent of their children's health and developmental problems were identified by ECEAP staff rather than by other health professionals, family members, or family friends.
- ECEAP parents reported that the adequacy of their health and dental resources improved significantly during their participation in the program.
- More ECEAP parents than parents of a peer group took their child to a doctor or dentist for a check-up, even though both groups had similar rates of reported health and developmental problems.
- ECEAP parents felt they had the necessary skills to help their child, and that they had control over their child's education, more so than did the parents of a peer group.
- ECEAP parents reported that they participated in meetings, classes, or conferences intended to help them support their child's growth and education at a significantly greater rate than the parents of a peer group.

Further discussion of these and other results from the first four years of the ECEAP Longitudinal Study can be found in this report and previous study reports available from the Washington State Department of Community Development.

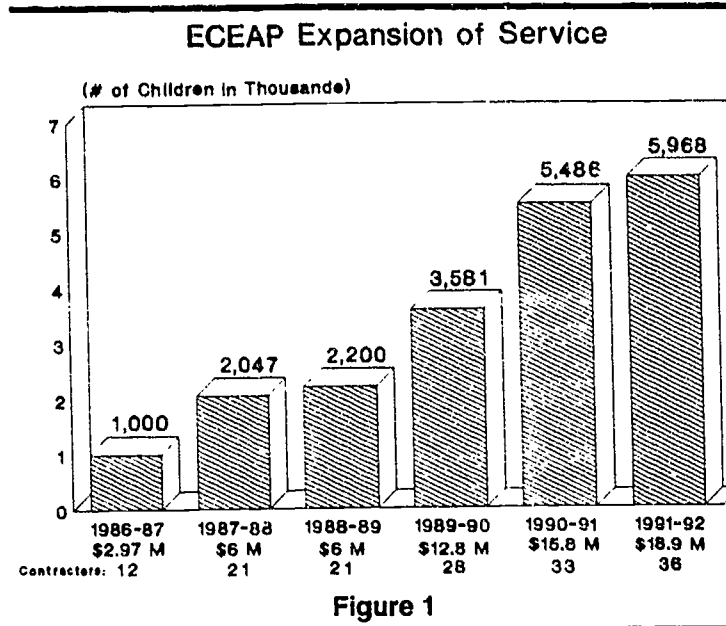
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ECEAP: Program and Highlights

In 1985, the State of Washington began building a statewide system of comprehensive early childhood education and assistance services to support the healthy development and future success of Washington's less advantaged children. The state's investment in a community-based, family-centered, comprehensive preschool program, called the Early Childhood Education and Assistance Program (ECEAP), is expected to have immediate and long-term benefits for program participants as well as for the state.

ECEAP has rapidly expanded in its first six years, and is now, together with Head Start, serving nearly all income-eligible four-year-olds in the state. The number of children enrolled in ECEAP has increased six-fold, from 1,000 in 1986-87 to nearly 6,000 in 1991-92 (see Figure 1). In all, ECEAP has served over 20,000 children and families and will expand to serve nearly 6,800 per year starting in the 1992-93 program year. ECEAP's 36 contractors are currently operating over 180 program sites across the state, offering assistance to children and families in every county.



This report describes the ECEAP program and highlights findings from an ongoing longitudinal study which examines ECEAP's effectiveness for children and families.

ECEAP Philosophy

ECEAP's approach is based on the following principles:

- a young child can benefit substantially from a comprehensive preschool program that fosters development, identifies and remedies health and developmental problems, and increases skills in preparation for success in school;
- a child's family is the primary contributor to the child's development and progress;
- access to community resources designed to support the child's development and learning, as well as the family's well-being, should be maximized; and
- low-income children, in particular, should have the opportunity to counteract the toll poverty takes on them and their families.

The ECEAP Program

ECEAP is a "whole-child," comprehensive, family-focused preschool program designed to help low-income children prepare for and succeed in the public school system and to assist families in supporting and participating in their children's success. ECEAP staff, community leaders, and parents collaborate to define and develop programs that are most appropriate for the children and families living in their community.

Because many factors affect a child's ability to learn and develop normally, ECEAP is comprised of four interactive components: education, health and nutrition, parent involvement, and social services.

Education. Children are prepared for entry into school through a developmentally appropriate learning environment that: (1) fosters intellectual, social, physical, and emotional growth; (2) emphasizes early identification of and intervention in problems interfering with learning; and (3) eases the transition from preschool to the public school system. Local ECEAP providers develop and select a developmentally based curriculum that incorporates readiness skills (such as recognition of numbers, shapes, and colors); language skills; gross and fine motor skills; social-emotional and self-concept development; and age-appropriate health, nutrition, and personal safety education. Additionally, field trips and visitors to the program broaden children's awareness and understanding of the community in which they live.

Cultural awareness and ethnic pride are actively promoted and integrated within ECEAP's educational component. When a majority of children speak a common language other than English, at least one teacher or aide who speaks that language actively participates in group and center experiences. In cases where a few children or one child speaks a different language, then one adult, often a community resource person or volunteer, works closely with the children or child.

"ECEAP allowed [my son] to go to school, be with others his age, make friends, learn, and feel good about himself. The program really made a difference in adjusting him to the idea of school and making him more prepared for kindergarten."

—ECEAP parent

In general, ECEAP providers strive to expose all children to new ideas, concepts, and experiences and create in all children an excitement for discovery and learning.

Health and Nutrition. ECEAP conducts or provides for health screenings within the first 90 days of a child's enrollment in the program. Medical, dental, mental health, and the nutritional needs of each child are

evaluated. ECEAP's remediation of problems identified through the screenings includes referral to community services, identification of community resources, and/or provision of services or funds as a last resort.

ECEAP health staff assist in bringing children up to date on immunizations against certain vaccine-preventable diseases. ECEAP staff have found that two out of five children have not received all of the immunizations they need by the time they are of age to enroll in ECEAP.

In areas where fluoride is not available through the drinking water, ECEAP arranges for fluoride treatments to be provided to children whose parents grant their consent. Nearly 40 percent of the children who began participating in the longitudinal study last year received fluoride treatments through ECEAP.

Few factors in a child's physical and mental development are as critical as adequate nutrition. All children in ECEAP receive at least one meal a day during the time when they are assembled in a classroom setting. Meals and snacks for children are designed to satisfy the minimum daily requirements of as many nutritional elements as possible, and careful attention is paid to the nutritional needs of young children in the context of their culture when planning the menus. Education about good nutrition is included in the curriculum to encourage life-long healthy eating habits.

Parent Involvement. Recognized as the primary source of educational instruction and motivation for their children, parents are directly involved with children in the classroom and during home visits. ECEAP provides opportunities for parenting skills training and support group participation based on the needs expressed by parents. Parents are also encouraged to be involved in local program decision making through their program's parent-run policy council and the committees their council forms to work on specific issues.

Social Services. ECEAP's commitment to family empowerment is expressed in part through the assistance staff provide to families in accessing social services or programs they need or in reducing or eliminating assistance they no longer need. ECEAP's family service staff work with families to assess their needs when they enroll in the program. In response to the needs and concerns that are identified, ECEAP staff assist families in locating and accessing community resources and provide awareness and educational training opportunities throughout the year. Collaborative arrangements with, and in-kind contributions from, various service providers and community organizations enable ECEAP staff to link families to a network of support.

"ECEAP's given me great insight on parenting and the importance of parental involvement in children's education."

—ECEAP parent

"ECEAP defined the areas that my daughter needed help with. Parents have a general idea of what might be wrong with their child, but don't always know what they need to do to correct it. This program gives parents a focus."

—ECEAP parent

of ECEAP, state agencies, and community service providers. Local, state, and federal dollars are combined to cover staff salaries and benefits, facilities, equipment and materials, services, transportation, and other costs. The average statewide per child reimbursement rate during the 1991-92 program year was \$3,434. This expenditure during a child's early years compares favorably to what Washington taxpayers spend on every child who is retained (\$2,546 per grade), who requires special education (up

to \$8,828 per year), or who drops out of school before graduation (as much as \$200,000 in lost taxes, welfare, and criminal justice expenditures).

State Leadership and Local Implementation

ECEAP is managed by the Community Assistance Division of the State Department of Community Development and operates locally through many types of organizations, including school districts, educational service districts, local government agencies, nonprofit organizations, child care providers, tribal organizations, and community colleges. ECEAP has evolved into an increasingly community-focused and needs-driven family service. From the outset, local flexibility in program design has been encouraged within the basic program requirements, such as a 32-week program year. Contractors must meet the established ECEAP program standards, but great flexibility in how they are met is encouraged to enable the development of programs that are responsive to children's and families' needs. Three program organizational structures, designated as "center-based," "home-based," and "locally designed," describe most current local ECEAP delivery models.

Center-based ECEAP programs provide children and families with:

- at least ten hours per week of group programming spread over three or more days;
- at least one and one-half hours of staff and parent contact time per month; and
- a home visit with the child's family at least twice a year to facilitate education.

Home-based ECEAP programs provide:

- an emphasis on training parents to be effective educators;

ECEAP Program Options
(N = 5,968 Children)

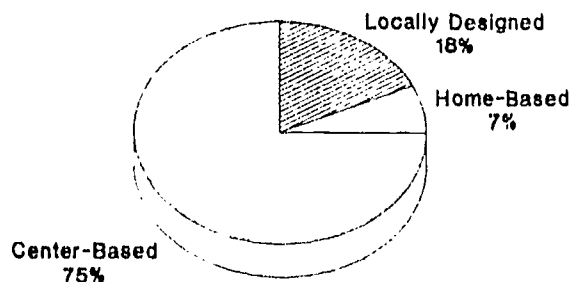


Figure 2

- weekly 90-minute visits during which staff members train and encourage parents to teach their children; and
- a weekly peer group experience for children.

Locally designed ECEAP programs provide:

- the opportunity for a community to design a program around its unique needs; and
- combinations of elements of center-based and home-based options or a weekly schedule that differs from the typical center-based program.

Figure 2 displays the percentages of children and families participating in center-based, home-based, and locally designed programs during the 1991-92 program year.

ECEAP Children and Families

An ECEAP child is typically four years of age, expected to enter kindergarten the following year, and from a family whose income during the last 12 months has been at or below the federal poverty level. The broad intent of ECEAP, to provide enhanced learning opportunities for children at risk of school failure, allows local programs to fill up to 10 percent of their enrollment with children who are at risk for such reasons as neglect, abuse, or disabling conditions, regardless of family income. In addition, one of every 10 ECEAP enrollment slots statewide is targeted to Native Americans and the children of migrant and seasonal farmworkers, since both populations currently have especially limited access to developmental and social services.

Enrollment data indicate that ECEAP serves a diverse group of children and families. The following figures profile the diversity of children and families enrolled during the 1991-92 program year. Percentages are based on the total number of children and families enrolled during this time (N = 5,968).

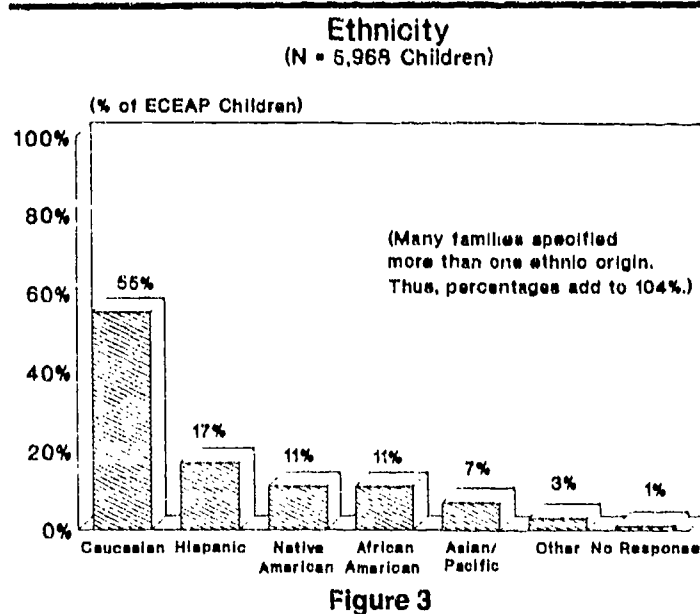
Ethnic Diversity. Although children of color currently comprise less than 15 percent of all of Washington's children, African American, Alaskan Native, Asian, Hispanic, Native American, Pacific Islander, and other minority ethnicities were represented by 49 percent of the children who were enrolled in ECEAP during the 1991-92 program year. As Figure 3 shows, 55 percent of ECEAP children enrolled during this year were Caucasian.

Primary Language. Although 86 percent of ECEAP children enrolled during the 1991-92 program year used English as their primary language, the diversity of primary languages spoken among ECEAP children is wide-ranging. Nine percent of the children spoke Spanish primarily and three percent spoke Asian languages primarily, including Cambodian, Chinese, Japanese,

Korean, Laotian, and Vietnamese. Eleven other primary languages were reported, though in smaller percentages, including Arabic, Armenian, Ethiopian, French, German, Native American languages, Polish, Romanian, Russian, Samoan, and Tagalog.

Family Configuration. Figure 4 shows that half of the ECEAP children enrolled during the 1991-92 program year were living with their mothers only and an additional two percent were living with their fathers only. Just over 44 percent lived with two parents (both biological parents or one biological parent and a step-parent).

At the time of enrollment, interviews with families participating in the ECEAP Longitudinal Study indicated that less than half of the study children had been in the same living arrangement since birth. Subsequent interviews with these families indicated that



Family Configuration (N = 5,968 Families)

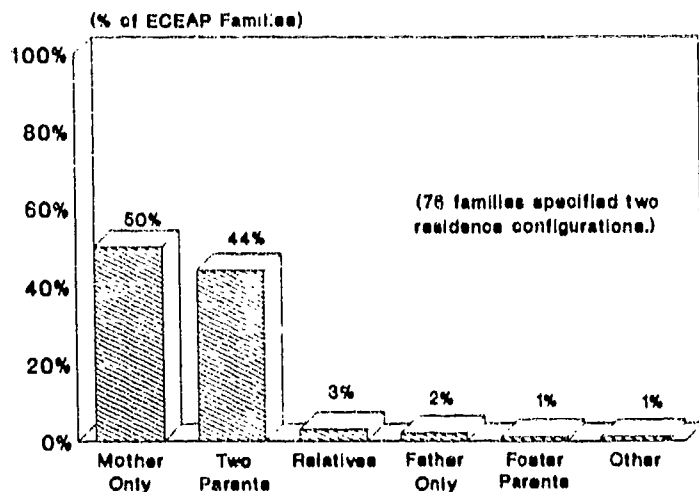


Figure 4

Parents' Education

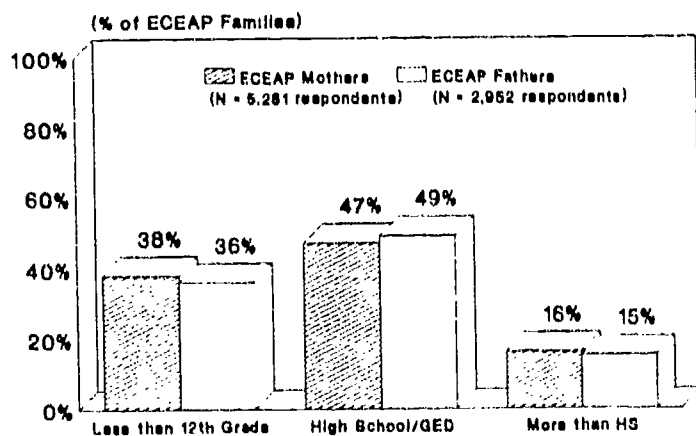


Figure 5

16 percent of the study children had experienced a change in their living arrangement during the course of their time in ECEAP (approximately six months).

Parents' Education. Figure 5 displays the education levels attained by ECEAP parents. During the 1991-92 program year, 38 percent of ECEAP mothers who responded, and 36 percent of ECEAP fathers who responded, reported that they did not have a high school diploma or a general equivalency degree (GED). Currently, the state average high school dropout rate is over 23 percent. Among parents who responded, 47 percent of ECEAP mothers and 49 percent of ECEAP fathers reported having completed 12 grades, while 16 percent of mothers and 15 percent of fathers indicated they had pursued education beyond high school, including community college, trade school, and four-year university programs.

Parents' Employment Status. Ten percent of the single mothers who participated in ECEAP this year were working outside the home, either full-time or part-time. Among families with two parents (both biological parents or one biological parent and a step-parent), nine percent of mothers and nineteen percent of fathers were working. Of those parents who were working, 67 percent were working full-time and 33 percent were working part-

time. For the 1991-92 program year, it is unknown how many unemployed parents were actively seeking work.

Family Income Sources. ECEAP families receive income from a variety of sources, including wages, public assistance, child support, social security, unemployment, and pension. While the majority of families report their incomes to be derived primarily from public assistance, increasing numbers of families enrolled in ECEAP are from the "working poor," i.e., working at jobs with wages that leave them with incomes below 100 percent of the federal poverty level. Figure 6 shows that, of the 5,968 families enrolled in ECEAP during the 1991-92 program year, 58 percent received public assistance and 39 percent were earning wages. Only six percent of families reported receiving child support. Four percent of families were receiving unemployment benefits, which meant someone had lost a job within the past year, and four percent were receiving social security benefits, which were typically related to disability.

Family Income Level. The eligibility standard for enrollment in ECEAP is 100 percent of the federal poverty level (\$13,950 annually for a family of four). While the 100 percent level is widely considered a minimal income given housing, transportation, health care, and child care costs, the average ECEAP family's income is well below the 100 percent allowable level (\$9,855 annually for a family of four). Figure 7 illustrates that for the last four years the average four-person ECEAP family has been living on an income 29 to 34 percent below the allowable standard. In the 1991-92 program year, an ECEAP family of four lived on \$821 per month (approximately 54 percent of families received food stamps and 67 percent of families received medical aid). This income level allowed families \$27 per day for housing, food, transportation, clothing, medical care, dental care, furniture, home heating and electricity, and miscellaneous items. If a family spends a standard 30 percent on housing, only \$19 per day remains for all other expenses. Low-income housing, however, is often unavailable and low-income families must pay up to half of their incomes for housing.

Family Stress. Interviews with 755 ECEAP families participating in the longitudinal study during their ECEAP year revealed the extent to which many of these families are experiencing personal and family stress. Significant life events, such as finding a new job, enrolling in school, getting married or divorced, having a baby, and moving—whether they are positive or negative experiences—can produce stress. Data regarding these changes provide some insight regarding the family environment, which may impact a child's development.

During a one-year period of time, the following family-related changes were reported: five percent of parents married, four percent of parents separated, three percent of parents divorced, two percent of parents reconciled their relationship, and four per-

Income Sources
(N = 5,968 Families)

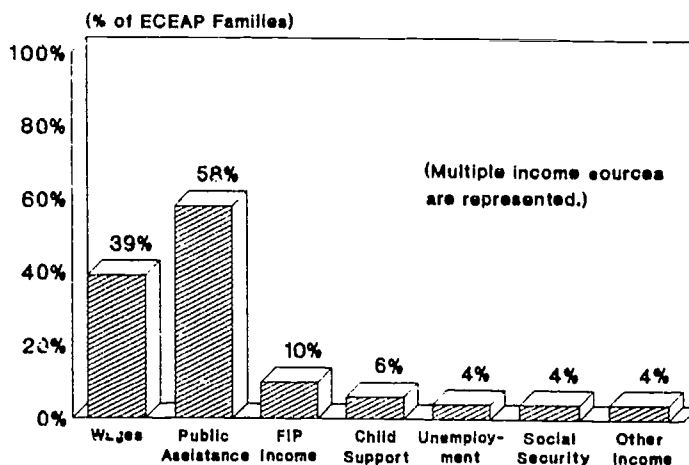


Figure 6

Annual Family Income For Four-Person Households

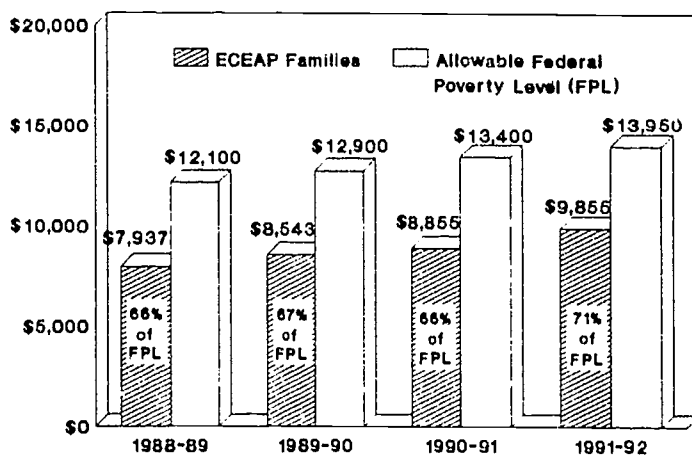


Figure 7

cent of parents started a relationship with a new partner. Nine percent of mothers became pregnant or had a baby. Someone moved into the household of seven percent of families, and someone moved out of the household of six percent of families.

Financial-related changes among the families interviewed included: 10 percent reported finding a new job, three percent reported receiving a promotion or raise, and eight percent reported losing their job. Six percent of families indicated that they had experienced a large reduction in their income, and seven percent indicated they had experienced a financial crisis of some kind.

Nearly nine percent of families reported moving to a better place, while six percent of families reported having a housing problem. A car was purchased by 10 percent of the families interviewed. Five percent of families indicated they had dealt with law enforcement, five percent reported experiencing a custody problem, and two percent reported experiencing child abuse. Among nine percent of families, serious illness occurred or a major medical treatment was needed, and among five percent of families, a major accident or injury occurred. Four percent of families reported substance abuse problems or treatment. Nine percent of families reported receiving some form of counseling or therapy.

Stress can be involved in many families' day-to-day arrangements and experiences, as well, particularly those related to work and school. Among families participating in the ECEAP Longitudinal Study, nearly 28 percent of ECEAP mothers and nearly 43 percent of ECEAP fathers were working outside their homes in the fall of the year they were enrolled in ECEAP. At that time, nearly 17 percent of ECEAP mothers and seven percent of ECEAP fathers were enrolled in schools or training programs. Similar percentages of ECEAP mothers and fathers indicated they were working or involved in education programs in the spring of the year they participated in ECEAP.

Attrition from the Program

Slightly over 26 percent of the ECEAP children and families enrolled during 1991-92 (N = 1,213) left the program before the end of the program year. Most frequently, families moved to another community or state. To a much lesser extent, families transferred their children to another program, often more specialized, or left because of personal reasons or family changes. In almost all cases, vacancies created by early exits were filled with new enrollees.

Highlights of the 1991-92 Program Year

Expansion of ECEAP Services. During the 1991 legislative session, the Governor and Legislature supported a significant expansion of ECEAP. Services were expanded to enroll an additional 620 children in January 1992. Further expansion of ECEAP in September 1992, in tandem with an expansion of Head Start, brought comprehensive preschool services to the vast majority of income-eligible four-year-old children in Washington. DCD currently expects that 95 percent of income-eligible children will be served by either ECEAP or Head Start in the 1992-93 program year. Reaching the goal of full service is dependent upon DCD's success in capturing federal funds to augment state funds.

Federal Funds. The 1991 Legislature appropriated \$8.7 million in federal funds for ECEAP during the 1991-93 Biennium. These consist of \$6.2 million in newly created

Child Care and Development Block Grant (CCDBG) funds, and \$2.5 million in Title IV-A Child Care funds. This is the first biennium that federal funds have been appropriated for ECEAP.

Both of these funding sources are available to the state on a per child basis for the number of children served by ECEAP who are eligible for federal funds. Given that the eligibility requirements for these funds are much more strict than the eligibility guidelines for ECEAP, only a small percentage of the children served by ECEAP are eligible for federal reimbursement.

DCD predicts that it will serve enough CCDBG funds-eligible families to capture the full \$6.2 million that was appropriated. However, Title IV-A funds are more difficult to secure. As mentioned above, DCD can only be reimbursed for a small percentage of ECEAP children who are eligible for federal funds. Annually, the department will capture less than \$400 in Title IV-A funds per eligible child, while services actually cost an average of \$3,434 per child. Documentation of the Title IV-A eligibility status of ECEAP children is extensive for contractors, DCD, and the Department of Social and Health Services. DCD currently projects that less than \$1 million (of \$2.5 million) in Title IV-A Child Care funds can be captured for ECEAP during the 1991-93 Biennium.

Increase in the 1991-93 Statewide Average Cost Per Child. In negotiations with local ECEAP contractors, the Office of Financial Management and DCD agreed to increase the statewide average per child reimbursement by \$430 over the course of the 1991-93 Biennium.

During the 1991-92 program year, a \$314 per child increase was granted (a nine percent increase). The statewide average cost per child totaled \$3,434 and included \$111 per child in funds specifically allocated to quality improvements, facilities and transportation expenditures, and equipment purchases. The 1992-93 program year cost per child will total \$3,550 (including \$111 per child in quality improvement funds), representing an additional 3.3 percent increase.

Local contractors were in need of a reimbursement increase for several reasons. First, contractors have experienced significant increases in salary and benefit costs. Fifty-five percent of contractors are associated with school districts, educational service districts, local governments, and community colleges, which have mandatory salary and benefit increases. For instance, local ECEAP programs associated with school districts had to provide at least a 6 percent salary increase to their staff this year. Salaries and benefits comprise 74 percent of local contractor costs. Thus, any increase in these items has a large impact on their total budget.

Many other costs have been driven higher by inflation. ECEAP contractors are experiencing the same inflation as the rest of the state when purchasing equipment, facilities, insurance, transportation, and services. Facility costs are also rising as child-appropriate locations become more scarce with each increase in ECEAP and Head Start service levels. Transportation costs are increasing for much the same reason. Finally, as local ECEAP programs expand, they are reaching families living in more remote and isolated areas, where services are less available and costs are higher.

Statewide Parent Meeting. The second statewide meeting of ECEAP parents took place on May 11, 1992. Parents representing nearly all of the 36 local ECEAP contractors met to discuss how the program is working for their children and themselves and to share their vision for ECEAP's future. Parents were able to meet one another and

SERVING HOMELESS FAMILIES IN SEATTLE

Neighborhood House, a nonprofit agency in Seattle, provides a classroom for 18 homeless children four days a week for seven hours each day. As a result of the expansion of ECEAP during the 1991-92 program year, Neighborhood House is able to offer services year round. Children are provided with an environment which is stimulating, safe, and stable. They receive two meals per day, an educational program, dental and medical screenings, and special attention to their significant emotional needs. Families use the time their children are in ECEAP to make contact with community agencies and to look for housing and/or employment. Neighborhood House coordinates with other Seattle area ECEAP and Head Start programs to ensure that once their homeless families locate permanently, children are enrolled in a preschool on a first-priority basis.

discuss local challenges and new ideas for services to children and families. DCD was able to hear directly from parents about how ECEAP meets or does not meet their needs. While participants shared many ECEAP successes, they also identified challenges and areas for improvement and developed a number of innovative and creative solutions in response. Parents were encouraged to become leaders for other parents in their local programs and voice their ideas and concerns to local ECEAP directors and governing boards.

Homeless Programs. Local ECEAP programs have responded to one of society's greatest ills: homelessness. Several programs have designed ECEAP's comprehensive service model around services for homeless families with young children. These ECEAP programs often offer services year-round instead of the standard ECEAP model of nine months and for five days a week instead of three or four. Young children of all ages are served instead of primarily four-year-olds. Families require intensive social services; children need educational programming that allows more one-on-one time with teachers, a curriculum altered to address the short time frame that children will be enrolled, and teachers who plan on long-term employ-

ment with the program (it is particularly difficult on homeless children when a teacher leaves). During the 1991-92 program year, approximately 148 homeless families were enrolled in ECEAP. Services to homeless families are currently provided in Clark, King, Pierce, and Snohomish counties.

Child Care Integration. The expansion of ECEAP during the 1991-92 program year provided the means to reach low-income families and children who were previously unable to access ECEAP's comprehensive services because of their need for full-time child care. Due to work or school schedules, parents could not manage shuttling their children from a part-day ECEAP site to a child care facility. Local ECEAP programs have teamed up with family day care homes and child care centers to make it possible for these children to receive a preschool education before transitioning to school.

Child care integration arrangements start with an agreement defined by the local ECEAP program and family day care home or child care center. All low-income four-year-old children in the home/center are officially "enrolled" in ECEAP. These children receive developmentally appropriate education as well as developmental, medical, and dental screenings; their parents receive social services assessments and referrals, parent involvement opportunities and parent skills training; and the family receives assistance in remediating any developmental delays or health problems identified by the child screenings. Simultaneously, the home/center begins to benefit from the edu-

A VARIETY OF CHILD CARE INTEGRATION MODELS

Child care integrated ECEAP programs have been developed in Clark, King, Pierce, and Snohomish counties. Sites offer high quality services to low-income children and families not otherwise reached by ECEAP, while enhancing existing center and family day care programs for the benefit of all the children.

Puget Sound Educational Service District (ESD), the largest ECEAP contractor, has several programs integrated with child care centers or family day care homes, including sites at Bates Technical College, Tacoma Community College, and Sunrise Child Care Center, a private nonprofit center in Tacoma's Hilltop neighborhood. Metropolitan Development Council, another subcontractor of the ESD, began their family day care integration with expansion funds in January, 1992. This program started with five family day care homes, enrolling 12 ECEAP children but impacting 85 children, since all children in the day care setting benefit from ECEAP involvement. An ECEAP educator visits each family day care home weekly to carry out curriculum activities with the children and plan with the family day care provider. Curriculum kits developed around weekly themes are left at the home after each visit with a set of sample lesson plans for the family day care provider to use. Parent training is available for all 85 families whose children are receiving care in the homes. Day care staff receive training, also. The program's success is evident in this statement by one of the family day care providers: "ECEAP has given me a lot of new ideas and a lesson plan for each day....ECEAP has given me the opportunity to offer preschool to my day care children and receive training for myself at the same time."

Snohomish County Human Services, an ECEAP contractor serving 11 percent of all ECEAP children, offers integrated programs through subcontracts with Everett Community College, Josephine Sunset Home, and Lake Stevens School District. Josephine Sunset Home integrates a child care center and ECEAP in a nursing facility. All children attending the child care center receive the benefits of a developmentally appropriate curriculum, low-income four-year-olds receive additional ECEAP services while staying all day in their chosen full-time care facility, and nursing home residents and children interact with each other and make new friends.

The city of Seattle, an ECEAP contractor serving 365 children, also offers integrated programs at several sites. Approximately 32 percent of the ECEAP families served by the city of Seattle are served in collaboration with community-based child care providers. Of special note is the Southeast Seattle Family Day Care Home Project. Newly funded through the 1991-92 expansion of ECEAP, this model serves 41 ECEAP-eligible children in family day care homes in Southeast Seattle. The city employs an education specialist, a public health nurse, and a parent social/health services intern to provide training and technical assistance to family day care home staff and direct health and social services to children and families. Homes receive a small stipend for equipment and classroom supplies and have access to other equipment on a rotating basis. A collateral goal of this project is to support the Seattle Task Force on African American Children in improving the quality of child care available to African American children.

cational expertise of ECEAP staff. ECEAP teachers (specialists in the education of young children) visit the child care program weekly, providing educational activities for all children, regardless of their ECEAP eligibility, and modeling developmentally appropriate teaching methods for the home/center staff. The ECEAP teacher develops and provides a weekly curriculum for the child care staff to utilize for all children and brings new toys, books, and activities for staff and children to use.

The results of this teamwork are:

- Low-income four-year-old children and their families receive the full benefits of ECEAP participation and meet their full-time child care needs;
- All children in the child care setting receive developmentally appropriate education and benefit from a better trained staff and a more creative and interesting learning environment; and
- All families benefit from parent trainings and meetings.

During the 1991-92 program year, approximately 480 ECEAP children were enrolled in ECEAP programs integrated with child care.

Challenges Ahead

Facility and Transportation Costs. Facility costs will continue to rise as the demand for child-appropriate facilities increases. As ECEAP has expanded (along with Head Start), contractors have had difficulties identifying low-cost facilities or facilities which can be provided in-kind. Increasing school enrollment has also led school districts to reclaim classrooms previously provided at no cost to ECEAP programs.

Transportation costs will increase at a greater rate than inflation. School districts will be adding new bus routes to accommodate their expanding school enrollment and that of ECEAP and Head Start—a more costly alternative to merely adding ECEAP children to existing bus routes. Also, as ECEAP continues to expand into rural areas, local ECEAP programs will need to provide transportation to a larger catchment area.

In the coming biennium, DCD and local contractors will have to explore options for dealing with facility and transportation issues. Further integration with existing child care centers and homes may provide some relief from rising facilities costs. DCD will need to consider the costs of remodeling efforts (which may be required to comply with the Americans with Disabilities Act) and step up efforts to collaborate with school districts in planning for preschool space in the design of new school facilities. Alleviating transportation cost increases will be difficult. DCD will continue to work with the Superintendent of Public Instruction to identify solutions to increasingly limited space and costly transportation for ECEAP children.

Diversity. Statewide, families and children who participate in ECEAP come from diverse backgrounds. Some are recent immigrants and speak limited or no English; many are ethnic minorities; some are migrant and seasonal farmworkers; and many are physically or developmentally challenged.

ECEAP programs across the state are working hard to accommodate the unique needs and interests of the various populations living in Washington. For instance, programs hire staff who speak the language of the majority of children in the classroom and

arrange for community volunteers to work with children who speak another language. These efforts will need to be redoubled given projected demographic trends. Interpretation services will increasingly be needed by local programs to assist families in accessing services, to support parents in participating fully in the program, and to enable children to benefit from ECEAP's educational experience. In the 1991-92 program year, ECEAP served families and children speaking at least 22 different languages. More and more families and children are recent immigrants from Eastern Europe who need interpretation services not available in many areas. These children and families, and others who have limited English skills, are needing interpretation services to help them prepare for and succeed in the public school system.

With the implementation of the Americans with Disabilities Act (ADA), local ECEAP programs face many challenges to provide services to physically and developmentally challenged children. Local ECEAP contractors have always been committed to serving these children, but in order to meet the full intent of the ADA, they may need to make significant changes. Programs will have to serve children they previously felt unequipped to serve. This will require hiring specialized staff and additional staff (to reduce adult:child ratios) and remodeling facilities. History has demonstrated these changes are likely to be costly.

Rural/Remote Services. As ECEAP has expanded statewide, services are increasingly being offered in rural and remote areas. These communities often have few resources and, consequently, families with more intensive health and social service needs. ECEAP programs must expend more staff time to develop creative solutions that address the lack of accessible services, such as medical and dental care, mental health services, literacy training, and transportation. The challenge for DCD and local programs will be to respond with limited resources to the significant needs of rural and remote communities, including those impacted by the decline in the timber industry.

Parent Involvement/Family Support. Conclusive studies show that providing children with developmental experiences and providing parents with opportunities for involvement with their child's development can improve children's performance in school as well as increase the likelihood of children's success later as adults. In recognition of this, ECEAP regulations specifically require local programs to provide for parent involvement in their children's preschool experience. Parents participate directly in their child's program, in local policy decisions, in development and revision of service delivery systems, and in parent education and training opportunities.

DIVERSITY

More than half of the children served by the Chelan-Douglas Child Services Association are Hispanic. Program staff work hard to include all parents by providing printed materials, including their newsletter, in both English and Spanish, and by having translators at parent meetings. While in the classroom, parents have access to the bilingual aides who work with the children. Teachers and assistants who don't already speak Spanish are taking Spanish classes and all staff learn new Spanish phrases on a weekly basis. Additionally, the Association is involved in a three-year model demonstration project sponsored by the Children's Alliance which focuses on helping human service agencies provide culturally relevant services to all children and families of color.

PARENT INVOLVEMENT IN A VARIETY OF FORMS

Local programs support and encourage parent involvement in a multitude of ways. A particularly popular activity of the Aberdeen School District ECEAP is Family Activity Day. Regularly scheduled throughout the school year, these events provide parents with opportunities to communicate with other parents, participate in enjoyable activities such as craft or cooking projects with their children, and discuss parenting issues. Family Activity Days also allow for positive interaction between siblings in the preschool environment, opportunities for grandparents, other relatives, and friends to be a part of the preschool experience, and demonstrations of developmentally appropriate practices to be provided through activities, interactions, and materials.

Parents whose children are enrolled in Walla Walla School District's Paine Campus Preschool are encouraged to be involved in their child's ECEAP experience in a variety of ways. Through a highly successful incentive program, parents earn "Paine dollars" for everything from volunteering in the classroom to attending school themselves to returning permission slips for field trips. The dollars are redeemed in the spring at the Paine Auction for both products and services, which are donated by the community and are otherwise out of reach for low-income families.

With the needs of families continually changing, however, DCD and local ECEAP contractors must revisit program regulations and standards relating to parent involvement. Parents must play a key role—they know how to enlist and ensure their own participation. The challenge for DCD and local contractors is to implement a policy-making process which will encourage widespread parent participation.

ECEAP's Effectiveness

How effectively is ECEAP serving Washington's children and families? The Washington State Legislature, when forming ECEAP in 1985, included a mandate for the evaluation of ECEAP's effectiveness in preparing children for success in school and in assisting their families in supporting and participating in their children's development and success. The next section describes the ECEAP Longitudinal Study design in more detail. Results of the study to date are highlighted in the final four chapters of this report.

Measuring the Outcomes of ECEAP Participation: The Longitudinal Study Design

In response to a legislative mandate, ECEAP is conducting a longitudinal study to measure outcomes of the state's investment in a family-focused, comprehensive preschool program for children and families. Findings from the first four years of this study are highlighted in this report, including preliminary results from a comparison of ECEAP children and families with a group of children and families who did not participate in a comprehensive preschool program. The findings reported in this document are described in more detail in the ECEAP Longitudinal Study Year 4 Technical Report, which is available through the Department of Community Development.

Collaboration in Design and Implementation

The Washington State Department of Community Development, ECEAP's administering agency, has contracted with the Northwest Regional Educational Laboratory of Portland, Oregon, to conduct the longitudinal study. The design and implementation plans were developed in cooperation with the Office of the Superintendent of Public Instruction and with consideration to state and local program resources. Data for the study are collected each year by local ECEAP providers with assistance from school districts and schools. *Indeed, the commitment of local ECEAP staff, and the cooperation of school administrators and teachers, continue to be key in tracking children and families from year to year.* Maintaining contact with ECEAP families and recruiting children and families for the comparison sample would be impossible without their persistent effort and care.

Study Methodology

To encompass the full scope of ECEAP's comprehensive range of services for children and their families, the ECEAP Longitudinal Study design includes child, family, and program variables. Some of these variables attempt to account for individual differences in children's development over time. Other variables address families' abilities to support and enhance their children's development.

The legislative mandate for this study of ECEAP specifies that the study include a longitudinal examination of ECEAP children and a comparison of ECEAP children to a group of peers who did not participate in a comprehensive preschool program. These two aspects of the study design are described next.

Tracking ECEAP Children and Families Over Time. ECEAP children and their families are being tracked during their ECEAP year and through their early elementary school years so that outcomes of their participation in the program can be assessed. This aspect of the longitudinal study seeks to answer the following questions:

- How well is ECEAP preparing children for success in school, i.e., what gains do ECEAP children make in their cognitive, motor, behavioral, and social development that encourage success in school?
- How well is ECEAP preparing families to participate in and support their children's educational experience?
- Do the effects of ECEAP participation last?

To answer these questions, a diverse sample of 1,358 ECEAP children and their families was assessed at the beginning and end of their preschool year and are being

assessed annually each spring from kindergarten through fourth grade. Annual assessment focuses on child and family success and how outcomes change over time.

"[ECEAP] has helped us feel more assured and confident about our son entering kindergarten next year, that he will be less anxious, more comfortable, and more ready. [The program] also put us in touch with the school system in this area, how it works, and what is going on."

—ECEAP parent

The fall and spring measures during the ECEAP year, together with the follow-up measures used for tracking children and their families through the early elementary school years, encompass a broad definition of competence predictive of school performance. Cognitive, physical, social, emotional, and behavioral outcomes are measured through cognitive and developmental assessments, parent interviews, teacher ratings of observable behaviors and family

participation, school records, and child health records. Children are tracked through the spring of grade four so that statewide achievement tests administered at that point will enable further comparison of the ECEAP children to the broader population of Washington's children.

Comparison with Unserved Children and Families. This component of the ECEAP Longitudinal Study, which began with the recruitment of a comparison sample at the beginning of this year (the 1991-92 program year and Year 4 of the study), examines how well ECEAP children and families are progressing through the children's early elementary years in the public school system *relative to a group of peers who did not participate in a comprehensive preschool program*. The questions to be addressed by this comparison include:

- Are ECEAP children better prepared for success in school than their peers, i.e., are ECEAP children more advanced at the start of school than their peers in terms of cognitive, motor, behavioral, and social development?
- Do families of ECEAP children participate in and support their children's educational experience more than families of comparison children?
- Do the differences last?

To explore these questions, a group of 322 children who are similar to ECEAP children in terms of age, sex, minority status, and language, but who did not participate in any preschool program, were recruited for the comparison sample and will be tracked

with the ECEAP sample through fourth grade. At the start of this year, the comparison children and a subset of "matched" ECEAP children (322 of the 1,358 ECEAP children) were assessed to determine initial differences between the two groups at the start of the current school year. Also at that time, comparison families were interviewed and teachers rated the classroom behavior of ECEAP and comparison children. For the remainder of the study, the comparison children will be followed each spring with the same measures as the ECEAP children (see above).

Where We Are in the Study

Figure 8 displays the time line of the longitudinal study. The study began in the fall of 1988 when the first of three "waves" of ECEAP children enrolled in the program. It will end in the spring of 1996 when the last of the three "waves" of ECEAP children complete fourth grade. In total, 1,358 ECEAP children were recruited to participate in the study. All have completed their ECEAP year and, depending on the year of their enrollment in the program, were enrolled in kindergarten, first grade, or second grade during Year 4 of the study. This report recaps findings regarding ECEAP children's progress during their preschool year and highlights initial findings from comparisons of the performance of ECEAP children and their peers in elementary schools across the state.

DATA COLLECTION TIME LINE

	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
ECEAP	Wave 1	Wave 2	Wave 3					
Kindergarten		Wave 1	Wave 2	Wave 3 & Control				
Grade 1			Wave 1	Wave 2 & Control	Wave 3 & Control			
Grade 2				Wave 1 & Control	Wave 2 & Control	Wave 3 & Control		
Grade 3					Wave 1 & Control	Wave 2 & Control	Wave 3 & Control	
Grade 4						Wave 1 & Control	Wave 2 & Control	Wave 3 & Control

Figure 8

Key Differences Between ECEAP and Comparison Groups

While the comparison children match ECEAP children with regard to age, sex, minority status, and language, key differences between the two groups exist with regard to level of poverty, family configuration, and mother's education. These differences are important to recognize when interpreting study findings.

The goal was to recruit 450 children who were enrolled within the same schools as ECEAP children and who "matched" ECEAP children in terms of age, sex, ethnicity, language, and level of poverty (which was defined as eligibility for the free lunch program). With assistance from school districts and schools, ECEAP program staff

Minority Status Differences Between ECEAP and Comparison Groups

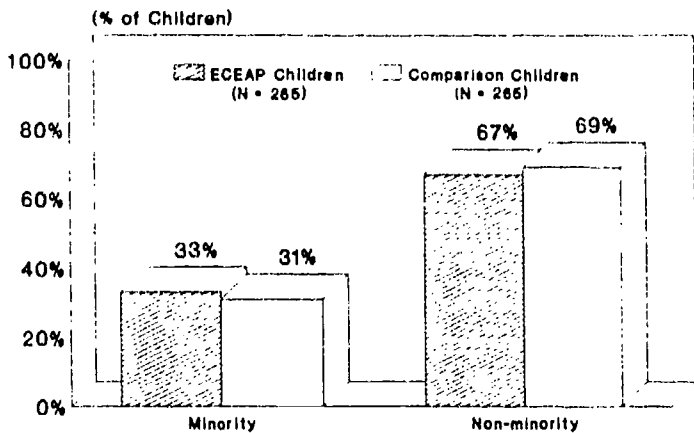


Figure 9

Ethnicity/Race Differences Between ECEAP and Comparison Groups

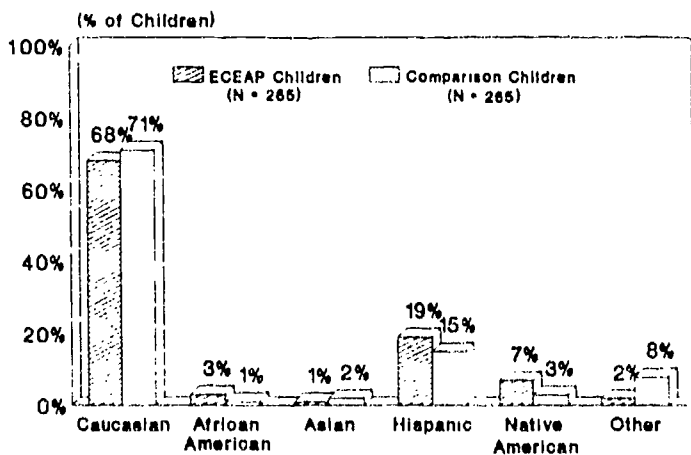


Figure 10

successfully identified 322 children, in spite of challenges posed by a fairly limited pool of eligible families, the difficulty and sensitivity of obtaining income eligibility information from families, and the reluctance of many eligible families to participate. Those remaining in the study the entire year totaled 265.

The comparison children who were recruited and remained involved in the study through the entire year (N = 265) are similar to the subset of ECEAP children (N = 265) in terms of their age, sex, and language. The groups are also similar in the proportion of minority and non-minority children in each (see Figure 9). Minority children comprise one-third of the ECEAP group and nearly that proportion of the comparison group. However, when the specific ethnicity and/or race of minority children is identified, differences exist that are statistically significant (see Figure 10). More children in the ECEAP group than in the comparison group are African American, Hispanic, and Native American. Fewer ECEAP children than comparison children are Caucasian, Asian, or of another ethnicity not provided as a response. These differences may confound the interpretation of some findings.

Family poverty (including a family's level of poverty relative to the allowable federal poverty level, mean annual and per capita income, and family income sources), family configuration (in this case, who the child lives with and mother's marital status), and mother's education (level of education and current enrollment status), were found to differ significantly between the two groups. These differences are discussed next.

Poverty. ECEAP and comparison families differ significantly with respect to level of poverty relative to the allowable federal poverty level, mean annual income and per capita income, and family income sources.

These poverty differences have resulted in part because 1) ECEAP programs recruited comparison children from among children participating in the free and reduced-price lunch program, whose income eligibility requirements are higher than the requirement for ECEAP participation, and 2) ECEAP programs prioritize service in their area

for families with the lowest incomes, resulting in a reduced number of unserved families at the lower levels of poverty.

Figure 11 illustrates the percentages of families in each group at different levels of poverty relative to the allowable federal poverty level. Significantly more ECEAP families are at lower levels of poverty than comparison families. While 62 percent of ECEAP families are below 100 percent of the federal poverty level, only 46 percent of comparison families are. In contrast, only 38 percent of ECEAP families are above the allowable federal poverty level, while 54 percent of comparison families are.

The mean annual household income and mean per capita income for ECEAP and comparison families are displayed in Figure 12. Comparison families, on average, are receiving \$3,822 more per year than ECEAP families. Comparison families have \$652 more per person per year than ECEAP families.

Figure 13 displays the income source differences between ECEAP and comparison families. Significantly fewer ECEAP families are receiving wages, and significantly more ECEAP families are receiving public assistance. These differences are statistically significant; the differences in other income sources are not.

Family Configuration. Figure 14 illustrates the significant differences that exist between ECEAP and comparison children with regard to their family configuration. Nearly 48 percent of ECEAP families reported that their child was living with one parent, while nearly 31 percent of comparison families reported

Percentage of Federal Poverty Level Differences Between ECEAP and Comparison Groups (% of FPL)

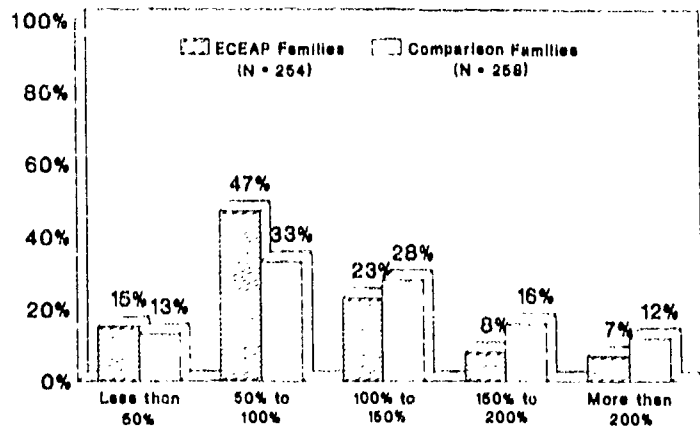


Figure 11

Annual Household Income Differences Between ECEAP and Comparison Groups

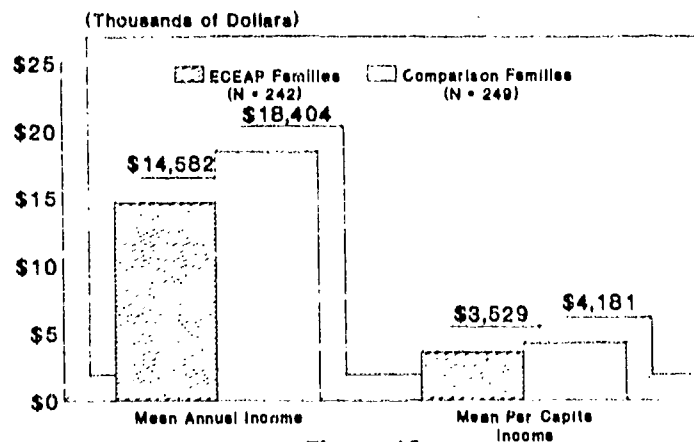


Figure 12

Income Source Differences Between ECEAP and Comparison Groups (% of Families)

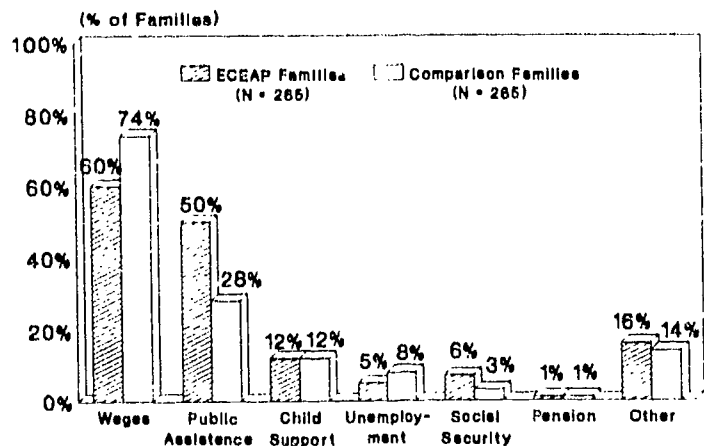


Figure 13

**Family Configuration Differences
Between ECEAP and Comparison Groups**

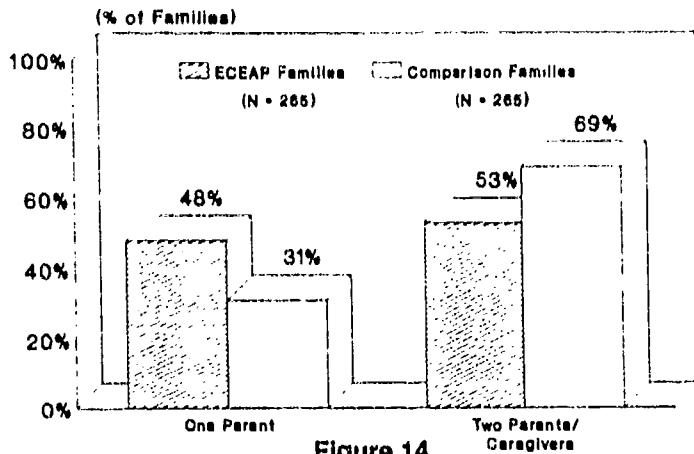


Figure 14

**Mother's Education Level Differences
Between ECEAP and Comparison Groups**

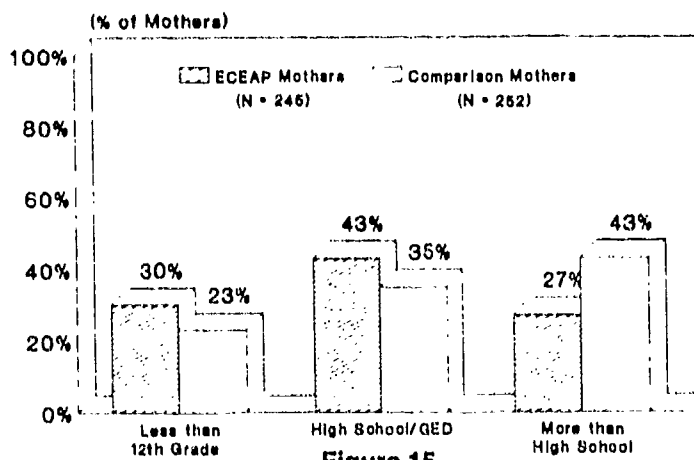


Figure 15

**Mother's Marital Status Differences
Between ECEAP and Comparison Groups**

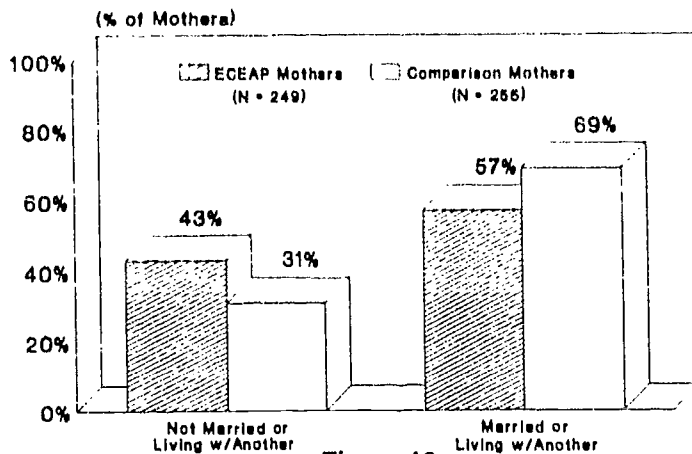


Figure 16

this. Fifty-three percent of the ECEAP children, and 69 percent of the comparison children, were living with two or more caregivers. Similar differences in mother's marital status exist, as shown in Figure 15. Fifty-seven percent of ECEAP mothers reported that they were married or living with another person, while 69 percent of comparison mothers reported this. Conversely, 43 percent of ECEAP mothers and 31 percent of comparison mothers indicated they were not married or living with another person.

Mother's Education. Figure 16 illustrates the significant education level differences between ECEAP and comparison mothers. While 30 percent of ECEAP mothers reported not completing 12 grades, only 23 percent of comparison mothers reported this. Fewer ECEAP mothers than comparison mothers reported completing high school (70 percent and 77 percent, respectively). Only 27 percent of the ECEAP mothers who completed high school went on to pursue higher education, while 43 percent of comparison mothers did so. However, 28 percent of ECEAP mothers reported being enrolled in a school or training program during the year, compared to 19 percent of comparison mothers.

Effects of Background Differences on Study Findings. In summary, ECEAP children and their families are less advantaged than comparison children and families in several important ways. ECEAP families are at a significantly lower level of poverty than comparison families. More ECEAP children live with one parent than do comparison children and fewer of their mothers are married or living with another adult. ECEAP mothers have attained lower levels

of education than mothers in the comparison group. These background differences must be considered when interpreting study findings, as they are purported to affect children's scores. Other research studies have found that children from disadvantaged backgrounds are significantly more likely to exhibit underachievement than children from more advantaged backgrounds (see the Year 4 Technical Report for references). Because ECEAP children are significantly less advantaged than comparison children, one might expect their scores on study measures to be lower. Yet, as will be discussed in the remaining sections of this report, ECEAP children and families appear to be performing at similar or higher levels than comparison children and families in several aspects of their lives, in spite of the significant background differences just outlined.

Relation to Other Research

Other research studies comparing children from low-income families who attended comprehensive preschool programs (e.g., Perry Preschool, Appalachia Educational Laboratory's HOPE, and Gray's Early Training Project), to statistically similar children who did not, reveal that preschool experiences substantially increase the likelihood of success in later schooling through high school (see the Year 4 Technical Report for references). Like the early childhood programs involved in these studies, ECEAP aspires to enhance similar long-term outcomes for children and families.

Preschool "graduates" indicate lasting effects in improved school performance, higher rates of continuing education, reduced teenage pregnancies, and lower crime rates. For instance:

- Thirty-eight percent of Perry preschool graduates went on to some form of post-secondary education, either academic or vocational, against only 21 percent of the no-preschool population.
- In constant 1981 dollars, the average cost of putting a Perry project preschool child through grades K-12 was \$34,813. Putting a no-preschool child through the same school cost \$41,895—an overrun of \$7,082 per no-preschool child—almost all of which was spent on some form of corrective education.
- The Gray Early Training Project showed that no-preschool children were twice as likely to drop out of school (43 percent versus 22 percent).
- Participants in the Perry project showed a 64 per 100 pregnancy and live-birth rate for teenage girls who had gone to preschool. This compares with a 117 per 100 rate for those who had not. (These figures include multiple births.)
- Perry preschool graduates had more members per capita with no criminal offenses (69 percent versus 49 percent) and the preschool graduates had fewer members with five or more criminal offenses (7 percent versus 17 percent).

Although the primary purpose of the ECEAP Longitudinal Study is to measure Washington State's "return" on its investment in early childhood education, the study is serving other purposes as well. The profiles of children's progress through the elementary grades may be useful to schools, districts, and the Office of the Superintendent of Public Instruction by adding to our knowledge about the lives of Washington's low-income children and families. The study may also contribute new and valuable insights to our current understanding of the benefits of a comprehensive preschool experience. The

ECEAP study is designed to do more than validate what other research studies have found, that early intervention provides many lasting benefits for children. It seeks to reveal a broader set of positive outcomes for both children and families and to identify areas in ECEAP that need more emphasis or improvement. The scope of this study—both the large number of children and families it tracks and the variety of outcomes it seeks to measure—is indeed unique.

Study Findings to Date

The next four sections of this report recap the gains ECEAP children made during their participation in the ECEAP program and present initial findings from the comparison of ECEAP children and their peers. Study results are organized in four general areas:

- Child Cognitive and Physical Development Outcomes
- Child Social and Emotional Well-Being Outcomes
- Child Health and Nutrition Outcomes
- Family Well-Being and Empowerment Outcomes

Child Cognitive and Physical Development Outcomes

E CEAP's focus on developmentally appropriate education provides children with extensive opportunity and support for their mental and physical development. ECEAP providers make specific efforts to:

- enhance each child's cognitive processes and skills with particular attention to conceptual and communication skills, including appropriate steps to correct current developmental problems; and
- enhance each child's health and physical abilities, including appropriate steps to correct current physical problems.

The longitudinal study attempts to measure children's outcomes over time and in comparison to a peer group. Significant findings regarding gains in children's progress during their ECEAP year and early elementary school years are described in the first section below. Then, initial findings regarding ECEAP children's performance in early elementary school relative to a group of peers are presented.

ECEAP Children's Progress Over Time

To measure children's cognitive and physical development, four study variables were selected to examine changes made by children during their participation in the program: *language*, *concepts*, *motor* skills, and *receptive vocabulary*. The first three variables are derived from an individually administered assessment called Developmental Indicators for the Assessment of Learning-Revised (DIAL-R). The fourth variable is a child's standard score on the Peabody Picture Vocabulary Test-Revised (PPVT-R). See the box below for descriptions of the variables.

COGNITIVE AND PHYSICAL DEVELOPMENT STUDY VARIABLES

Language includes eight items from DIAL-R:

Articulating
Giving personal data
Remembering
Naming nouns
Naming verbs
Classifying foods
Problem solving
Sentence length

Concepts includes eight items from DIAL-R:

Identifying body parts
Naming colors
Rote counting
Meaningful counting
Positioning
Identifying concepts

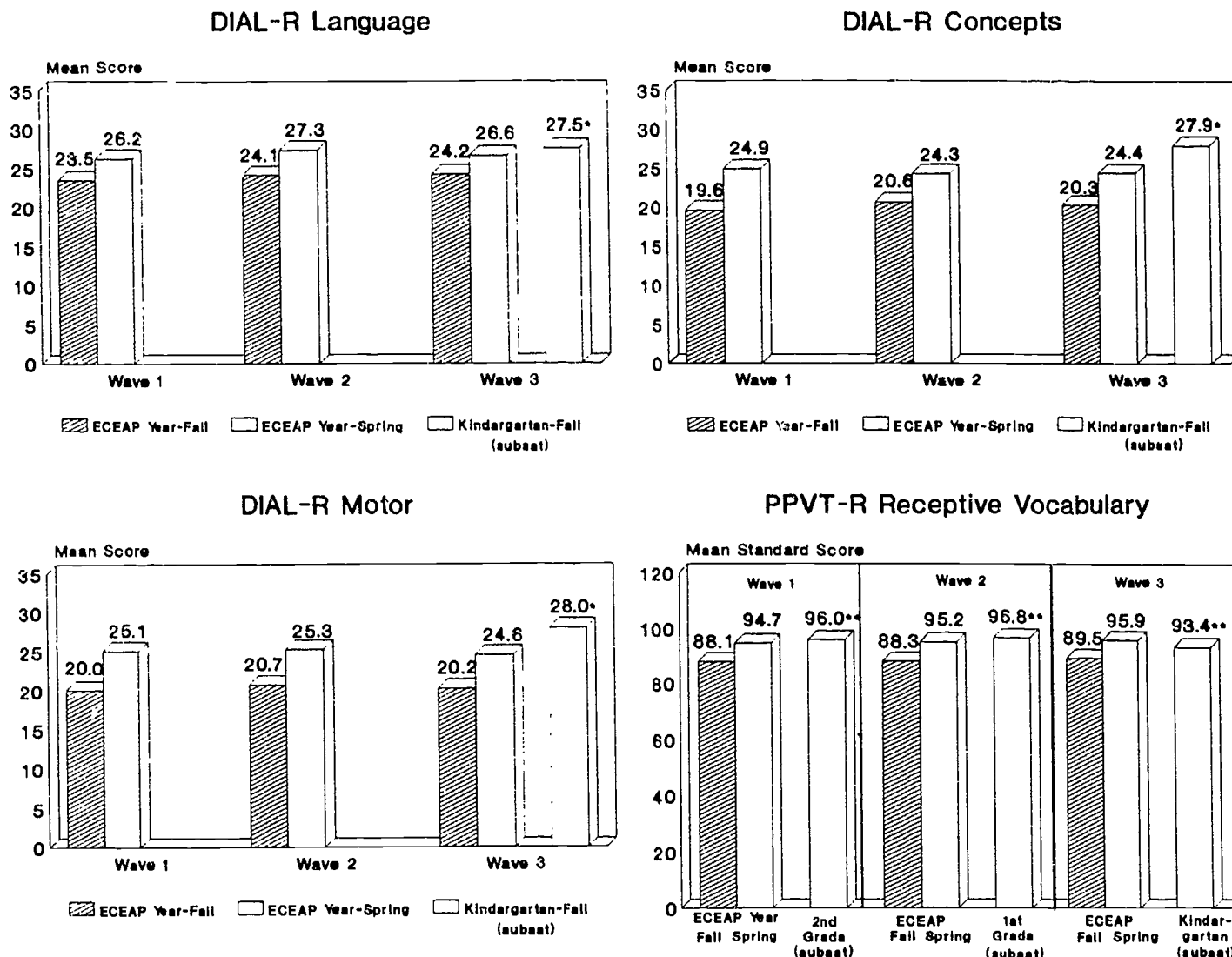
Naming letters
Sorting chips

Motor includes eight items from DIAL-R:

Catching
Jumping/hopping/skipping
Building
Touching fingers
Cutting
Matching
Copying
Writing name

Receptive vocabulary is the PPVT-R standard score, derived from the child's raw score on the PPVT-R according to age-referenced norms.

ECEAP Children's Cognitive and Physical Scores Over Time



* Mean score for a subset of Wave 3 children (N=166).

** Mean score for subsets of children: Wave 1, N=75; Wave 2, N=53; Wave 3, N=113.

Figure 17

Figure 17 illustrates the gains ECEAP children made in *language*, *concepts*, and *motor* skills between fall and spring of their ECEAP year, and in the case of a subset of Wave 3 children, in their kindergarten year. The cognitive and physical development seen in children during their participation in ECEAP, as measured by these variables, was statistically significant and faster than the development of children in the national norm group. As the figure shows, the subset of Wave 3 children who were assessed for purposes of comparison with a group of peers (described in the next section) continued to show gains at the time they entered kindergarten.

Figure 17 also displays ECEAP children's *receptive vocabulary* scores in the fall and spring of their ECEAP year and in the fall of this year, when Wave 1 children were start-

Comparison of Children's Cognitive and Physical Scores

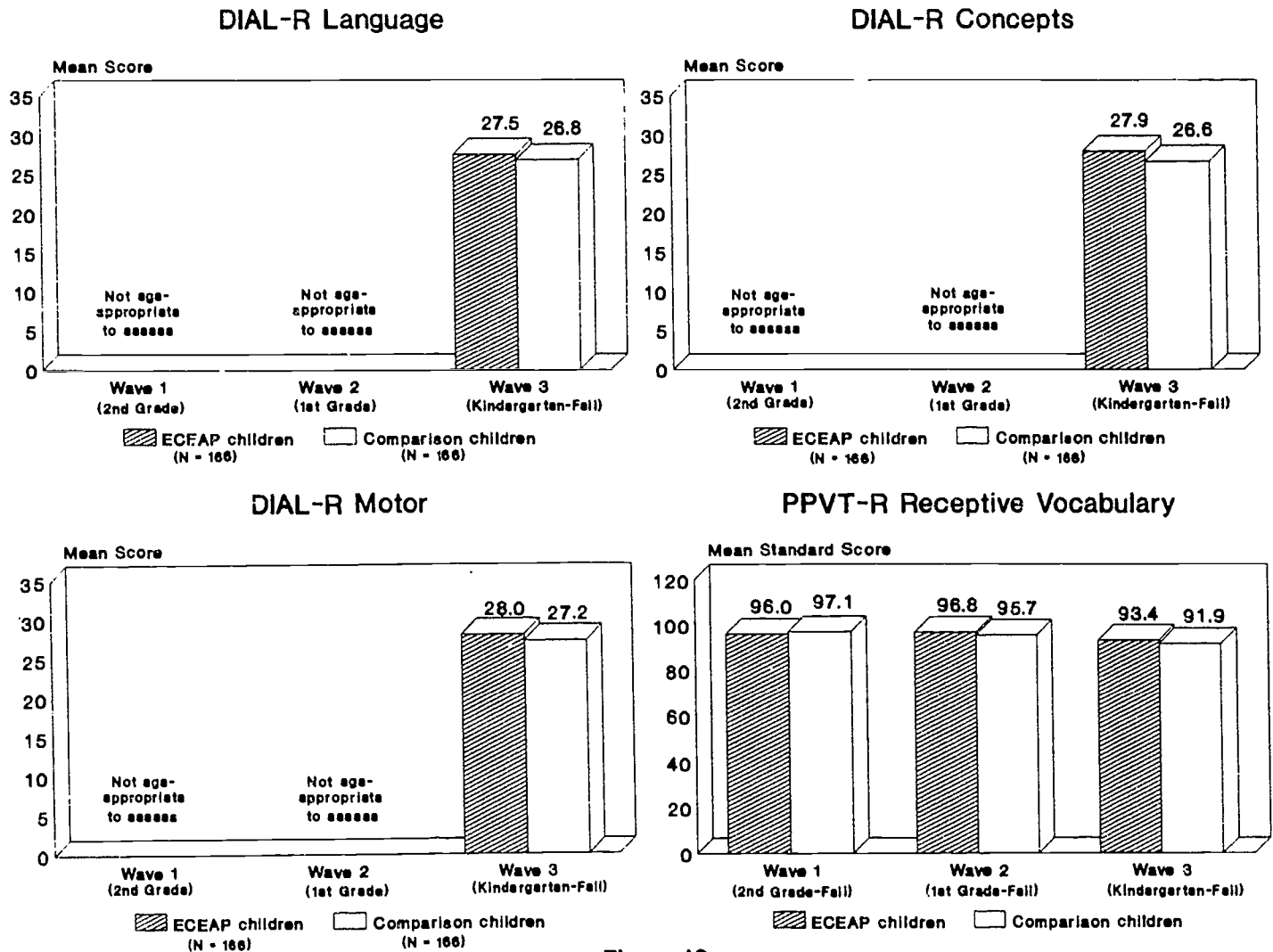


Figure 18

ing second grade, Wave 2 children were starting first grade, and Wave 3 children were starting kindergarten. The gains in *receptive vocabulary* made by children in all three waves during their participation in ECEAP were statistically significant and larger than gains made by the national norm group. As shown in the figure, subsets of Wave 1 children and Wave 2 children assessed for purposes of comparison with a group of peers (described in the next section) showed continued gains in the second and first grades, respectively. The *receptive vocabulary* scores of Wave 3 children in the subset assessed for comparison purposes declined, but remained high, between the spring of their ECEAP year and the fall of their kindergarten year.

ECEAP Children's Performance Compared with Peers

Were the significant gains seen among ECEAP children accelerated by their participation in the program? This question was addressed by contrasting ECEAP children's cognitive and physical development with that of their peers.

Comparison of Special Services Received

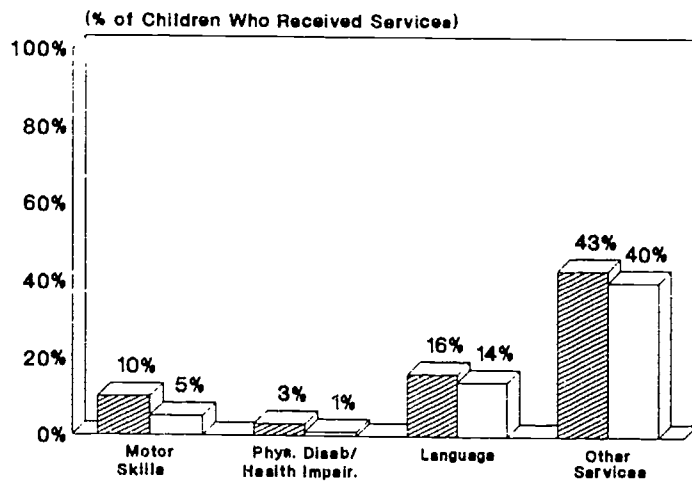
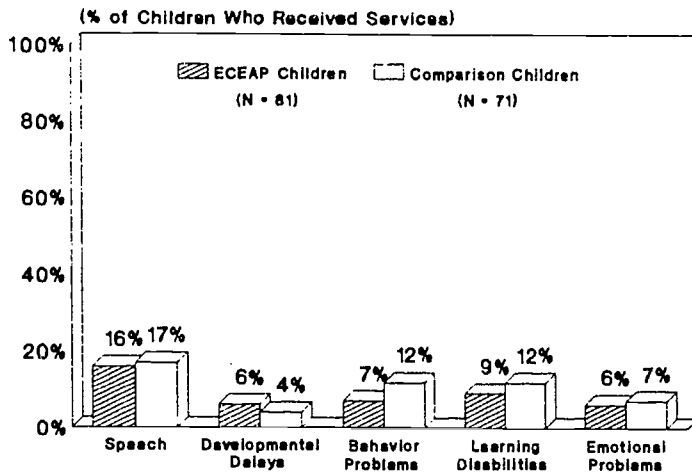


Figure 19

Figure 18 illustrates the differences between ECEAP and comparison children's *language*, *concepts*, and *motor* scores. At the start of kindergarten, ECEAP children's scores in all three areas were significantly better than those of the comparison children. ECEAP children outperformed comparison children in spite of their less advantaged background, implying that children's *language*, *concepts*, and *motor* skills are enhanced by their participation in ECEAP.

As shown in Figure 18, ECEAP children's *receptive vocabulary* scores were similar to those of comparison children at the start of kindergarten, first grade, and second grade. ECEAP children performed at the same level as their more advantaged peers, indicating that this more academic aspect of development is affected by participation in ECEAP, but not as strongly as the developmental abilities discussed above.

In addition to the individual child assessments, teacher observations and parent interviews revealed the following:

- Teachers reported that 44 percent of ECEAP children and 49 percent of comparison children were *referred for special services* of some kind. Nearly 31 percent of ECEAP families reported that their child had *received special services* during this school year, while 29 percent of comparison families reported this for their child. These differences between ECEAP and comparison children were not statistically significant. A profile of the types of special services received by each group of children is displayed in Figure 19.
- Nearly the same percentage of ECEAP and comparison children were provided with *Individualized Education Plans* (IEPs) during this school year (13.0 percent and 13.5 percent, respectively).
- When asked to rate each child's development relative to that of other children in the child's class, teachers rated ECEAP and comparison children similarly. No significant differences were found in teachers' ratings of children's *academic progress*, *motivation*, *confidence*, or *motor development*. Families' ratings of these aspects of children's development were similar in the spring for both groups, as well.

- No significant differences emerged between ECEAP and comparison families' reports of the occurrence of *recognition or an award for good schoolwork, contact from the school about problems with their child's schoolwork or attendance, or contact with the school (initiated by the family) about their child's schoolwork, grades, behavior, or attendance.*

Discussion of Findings to Date

Findings during previous years of the study indicated that ECEAP children made significant cognitive and physical gains during their participation in the program. Highly significant improvements were seen in children's DIAL-R language scores, DIAL-R concepts scores, and PPVT-R receptive vocabulary scores. Additionally, ECEAP children gained significantly in their fine and gross motor skills, as measured by the DIAL-R. Of particular interest were findings showing that parental characteristics had a significant effect on children's development in these areas. The strongest gains in cognitive and physical development were made by children whose parents were working or planning to pursue more education; whose parents participated in their child's educational experience; and whose parents expected their child to complete high school or pursue a higher education. These findings underscore the importance of ECEAP's response to the needs of the whole family and support of the family's participation in their child's education.

Additionally, ECEAP children's gains in language, concepts, receptive vocabulary, and motor skills during their participation in the program surpassed those of the national norm group. ECEAP children moved from the 60th percentile in the fall to the 80th percentile in the spring in language; from the 44th to the 68th percentile in concepts; and from the 40th to the 74th in motor. While ECEAP children did not surpass the national norm group by the spring in receptive vocabulary, their improvement over the year was remarkably faster than the national norm group's improvement; ECEAP children moved from the 23rd percentile to the 39th percentile.

Not only did ECEAP children exhibit significant growth in language, concepts, and motor skills during their ECEAP year, they started kindergarten scoring significantly higher in these developmental areas than comparison children. Their higher scores in these areas did not translate into higher receptive vocabulary scores, better parent and teacher ratings of several academic-related indicators, or significantly lower rates of referrals to special services. However, on these measures, ECEAP children performed at the same level as, or were rated similarly to, comparison children who might be expected to perform or be rated higher than the ECEAP children because of their more advantaged backgrounds. As discussed earlier, ECEAP children are more impoverished than comparison children; more ECEAP children than comparison children live with one parent; and ECEAP children's mothers, overall, have attained lower levels of education than comparison children's mothers. Despite these differences, which other research has shown to have a negative effect on children's achievement, ECEAP children out-performed or performed just as well as their peers.

The significant gains made by ECEAP children during their participation in the program, their faster development relative to the national norm group, and their higher or similar level of performance relative to the comparison group in kindergarten, first grade, and second grade, imply that children's cognitive and physical development and readiness for school are enhanced by participation in ECEAP.

Child Social and Emotional Well-Being Outcomes

Local ECEAP providers encourage the development of the social and emotional well-being of children through developmentally appropriate education and careful attention to the emotional needs of the children and their families. Providers particularly attempt to:

- establish patterns and expectations of success for each child, which will create a climate of confidence for present and future learning and development; and
- encourage each child's self-confidence, spontaneity, curiosity, and self-discipline.

The longitudinal study attempts to measure children's outcomes over time and in comparison to a peer group. Significant findings regarding gains in children's progress during their ECEAP year and early elementary school years are described in the first section below. Initial findings regarding ECEAP children's performance in early elementary school relative to a group of peers are then presented.

ECEAP Children's Progress Over Time

In measuring social and emotional well-being outcomes, 10 study variables were selected to examine changes during children's ECEAP year. The gains identified by these variables indicated that ECEAP children became more mature, motivated, secure, outgoing, and expressive before kindergarten. Specifically:

- Teachers observed that ECEAP children made very significant gains in *motivation/achievement*.
- Parents reported that children's *maturity* increased significantly from fall to spring.
- Parents reported that both *insecurity* and *shyness* decreased very significantly during the program year.
- Teachers indicated that children's *emotional* well-being changed very significantly from fall to spring, that is, children expressed their emotions more strongly in spring. This may be related to the decrease in *insecurity* and *shyness*.
- Teachers also indicated that the *temperament/attention* of children changed very significantly. By the end of the program year, children were more expressive of their needs for attention. Again, this may be related to decreases in *insecurity* and *shyness* among children.
- Parents observed very significant decreases in *difficult behaviors* and *attention/dependence* in their children by the end of the program year.

The Year 3 Technical Report provides a more detailed discussion of these and other findings, as well as the effects of various demographic factors on the social and emotional well-being outcomes measured during children's participation in ECEAP.

The instrument used to collect behavior ratings was abridged to make the follow-up of children during the elementary school years manageable for school teachers. As a result, a longitudinal examination of the above variables used during the ECEAP year is impossible. However, four very similar variables were derived from the new instrument and will be tracked throughout the remaining years of the study. A longitudinal examination of these variables, which are described in the box below, will begin next year.

ECEAP Children's Performance Compared with Peers

Factor analysis of the items on the student behavior rating scale used during the follow-up years revealed four study variables that are similar to those used during the ECEAP year: *temperament*, *motivation/attention*, *emotional* behavior, and *social*

interaction. These new variables and the items comprising them are described in the box at left.

SOCIAL AND EMOTIONAL WELL-BEING STUDY VARIABLES

Temperament combines these items from a behavior inventory completed by the child's teacher:

- Likes to disobey/break rules
- Is restless/can't sit still
- Is calm and easy-going
- Has a hot temper
- Has a hard time waiting
- Gets into fights with others
- Is often left out by other children
- Quickly loses interest

Motivation/attention includes the following items from the behavior inventory completed by the child's teacher:

- Catches on quickly
- Is easily distracted
- Follows directions/remembers what he/she is told to do
- Listens well

Emotional is comprised of these items from a behavior inventory completed by the child's teacher:

- Runs to me with every bump
- Worries a lot
- Is afraid of a lot of things
- Often complains of not feeling well
- Gets upset easily

Social includes the following items from a behavior inventory completed by the child's teacher:

- Is always asking questions
- Is shy or bashful
- Makes friends quickly and easily
- Doesn't smile or laugh much

ECEAP children who were in kindergarten were rated by teachers as significantly more *emotional* in their behavior than comparison children at the start of the school year. By the end of the school year, however, teachers' ratings for ECEAP and comparison children in kindergarten did not differ significantly. Teachers' ratings of ECEAP and comparison children in first or second grade were similar with respect to their *emotional* behavior in both the fall and the spring of this school year. No significant differences were found in teachers' ratings of children's *temperament*, *motivation/attention*, and *social* interaction in any of the three grades.

In addition to teachers' ratings of children's behavior, parent interviews and teacher ratings of other aspects of children's social and emotional well-being revealed the following:

- Over six percent of the ECEAP children and nearly eight percent of the comparison children *changed schools at least once during this school year*.
- No statistically significant difference was found between ECEAP and comparison children with respect to their *adjustment to school*. Over 75 percent of ECEAP children,

and 72 percent of comparison children, were reported by their families to have had no problems adjusting to school this year.

- When asked in the spring to rate each child's development relative to that of other children in the child's class, teachers rated ECEAP and comparison children similarly. No significant differences were found in teachers' ratings of how **sociable**, **mature**, or **well-behaved** the children were, or how high their **self-esteem** was, compared to other children in the class. There were also no differences in families' ratings of these aspects of children's development in the spring.
- Nearly the same percentages of ECEAP and comparison children (50 percent and 49 percent, respectively) were reported by their families to have **participated in organized activities**, such as sports, scouts, music, dance, art, and church youth groups or classes, during this school year.

Discussion of Findings to Date

According to teachers' ratings, the behavior of ECEAP children in kindergarten, first grade, and second grade was similar to the behavior of their peers with regard to temperament, motivation/attention, and social interaction. Significant differences in teachers' ratings of emotional behavior—worries a lot, gets upset easily, comes running to me with every bump or scratch, is afraid of a lot of things, and often complains about not feeling well—existed among Wave 3 children in the fall of kindergarten but evened out by the spring and were not seen at all among older children in first or second grade.

These results regarding differences in emotional behavior may indicate that ECEAP children may be responding emotionally to the changes in their routine and their expectations about "school" as they move from the ECEAP environment to a more structured elementary school environment. Their peers who did not attend a comprehensive preschool program may not have formed conceptions about "school" that are as strong as those of the ECEAP children who are transitioning between programs. Further, ECEAP children may be less timid in seeking support and attention from adults other than their parents and, thus, may appear more emotional in comparison. Although ECEAP children seem more emotional when they enter kindergarten, they appear no more emotional than their peers by the end of their first year in elementary school.

In addition to these findings, ECEAP children and comparison children were reported to be equally adjusted to school and similarly well-behaved relative to classmates. Their self-esteem levels were similar and they were participating in organized activities to the same extent.

These outcomes indicate that ECEAP children and comparison children show similar levels of development with respect to their social and emotional well-being. Children who have participated in ECEAP appear to be just as socially and emotionally ready for elementary school as children who come from more advantaged backgrounds and have not participated in a comprehensive preschool program.

Child Health and Nutrition Outcomes

The comprehensiveness of ECEAP is attained in part through its inclusion of health and nutrition education and services for children and families. Through this program component, ECEAP providers specifically aim to:

- enhance each child's health and physical abilities, including taking appropriate steps to correct current physical problems; and
- enhance each child's access to an adequate diet, as well as enhance the family's attitude toward sound nutritional practices.

The longitudinal study attempts to measure children's outcomes over time and in comparison to a peer group. Significant findings regarding children's progress during their ECEAP year and early elementary school years are described in the first section below. Initial findings regarding ECEAP children's health status in early elementary school relative to a group of peers are then presented.

ECEAP Children's Health Over Time

To determine children's progress with regard to their health and nutrition during their time in the program, ECEAP staff gathered information from each child's health file, provided their perceptions about ECEAP's role in treating any problems, and interviewed parents about the identification and treatment of any problems their child might have. Parents also offered their perception of ECEAP's role and their own role in addressing any health problems. Data from these study activities indicated that children and families made health- and nutrition-related gains over the course of their participation in ECEAP.

Of a sample of 775 ECEAP children in Wave 3, over 50 percent had **health or developmental problems** which may have impaired future learning and development, and nearly 40 percent of children did not have basic **immunizations** at the time they enrolled in ECEAP, immunizations which are recommended for a child well before her/his fourth year. Now in kindergarten, 47 percent of the 638 children remaining in this subsample are reported to have health or developmental problems. Figure 20 displays the extent to which ECEAP children were reported by their parents to have health and developmental problems in the spring of their ECEAP year and the spring of their kindergarten year. Smaller proportions of ECEAP children were identified by their parents as having dental or speech problems in the spring of their kindergarten year than in the spring of their ECEAP year. The proportions of children reported to have other types of health and developmental problems increased during this time period.

During the ECEAP year, staff *strongly suspected* that nearly nine percent of the ECEAP children in Wave 3 were experiencing **child abuse or neglect**. Nearly eight percent of the ECEAP families were thought to be experiencing a problem with **alcohol abuse**, while nearly six percent were thought to be experiencing a problem with **drug abuse**.

Health and Developmental Problems Over Time

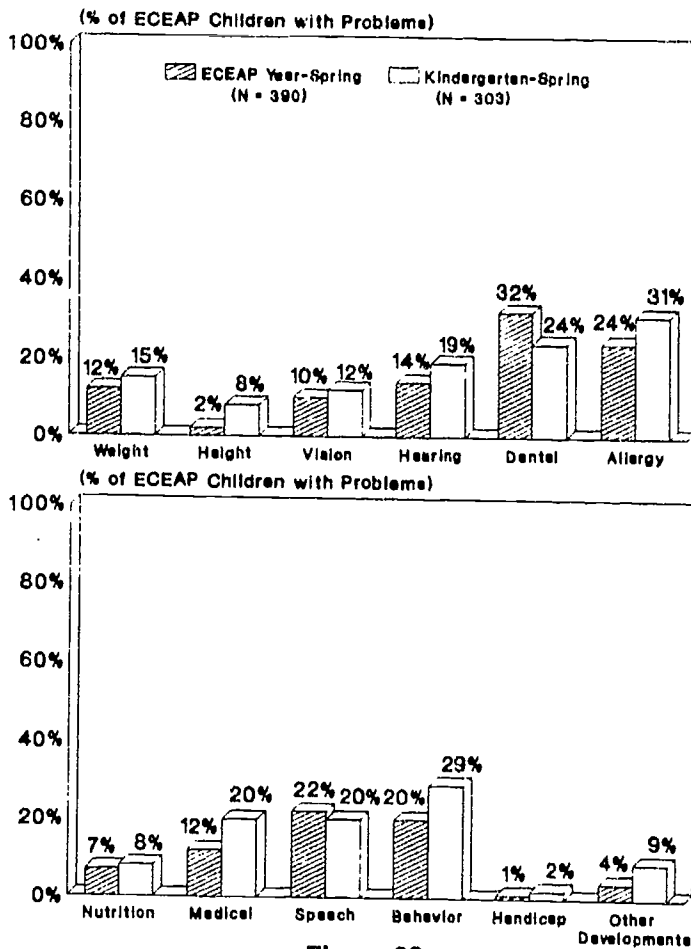


Figure 20

Utilization of Health Services Over Time

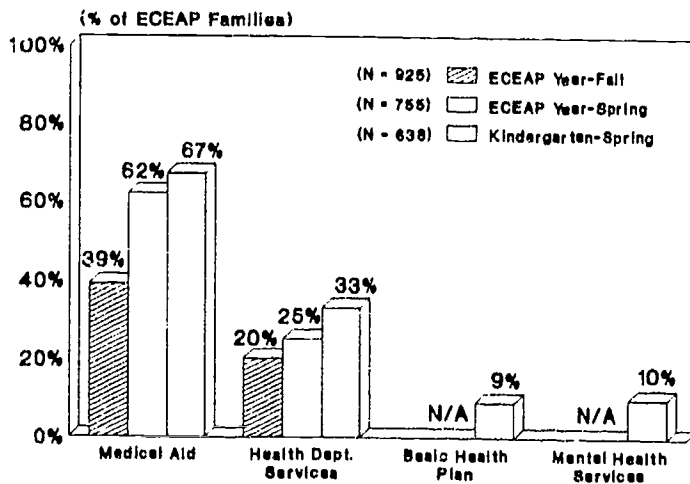


Figure 21

ECEAP staff also indicated that nearly 12 percent of the ECEAP children were *referred to a mental health specialist* during their participation in the program.

ECEAP's comprehensive model enables early evaluation and identification of problems which can then be addressed without further delay or interruption in a child's growth and development. Parents reported that approximately 40 percent of health and developmental problems were identified by ECEAP staff. *ECEAP's role in addressing problems* included referring parents to available services, setting up appointments, providing transportation, accompanying parents, and paying for or identifying funds for services. The variety of ways in which staff and parents indicated that ECEAP assisted with identified problems shows that ECEAP's locally driven model provides the flexibility needed to address children's unique health and developmental needs within the context of available community resources.

Figure 21 illustrates the extent to which ECEAP families were utilizing *health services* in the fall and spring of their child's ECEAP year and the spring of their child's kindergarten year. The percentages of ECEAP families accessing medical aid and using Department of Health services increased during their participation in the program and during their child's kindergarten year. Longitudinal data regarding participation in Washington's Basic Health Plan and utilization of mental health services will be available in upcoming years.

While participating in ECEAP, parents also perceived significant, positive changes in their child's health status, the adequacy of their family's health resources, their child's hygiene, the family's knowledge of good health and nutrition, and their child's knowledge of safety.

ECEAP Children's Health Compared with Peers' Health

Parent interviews during the follow-up years provide a descriptive profile of children's health and nutrition during the elementary school years as well as information about the adequacy of their family's health resources. Comparisons were made between ECEAP children (N = 265) and comparison children (N = 265) to identify areas potentially effected by program participation.

- In the spring, 44 percent of ECEAP children and 43 percent of comparison children were reported by their families as having some type of **health or developmental problem**. The types of problems children were reported to have are displayed in Figure 22. None of the percentage differences were statistically significant.

- ECEAP and comparison families rated their families' and their child's **health and nutrition status** similarly on a five-point scale from excellent to poor. No significant differences were found in families' ratings of their child's health, overall; their family's knowledge of their child's health; their child's healthcare; their family's healthcare; their child's hygiene; their child's eating habits; their family's knowledge about good nutrition; or their family's nutrition, overall.
- Ten percent of ECEAP children and 11 percent of comparison children were reported by their parents to have suffered from an **accident or injury** during the year. Nearly 10 percent of ECEAP children and over seven percent of comparison children were reported to have had a **serious illness or major medical treatment**.
- Seventy-two percent of ECEAP children **visited a doctor** for a physical exam at least once during the year, while 70 percent of comparison children did so. Over

Comparison of Health and Developmental Problems

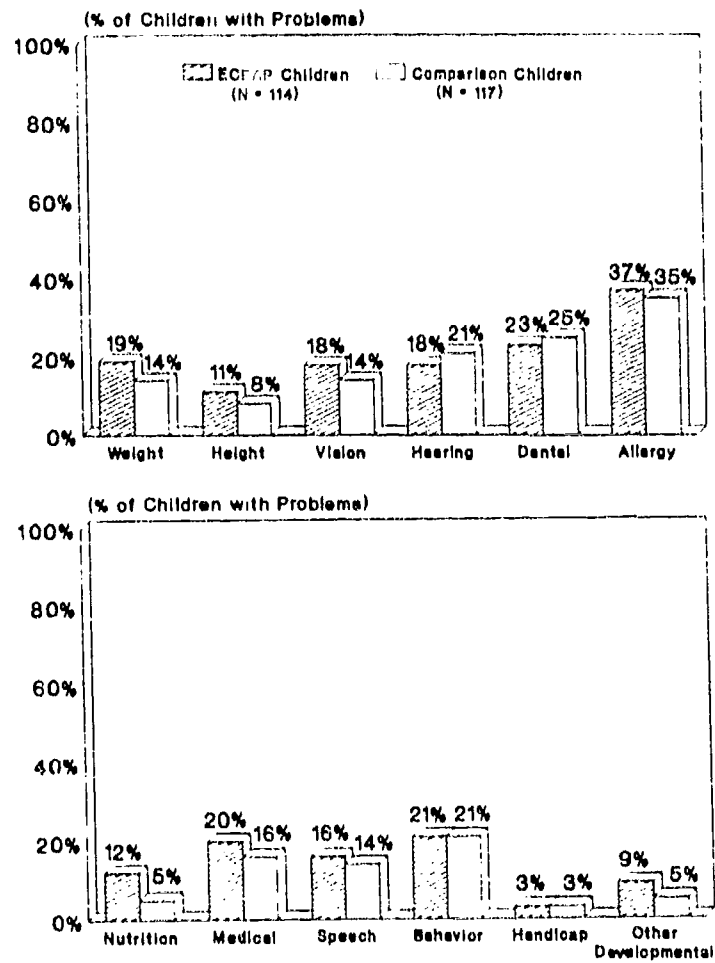


Figure 22

Comparison of Health Services Utilization

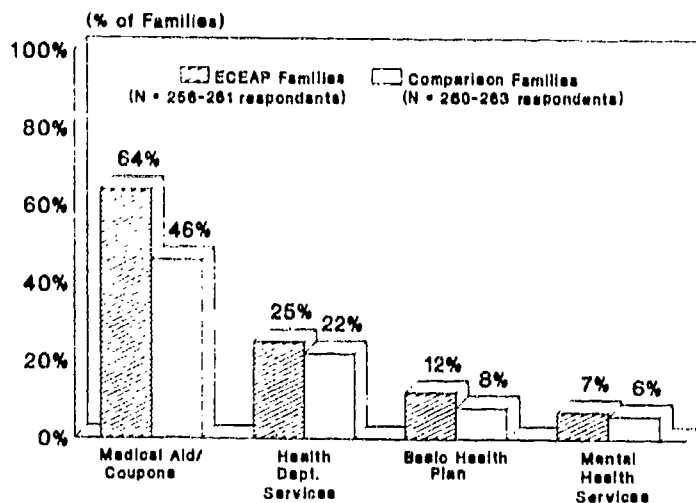


Figure 23

Comparison of Family Health Insurance

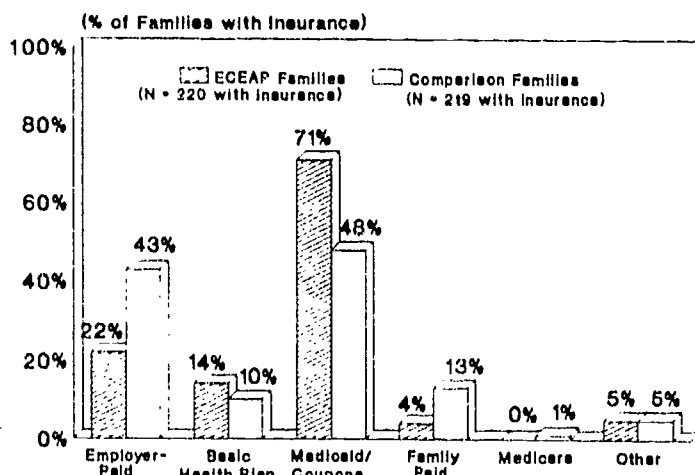


Figure 24

68 percent of ECEAP children, and 62 percent of comparison children, visited a doctor because of illness. While 35 percent of ECEAP children visited a doctor to receive an immunization, 45 percent of comparison children did so during this past year; this difference was statistically significant.

- More ECEAP children (66 percent) *visited the dentist* for teeth cleaning during the year than did comparison children (61 percent), although the difference was not statistically significant.
- ECEAP and comparison families' ratings of the adequacy of their family's *health resources* were similar. Nearly 80 percent of ECEAP and comparison families reported that their family's *medical care* was "usually adequate" or "almost always adequate." Seventy percent of both groups rated their family's *dental care* was "usually adequate" or "almost always adequate."

- Figure 23 displays the types of *health services* families were utilizing. Significantly more ECEAP families than comparison families reported receiving medical aid/coupons (64 percent and 46 percent, respectively).

Higher percentages of ECEAP families also reported utilizing local health department services, Washington's Basic Health Plan, and mental health services, but the percentage differences between groups were not statistically significant.

- Seventeen percent of ECEAP families and comparison families indicated that their family does not have *health insurance*. Figure 24 displays the sources of insurance for the families in both groups who do have health insurance. Given that more comparison families than ECEAP families are receiving wages, it is not surprising that a higher percentage of comparison families have insurance paid for by their employer and a lower percentage are covered by Medicaid.

Discussion of Findings to Date

The health component of ECEAP is designed to identify children with health and developmental problems early and refer their families to services and resources the child may need. In previous years, the study found that 56 percent of ECEAP children had some type of health or developmental problem during their participation in the program. For instance, ECEAP staff reported that:

- 20 percent of children had dental problems;
- 11 percent had a speech-related problem;
- 10 percent had a behavior problem;
- 6 percent had hearing problems and 6 percent had vision problems; and
- 5 percent had a handicapping condition or other developmental problem.

In addition, two out of five children did not have up-to-date immunizations.

Parents indicated that nearly 40 percent of the reported health and developmental problems were identified by ECEAP staff rather than by other health professionals, family members, or family friends. Had these problems gone unidentified, children's development and ability to learn may have been impaired, underscoring the importance and appropriateness of ECEAP's focus on children's health.

Parents reported that ECEAP's role in addressing problems, once identified, included:

- Referring parents to available services (29 percent of cases);
- Setting up appointments (14 percent);
- Accompanying parents (8 percent);
- Paying or identifying funds for services (8 percent); and
- Providing transportation to appointments (7 percent).

In addition, during their child's participation in ECEAP, parents saw improvements in their child's health status, their child's hygiene, the family's knowledge of good health and nutrition, and their child's knowledge of safety. Parents also indicated that ECEAP's prevention education efforts in these areas were valuable for them and their child. Finally, parents reported that their access to health care resources (medical and dental) improved significantly. This was mirrored by a 23 percent increase in ECEAP families' utilization of medical aid, and a six percent increase in their utilization of local health department services, during their participation in ECEAP.

ECEAP families appear to be continuing good health practices during their children's early elementary school years—their utilization of health services has continued to increase, for instance. And while the numbers of ECEAP and comparison children with health and developmental problems were similar, more ECEAP families than comparison families utilized health services and took their children to the doctor and dentist for a check-up this year. In spite of having fewer financial resources than comparison families, ECEAP families' ratings of the adequacy of their health care resources (medical and dental) were similar to those of comparison families. ECEAP families may be accessing services to a greater extent than their peers as a result of having received assistance from ECEAP staff in identifying their child and family's health needs, having learned more about how to access community health resources, and having established relationships with health care providers during their ECEAP year.

Family Well-Being and Empowerment Outcomes

Family well-being and empowerment are encouraged through ECEAP's parent involvement and social services components. Parents have opportunities to volunteer in their child's classroom, advise local program decision making, and participate in training and education workshops and support groups. Family needs assessments, which are conducted upon enrollment in the program and during home visits throughout the year, enable ECEAP staff to link families to the community resources and services they require. These assessments also help staff develop training and education opportunities that are responsive to families' needs.

Through these activities, ECEAP providers strive particularly to:

- empower families to develop improved parenting skills, increased knowledge of and access to appropriate resources, greater advocacy for children's needs, and increased self-sufficiency;
- enhance the ability of each child and family to relate to each other and others; and
- enhance dignity and self-worth within each child and family.

The longitudinal study attempts to measure ECEAP family outcomes over time and in comparison to a group of families who were not served. Significant findings regarding family changes during their ECEAP year and child's early elementary school years are described in the first section below. Initial findings regarding ECEAP families' participation in their child's education during early elementary school, relative to families who were unserved, are then presented.

ECEAP Family Outcomes Over Time

Fourteen study variables were selected to examine changes made by families during their child's participation in ECEAP. Two study variables addressing the first goal stated above (particularly, access to appropriate resources and self-sufficiency) increased significantly during the program year:

- The adequacy of *basic resources*, as rated by parents, improved very significantly from fall to spring. This variable was comprised of parents' combined ratings of the adequacy of their family's food, housing, furnishings, clothing, heat, plumbing, transportation, telephone, and toys for children.
- Parents' ratings of the adequacy of *money* increased significantly by the end of the program year. This variable combined parents' ratings of the adequacy of their money for bills, money for themselves, money for entertainment, and source of loans.

Positive changes in ECEAP parents' ratings may reflect actual or perceived improvement in *basic resources* and *money* or improvement in their ability to manage these

Utilization of Community Services Over Time

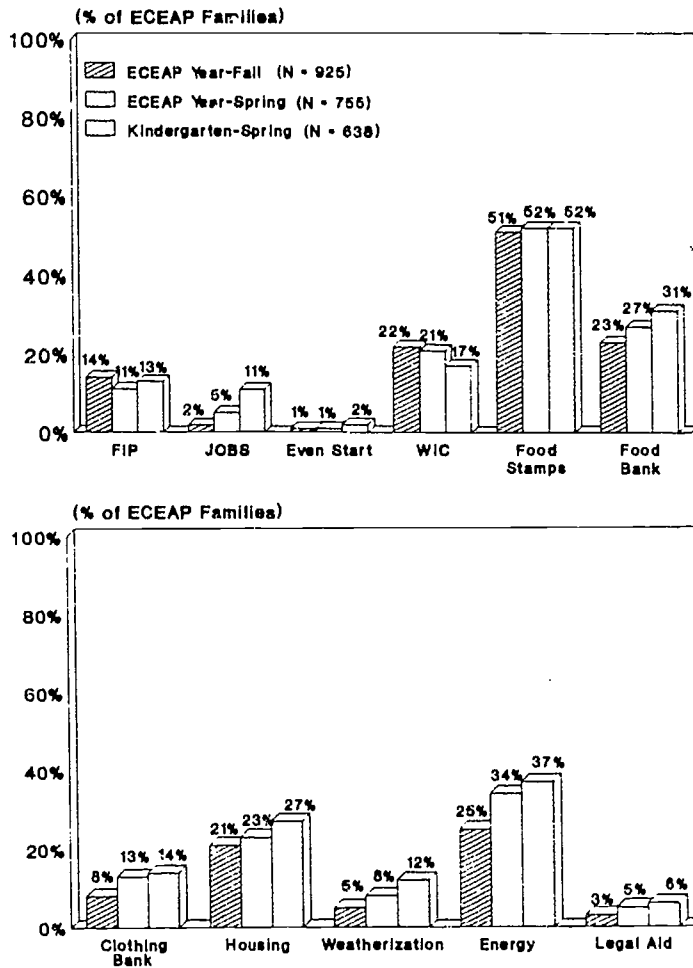


Figure 25

resources. Regardless, ECEAP families' perceptions of the adequacy of their resources improved.

ECEAP's family-centered, comprehensive service delivery model enables staff to facilitate families' access to social services and support organizations through collaboration with other family service agencies in their communities. Figure 25 illustrates changes in the *utilization of community services* among ECEAP families in Wave 3 over time. The array of services and support accessed by ECEAP families continues to be broad, and increases in the level of utilization are seen with regard to all but two of the services, the Family Independence Program (FIP) and the Women, Infants, and Children nutrition program (WIC).

Changes in ECEAP families' *participation in support groups and organizations* has changed over time as well. Participation in parenting groups increased among Wave 3 ECEAP families between the fall and spring of their ECEAP year, from 17 percent to 22 per-

cent, and then decreased to 16 percent during their children's kindergarten year. The opposite pattern appears in levels of family participation in religious organizations. Twenty-four percent of families reported they belonged to a religious organization in the fall of their ECEAP year; this percentage dropped slightly to 22 percent in the spring of that year and then jumped to 35 percent a year later, in the spring of their children's kindergarten year. Participation in community organizations, recreation, substance abuse prevention, and domestic violence prevention support groups has continued to increase since Wave 3 families' participation in the program.

ECEAP Families Compared with Unserved Families

Interviews with parents during their child's early elementary school years provide a descriptive profile of families' resources, parents' perceptions about their support for their child, and families' participation in their children's education. Study findings regarding differences between ECEAP and comparison families with respect to these

three areas are described next. Teachers' observations of families' school participation are then provided, followed by a discussion of family outcomes.

Family Resources. ECEAP families and comparison families rated the adequacy of their *basic resources* similarly, even though ECEAP families were found to have fewer financial resources than comparison families. This variable was comprised of parents' combined ratings of the adequacy of their family's food, housing, furnishings, clothing, heat, plumbing, transportation, telephone, and toys for children.

Ninety-two percent of ECEAP families and 90 percent of comparison families rated the adequacy of *food for two meals a day* as "usually adequate" or "almost always adequate." Eighty-eight percent of ECEAP families and 84 percent of comparison families rated their *house or apartment* as "usually adequate" or "almost always adequate." *Heat* was rated as "usually adequate" or

"almost always adequate" by 91 percent of ECEAP families and comparison families, while *transportation* was rated as "usually adequate" or "almost always adequate" by 78 percent of ECEAP families and 80 percent of comparison families.

There were statistically significant differences in ECEAP and comparison families' ratings of the adequacy of their *money* resources among families whose children were in kindergarten or second grade. ECEAP families whose children were in kindergarten rated their *money* resources as less adequate than comparison families. ECEAP families whose children were in second grade rated their *money* resources as more adequate than comparison families. This variable combined parents' ratings of the adequacy of their money for bills, money for themselves, money for entertainment, and source of loans.

Overall, higher percentages of ECEAP families were utilizing *community services*, but the differences between ECEAP and comparison families were not statistically significant in all cases (see Figure 26). Those that were significant were:

Comparison of Community Services Utilization

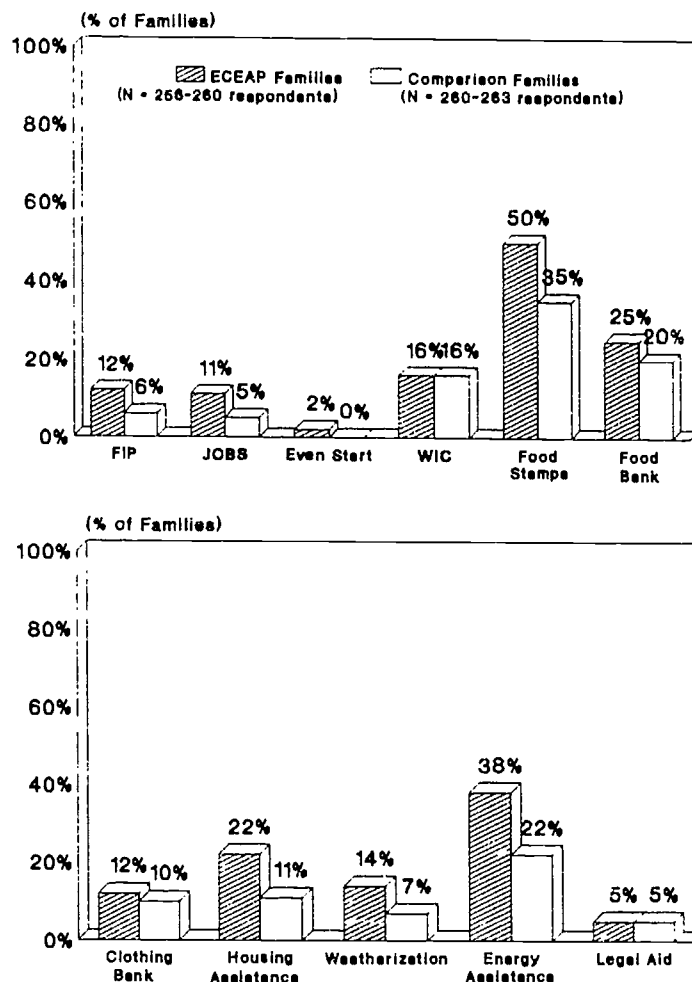


Figure 26

Parents Feeling Their Family Had Time to be Together

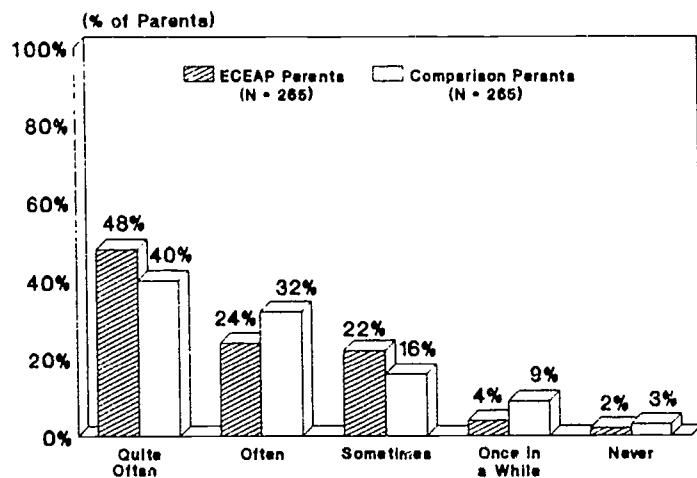


Figure 27

- Half of ECEAP families were receiving **food stamps**, while just over one-third of comparison families were receiving food stamps.
- Nearly 12 percent of ECEAP families participated in the **Family Independence Program (FIP)**, while six percent of comparison families did so.
- Nearly 11 percent of ECEAP families participated in the **Job Opportunities and Basic Skills Program (JOBS)**, compared to five percent of comparison families.
- Twenty-two percent of ECEAP families were receiving **housing assistance** compared to 11 percent of comparison families.

- Fourteen percent of ECEAP families were receiving **weatherization assistance**, while seven percent of comparison families were receiving such assistance.
- Thirty-eight percent of ECEAP families were receiving **energy assistance**, compared to 22 percent of comparison families.

ECEAP and comparison families reported participating to the same extent in **support organizations and groups**, such as parenting groups and PTA, religious organizations, community organizations, recreation teams, and support groups for substance abuse or domestic violence prevention.

Parents' Perceptions Regarding Their Support for Their Child. Parents were asked to indicate how they had been feeling recently about several aspects of their support for their child. Significant findings included:

- As Figure 27 illustrates, more ECEAP parents than comparison parents reported that they had "quite often" felt their **family had time to be together**. Fewer ECEAP parents than comparison parents indicated they only "once in awhile" or "never" had this time for their family to be together.
- Figure 28 shows that fewer ECEAP parents than comparison parents said they had "quite often" felt they **didn't have skills to help their child**, while more ECEAP parents reported that they had "never" felt this way.
- More ECEAP parents than comparison parents had "quite often" felt they had **control over their child's education**, and fewer ECEAP parents had "never" felt they had this control. Figure 29 displays these differences in parents' ratings.

Additionally, 86 percent of ECEAP children in both groups **go home after school**. The vast majority of children have a parent or adult relative at home; only two percent of the ECEAP children and one percent of the comparison children "usually" have "no

one" at home. Nineteen percent of ECEAP children and 22 percent of comparison children were cared for in a child care center or a family child care situation after school. Two percent of ECEAP children and three percent of comparison children attend after-school activities, community programs, or organized sports. (Note: these percentages do not equal 100 percent because two or more after-school care situations were reported for some children.)

Family Participation in Their Child's Education.

From parents' perspective, findings regarding their family's participation in their child's education included:

- During the past year, ECEAP families *participated in meetings, classes, or conferences intended to help them support their child's growth and education* at a significantly greater rate than did comparison families. Nearly half of the ECEAP families participated in parenting classes or groups, literacy training, adult education classes, conferences, and other types child development activities, compared to 38 percent of comparison families.

- *Parents' expectations for their child's educational attainment* were similar. Forty-eight percent of ECEAP parents and 52 percent of comparison families expect that the highest level of education their child will complete will be a Bachelor's degree. Trade school or community college is expected by parents to be the highest level attained by 24 percent of ECEAP children and 23 percent of comparison children. Twenty-eight percent of ECEAP parents expect their child's highest level of education to be completion of high school, as compared to 25 percent of comparison parents. No parent in either group expects their child to complete less than high school.

Parents Feeling They Don't Have Skills to Help Their Child

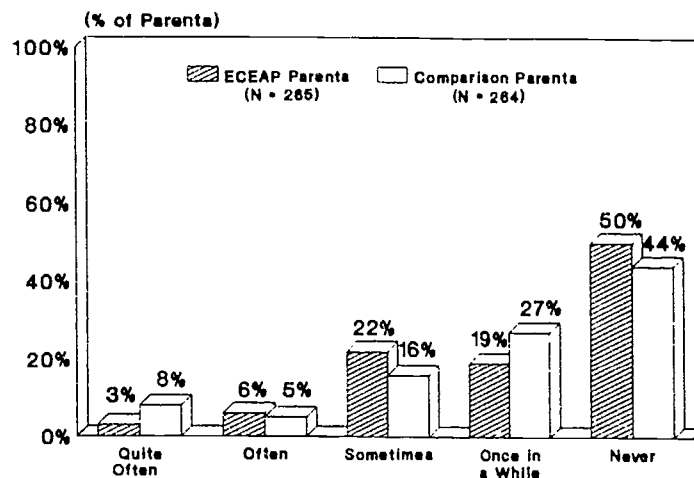


Figure 28

Parents Feeling They Have Control Over Their Child's Education

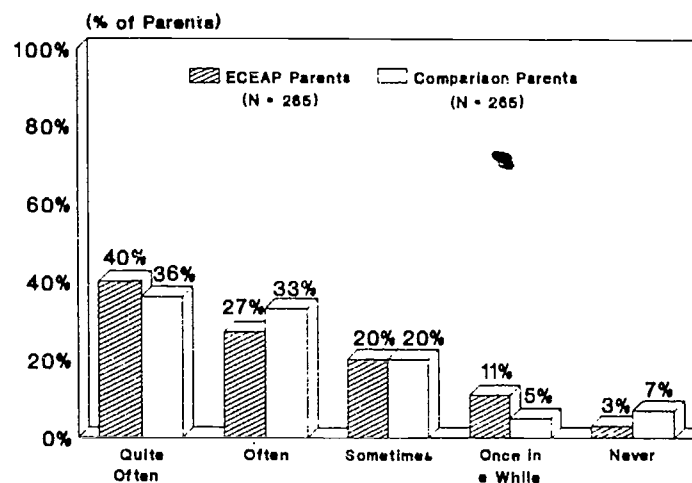


Figure 29

Barriers to Parent Participation in School-Related Activities

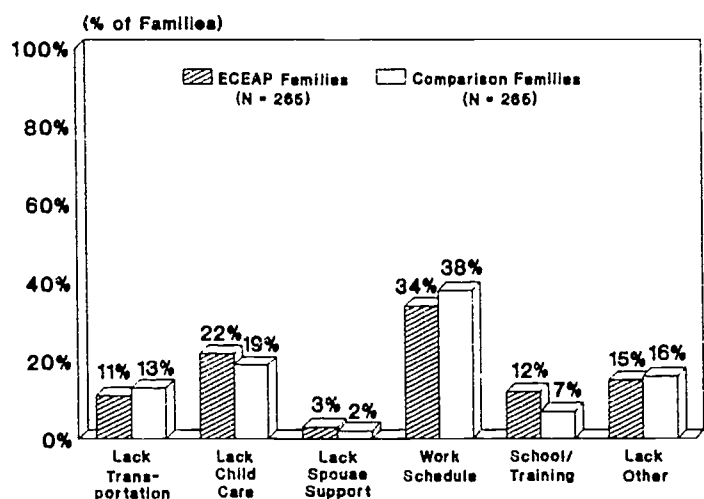


Figure 30

Figure 30). Nearly 12 percent of ECEAP families reported that their school or training schedule kept them from participating as compared to seven percent of comparison families. Differences found in parent reports of other barriers to participation, including transportation, child care, support from spouse or partner, and/or work schedule, were not statistically significant.

Teachers' ratings of family participation revealed the following:

- According to teachers, ECEAP families whose children were in first grade **supported their child in getting to school regularly and on time** more consistently than did comparison families. Families whose children were in kindergarten or second grade were not rated differently.
- ECEAP families whose children were in kindergarten **worked when scheduled as a volunteer in the classroom** less frequently than did comparison families, according to teachers. Families whose children were in first or second grade were not rated differently.
- Teachers indicated that ECEAP families whose children were in kindergarten **participated in parent meetings, committees, and organizations** less frequently than did comparison families. Families whose children were in first or second grade were not rated differently.
- As reported by teachers, there were no significant differences between ECEAP and comparison families with regard to **barriers to their participation in school activities**.

- ECEAP and comparison parents rated their participation in school-related activities similarly. No significant differences were found in parents' report of how often they **helped their child with homework, volunteered in the classroom, did things for the school at home, met with school staff, attended their child's school events, and attended school parent meetings**.

- Significantly more ECEAP families than comparison families stated that school or training schedules were a **barrier to their participation** in the school-related activities listed above (see

Discussion of Findings to Date

ECEAP attempts to assist families by improving their knowledge of community resources, increasing their self-sufficiency, and empowering them to support their child's development and success in school. Positive family outcomes in these areas are emerging over time through comparisons with unserved families.

Although ECEAP families as a group have fewer financial resources than comparison families, their perceptions of the adequacy of their basic and money resources were similar to those of the more advantaged comparison families. In addition, ECEAP families' utilization of social services has increased over time, and higher percentages of ECEAP families are using many services more than comparison families. ECEAP's efforts to increase families' knowledge of and access to community resources may be contributing to ECEAP families' perceptions that the adequacy of their resources is improving.

Some significant differences emerged between groups with respect to parents' perceptions about their ability to support their child. ECEAP families felt that they had more time to be together as a family, that they had the necessary skills to help their child, and that they had control over their child's education, more so than did comparison families. ECEAP parents reported that they participated in meetings, classes, or conferences intended to help them support their child's growth and education to a greater extent than comparison families.

Parent reports indicate that ECEAP and comparison families do not differ significantly in their level of participation in school-related activities; teacher reports, however, indicated some differences. For instance, teachers reported that ECEAP families whose children were in kindergarten volunteered in the classroom and participated in parent meetings, committees, and organizations less frequently than comparison families. ECEAP and comparison parents reported no differences in the extent to which there were barriers to their participation in school-related activities, except that 12 percent of ECEAP parents and only seven percent of comparison parents indicated that school or training schedules kept them from participating. This is consistent with the finding that significantly more ECEAP mothers than comparison mothers were enrolled in school or a training program this year (28 percent and 19 percent, respectively).

For More Information

Previous Study Reports

The Year 3 Annual and Technical Reports document findings from the first three years of the ECEAP Longitudinal Study. These reports contain descriptions of the study design, the representativeness of the study sample to the entire ECEAP population, the analyses conducted with data collected during the ECEAP year, and study results, which focus on the gains made by children and families during their participation in the program. Study variables and the instruments used to collect data are also provided. The reports can be obtained from the Department of Community Development at the address provided below.

Year 4 Technical Report

Details of the analyses conducted this year, including comparisons of ECEAP children and their peers, are available in the ECEAP Longitudinal Study Year 4 Technical Report. Information provided in the technical report includes:

- a detailed description of the study design, variables, and instruments;
- documentation of the similarities and differences between the study and comparison samples;
- detailed descriptions and results of study analyses;
- data tables; and
- a bibliography of other research referenced.

What's to Come in Subsequent Years

ECEAP and comparison children, and their families, are being tracked as the children proceed through elementary school. During each spring of the remaining years of the study, until the children complete fourth grade, families will be interviewed, teachers will be asked to complete observation inventories, and schools will be asked to provide information regarding school attendance, progress reports, and referrals to special services. In addition, during the fourth grade, study children's scores on the state-required CTBS assessment will be collected and compared to the scores of all children in the state. The focus of analyses conducted during the follow-up years of the study will be twofold: (1) study children's progress over time; and (2) study children's performance compared to the performance of their peers.

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