

DOCUMENT RESUME

ED 387 596

CE 069 907

AUTHOR Tadros, Lori Connors  
 TITLE Participation in Adult Education and Its Effects on Home Literacy. Report No. 32.  
 INSTITUTION Center on Families, Communities, Schools, and Children's Learning.  
 SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.  
 PUB DATE Oct 95  
 CONTRACT R117Q00031  
 NOTE 43p.  
 PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Adult Education; \*Outcomes of Education; Parent Child Relationship; \*Parent Influence; \*Parent Participation; Participant Characteristics; \*Predictor Variables; Preschool Children; Preschool Education; Reading Aloud to Others; \*Reading Habits  
 IDENTIFIERS \*Family Literacy; Impact Studies; National Household Education Survey

ABSTRACT

Data regarding a subsample of 815 families surveyed in the 1991 National Household Education Survey were analyzed to identify factors related to parent participation in adult education (AE) and completion of AE courses and to determine the impact of participation in AE on selected indicators of home support for children's learning. The data were subjected to descriptive, bivariate, and multivariate analyses. It was discovered that parents' primary reasons for participating in AE were to improve their skills related to their current job or to prepare for another job. Prior education, minority status, and children's child care experiences were also found to be significant predictors of completion of participation in and completion of AE courses. Although participation in AE was a significant predictor of the number of hours children watch television daily, it was not a significant predictor of the frequency of reading to the child or the number of children's books available in the home. It was recommended that activities to help parents obtain the high school diplomas or other credentials needed for employment be included in family literacy programs. (Contains 55 references.) (MN)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*



**CENTER ON FAMILIES,  
COMMUNITIES, SCHOOLS  
& CHILDREN'S LEARNING**

---

**PARTICIPATION IN ADULT EDUCATION  
AND ITS EFFECTS ON HOME LITERACY**

**Lori Connors Tadros**

**Report No. 32 / October 1995**

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

**CENTER ON FAMILIES,  
COMMUNITIES, SCHOOLS  
& CHILDREN'S LEARNING**

**Boston University, School of Education  
Institute for Responsive Education  
605 Commonwealth Avenue, Boston MA 02215 (617) 353-3309 / fax (617) 353-8444**

**The Johns Hopkins University  
3505 North Charles Street, Baltimore MD 21218 (410) 516-8800 / fax (410) 516-8890**

with research partners at

**Michigan State University, College of Education  
501 Erickson Hall, East Lansing MI 48824 (517) 355-1734 / fax (517) 353-6393**

**Temple University  
13th and Cecil B. Moore Avenues, Philadelphia PA 19122 (215) 204-1559 / fax (215) 204-5539**

**Wheelock College  
45 Pilgrim Road, Boston MA 02215 (617) 734-5200 / fax (617) 566-7369**

**Yale University  
310 Prospect Street, New Haven CT 06520 (203) 432-9931 / fax (203) 432-9933**

**ZERO-TO-THREE/NCCIP  
Arlington VA 22201 (703) 528-4300 / fax (703) 528-6848**

**For more information on the work of the Center, contact:  
John Hollifield, Dissemination Director  
The Johns Hopkins University  
3505 North Charles Street, Baltimore MD 21218 (410) 516-8800 / fax (410) 516-8890**

**National Advisory Panel**

**Robert Bartman (Chair), Commissioner of Education, Missouri Department of Education, Jefferson City MO**

**Barbara Bowman, Erickson Institute, Chicago IL**

**James Comer, Maurice Falk Professor of Child Psychiatry, Yale Child Study Center, New Haven CT**

**Gayle Dorman, Mary Reynolds Babcock Foundation, Winston Salem NC**

**Sanford Dornbusch, Director, Family Study Center, Stanford University, Stanford CA**

**Susan Freedman, Director, Office of Community Education, Massachusetts Department of Education, Quincy MA**

**Frieda Garcia, Executive Director, United South End Settlements, Boston MA**

**Maria Garza-Lubeck, Council of Chief State School Officers, Washington DC**

**Patricia M. Lines, U.S. Department of Education, OERI (ex-officio), Washington DC**

**Evelyn K. Moore, Executive Director, National Black Child Development Institute, Washington DC**

**Douglas R. Powell, Child Development and Family Studies, Purdue University, West Lafayette IN**

**Jonathan Sher, Director, North Carolina REAL Enterprises, Chapel Hill NC**

**Nora Toney, Teacher, David A. Ellis School, Roxbury MA**

**Rafael Valdivieso, Vice President, Academy for Educational Development, Washington DC**

**Robert Witherspoon, Educational Consultant, RaSaun & Associates, Inc., Herndon VA**

# **PARTICIPATION IN ADULT EDUCATION AND ITS EFFECTS ON HOME LITERACY**

**Lori Connors Tadros**

**Report No. 32**

**October 1995**

Published by the Center on Families, Communities, Schools and Children's Learning. This work has been supported by the Office of Educational Research and Improvement, U.S. Department of Education (R117Q00031). The opinions expressed are the author's and do not necessarily represent OERI positions or policies.

# **CENTER ON FAMILIES, COMMUNITIES, SCHOOLS & CHILDREN'S LEARNING**

The nation's schools must do more to improve the education of all children, but schools cannot do this alone. More will be accomplished if families and communities work with children, with each other, and with schools to promote successful students.

The mission of this Center is to conduct research, evaluations, policy analyses, and dissemination to produce new and useful knowledge about how families, schools, and communities influence student motivation, learning, and development. A second important goal is to improve the connections between and among these major social institutions.

Two research programs guide the Center's work: the Program on the Early Years of Childhood, covering children aged 0-10 through the elementary grades; and the Program on the Years of Early and Late Adolescence, covering youngsters aged 11-19 through the middle and high school grades.

Research on family, school, and community connections must be conducted to understand more about all children and all families, not just those who are economically and educationally advantaged or already connected to school and community resources. The Center's projects pay particular attention to the diversity of family cultures and backgrounds and to the diversity in family, school, and community practices that support families in helping children succeed across the years of childhood and adolescence. Projects also examine policies at the federal, state, and local levels that produce effective partnerships.

A third program of Institutional Activities includes a wide range of dissemination projects to extend the Center's national leadership. The Center's work will yield new information, practices, and policies to promote partnerships among families, communities, and schools to benefit children's learning.

## ABSTRACT

One of the National Education Goals is that "by the year 2000, every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy." Recent national surveys suggest that many adults in this country do not possess these skills. Given the well-documented relationship between higher parental education and better children's achievement in school, attention to improving the education levels of parents has grown in the last decade. About one third of adults over age 17 participate in adult education. However, we know little about why some parents participate in adult education and others do not; and we have insufficient knowledge about the impact of adult education experiences on children.

The purpose of this study is to test hypotheses generated from small-case studies of family literacy programs with data from the 1991 National Household Education Survey. Three stages of analyses (descriptive, bivariate, multivariate) were conducted to determine factors related to parent participation in adult education, completion of adult education courses, and the impact of participation on selected indicators of home support for children's learning. Analyses are based on a subsample of 815 families for whom information on adult education activities of the parent and parent's report of their preschool child's early care and education experiences are available.

Results indicate that parents participate in adult education primarily to improve skills related to their current job or in preparation for another job. Prior education, minority status, and children's child care experiences are also significant predictors of participation. These factors are also predictive of completion of adult education courses. Of the indicators of home support for learning explored, participation in adult education was a significant predictor of the number of hours children watch television daily. Participation in adult education was not a significant predictor of the frequency of reading to the child or the number of children's books available in the home in this study. The report concludes with recommendations for policy and practice related to adult education and training for parents of preschool age children.

## **ACKNOWLEDGMENTS**

The author wishes to acknowledge the assistance of Joyce Epstein, Don Davies, Nancy Karweit, and Barbara Wasik in reviewing earlier drafts of this report.

## Introduction

One of the National Education Goals is that "by the year 2000, every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy." Recent national surveys suggest that many adults in America are not able to perform the complex array of tasks required for the 21st century (Crandall & Imel, 1991; Snow, 1991).

In 1991, the National Adult Literacy Survey (NALS) assessed the prose, document, and quantitative literacy skills of 191 million adults in the United States. In all three areas, 21 to 23 percent of adults performed at the lowest level. Respondents at this level answered questions related to brief and uncomplicated texts or performed simple arithmetic functions. Two factors were critical in determining the performance levels of adults in this survey — the respondent's own level of education and their parents' level of education (Kirsch et al., 1993).

Education, particularly in the United States, has been considered the key to economic and social success. Adults with higher levels of education are more likely to be employed, to earn higher wages, and to contribute to the vitality of the community — for example, by voting or investing in savings accounts (Kirsch et al., 1993). Even more important for the future of our society are the well documented effects of parental education (particularly mother's education) on many aspects of children's development. According to Sticht & McDonald (1990) higher levels of mother's education results in better prenatal health care, better language and cognitive development in children, and higher academic achievement in school.

A plethora of programs exist to educate children early and to keep students in school through high school graduation. Once an adult leaves the mandatory education system, however, opportunities for further education and job training are available only through a patchwork of public and private organizations. According to a recent study, 32 percent of adults age 17 and over were enrolled in some type of part-time educational activity (Kopka & Peng, 1994).

Little is known about why some adults participate in adult education and others do not. Adult education has not been shown to be particularly effective at improving the literacy skills or job-preparedness of adults (Datta, 1992; Duffy, 1992; Mikulecky, 1992, St. Pierre, Layzer, & Barnes, 1994). Problems plague the adult education field, including high dropout



rates and the length of time needed to make significant gains (Duffy, 1992; Mikulecky, 1992; Park, 1992). These problems are particularly serious for parents of young children participating in adult education (Connors, 1993). For those parents who do participate, there is little information about the impact on children and on general indicators of home support for learning (St. Pierre, Layzer, & Barnes, 1994).

## **Theory and Research on Family Literacy Programs**

Since the 1960s and the introduction of the National Head Start program, efforts to improve outcomes for children in school have also focused on the parent's role in supporting young children's learning (Comer, 1980; Scott-Jones, 1992; Zigler & Styfco, 1993). Many family literacy or intergenerational programs are based on the expectation that parents' newly developing skills will transfer intergenerationally to their children. A large body of literature supports the correlation between parents' education and children's development, and suggests that parents with more education are better able to transfer their knowledge to their children (Hess & Holloway, 1979; Sticht, 1975; 1992).

Intervention programs designed to improve family conditions and the development of young children are not likely to be successful unless they recognize that "parents' abilities to meet their children's emotional and intellectual needs are inextricably bound to their own mental health, social and educational resources" (Morisset, 1993, p. 25). Duffy (1992) suggests that parents participating in adult education activities *indirectly* influence their children's learning through the "new attitudes and the new skills that the adult introduces into the house and into the pattern of family interaction" (p. 62). The evidence for such indirect benefits is limited, but Van Fossen & Sticht (1991) found some support for indirect effects on children of mother's participation in adult education. Swartz, St. Pierre & Beckford (1993) found that participation in a family literacy program, which included parenting education, had positive effects on children's language development.

Although St. Pierre et al. (1994) assert that "effects on children are best achieved by services aimed directly at children" (pg. 19), our premise is that deep and lasting change for *families* will occur only when parents have adequate literacy skills to enable them to support their families, economically and educationally, in order to sustain their children's growth and development (Hayes, 1991). Empirical evidence for this premise is scarce and primarily correlational at this time due to the nascent stage of research on family literacy. There is,

however, a growing understanding from small, field-based studies of how parents with low literacy skills improve their own skills and that of their children.

**Research on family literacy programs.** As part of a larger study, Partners in Learning: Parent-Child Literacy, we have been evaluating local family literacy projects since 1991 (Connors, 1993; 1994; Dolan, 1992). One study evaluated an elementary school-based program serving preschool children, elementary children, and their parents. Participants attended the program two days per week. Services included adult education, preschool education, parent education, elementary tutoring, and a family summer reading program. Results indicated that preschool children's literacy levels improved, elementary students benefited from summer reading activities, parents' literacy improved, and teacher ratings of students participating in the project rose (Dolan, 1992; Connors, 1993).

Another study in the Partners in Learning project evaluated a middle-school-based family literacy project serving parents and community members three afternoons per week. The study revealed small but encouraging accomplishments: adult participants had positive attitudes toward education, often did their own homework together with their children, and increased the use of literacy skills in their daily lives (Connors, 1994).

Other researchers have reported similar results. For example, Heberle (1992) found that parents' participating in Kentucky's Parents and Children Education program had higher expectations for their children's future; parents' literacy levels improved (70% either received their Graduate Equivalency Diploma or raised their academic skills by two or more grade levels); and children's learning skills improved.

Seaman (1992) and Darling & Hayes (1989) investigated the effects of the Kenan Family Trust literacy programs on parents and children. Parents completing the program reported that they read more often, had plans to further their education, were able to help their children with homework, read more often to their children, and used more positive discipline techniques. Teachers gave more positive ratings to children whose parents participated in the program.

In a large study of over 1200 children and 500 parents, St. Pierre and colleagues (1993a,b) found that children participating in Even Start projects improved on tests of school readiness skills and language development at double the rate expected due to maturation (a control group was not used in this study). Adults in the programs made small but positive gains on pre-post measures of adult literacy. Further analyses revealed that parents who had

received more hours of parenting education had children who gained more on measures of language development .

Other adult education programs have served parents with no direct services to children and found some evidence of indirect effects of adult participation on children. For example, VanFossen & Sticht (1991) report that "65% of the children of mothers participating in adult education and training programs demonstrated educational improvements as a result of their mothers' participation" (p.v). Educational improvements were determined by teacher ratings and parent ratings of learning practices conducted at home with their children. Askov, Maclay, & Bixler (1992) also report that the children of parents attending an adult education program showed improvement in attendance and teacher ratings.

The purpose of the study reported here was to test field-based hypotheses concerning parent participation in adult education and the impact of these experiences on the home learning environment. While the data collected in the field-based projects have been descriptively rich, the small sample sizes and other methodological problems have limited the depth of analyses and, hence, the reliability and generalizability of the results (Connors, 1993; 1994; Park, 1992). The availability of the National Household Education Survey (NHES, 1991), and data on parents and their children, afforded us a unique opportunity to supplement and extend the results of our field-based work.

We specifically sought to investigate three questions in this study:

***1. What factors related to family background, child characteristics, and reasons for participation affect whether parents of preschool age children participate in adult education?*** Most parents in our field-based studies have reported that they participated in the family literacy program in order to improve their skills for employment and to provide their children with social/educational experiences (Connors, 1993;1994).

***2. What factors related to family background, child characteristics, and reasons for participation affect whether parents of preschool age children complete the adult education courses they take?*** Our field-based studies have shown that parents with more stable family circumstances are more likely to persist in completing family literacy programs (Connors; 1993).

***3. What factors related to family background, child characteristics, type of adult education course, and reasons for participation affect specific parenting practices which provide preschool age children with home support for learning?*** Our field-based work has

been conducted with family literacy programs which specifically address how parents can improve and extend their children's learning at home. Our results show that parents in family literacy programs read more often to their children and increase the number of children's books at home (Connors, 1993). However, we expect parents of young children who participate in adult education activities will limit the amount of television children watch, read to children frequently, and make many children's books available for children (VanFossen & Slicht, 1991).

## **Methodology**

### **Data Source**

The 1991 National Household Education Survey was a random-digit-dial telephone survey of approximately 60,000 adults in the United States. The survey collected information on the adult education experiences of persons ages 16 and older and the early childhood experiences of children ages three to eight (n=13,892) living in the sampled households. The early childhood survey collected information from parents on the following topics: child care and early childhood program experiences, kindergarten and elementary school entry, retention in early grades, parental involvement in center-based programs and in school, educational environment in the home, and household and family characteristics. The adult education survey collected information from both participants and non-participants about experiences with adult education activities, including characteristics of courses taken, benefits of participation, barriers to participation, and background characteristics (National Center for Education Statistics, 1992).

It was possible to identify a subsample of parents and children from the same households with information on both the adult education and early childhood survey components. The parent or guardian most knowledgeable about the child provided information regarding early childhood experiences. This report uses data provided by 815 parents or guardians about their own adult education activities and the early childhood experiences of their children who were between the ages of three and six on January 1, 1991. The National Household Education Survey over-sampled for Blacks and Hispanics in order to increase the reliability of estimates for race and ethnicity.

## Measures

Dependent variables for the three questions investigated in this study are identified next. This section is followed by the independent variables and background variables used in all three questions.

**Question 1.** What factors affect the participation of parents of preschool age children in adult education?

**Dependent variable:** The composite variable, PARTICIP, identifies participants in any adult education program (defined as "any kind of school, training program, or other educational program") including full-time and part-time degree and non-degree programs. This variable permits an explanation of this question with a sample which represents the wide range of experiences of adults once they have moved out of the mandatory education system.

**Question 2.** What factors affect the completion of adult education courses by parents of preschool age children?

**Dependent variable:** COMPLETE indicates the sum of positive responses to the question, "Did you complete the course?" The adult education survey component allows respondents who participated in adult education to report information for up to four courses.

**Question 3.** Does participation in adult education by parents of preschool age children affect parenting practices, such as the amount of television parents allow their children to watch, the frequency that a parent reads to a child, or the number of children's books in the home?

**Dependent variables:** HOURSTV, RDOFTEN, and MANYBOOK, were used to indicate the number of hours children watch television per day, how often the parent reads to a child, and the number of children's books available in the home, respectively. These factors have been cited frequently as indicators of home support for learning (Anderson et al., 1985; Heller, 1991; Mullis, 1992).

**Background variables:** PARED is a composite variable of mother's and father's education. If information for one parent was missing, information for the other parent or guardian living in the household was used. This variable represents most broadly the educational environment of the home.

**MINORITY** is a dichotomous variable indicating African American or Hispanic race. We attempted to control for the disproportionately low participation in adult education of African American and Hispanic individuals (Kopka & Peng, 1994).

**INCOME** identifies the income level of the household. We controlled for the effects of higher levels of income as determinants of the ability to participate in adult education or to provide resources for children's learning in the home due to cost-related factors.

**AGE** is the child's age on January 1, 1991. It was hypothesized that parents of younger children may be less likely to participate in adult education activities than parents of older preschool age children due to the increased demands on parental time, lack of available child care, and employment status of mothers.

*Independent variables:* **FORJOB** indicates whether the primary reason for participation in adult education was for current job reasons or to train for a new job. This variable is the most frequently cited reason for participation in adult education (Kopka & Peng, 1994).

**ANYCARE** indicates whether the child is currently receiving any type of regular, nonparental care or education. Parents of young children often cannot participate in adult education activities unless their child is cared for by someone else. Parents often state that one of the reasons they attend a family literacy program is to give their child an opportunity to participate in a structured social setting with other children (Connors, 1993; National Center for Family Literacy, 1993).

**HRSCARE** gives the total number of hours per week of regular, nonparental care or education. Parents of young children must balance their needs to further their education and employment opportunities with the needs of their children for time and attention. Parents who participate in adult education activities, often in addition to a job, may be faced with the need to have their child in child care for long periods of time.

## **Description of the sample**

Respondents in the sample for this study of 815 parents reporting about themselves and their three-to-six year old child included 78% natural or adoptive mothers, 16% natural or adoptive fathers, 4% grandparents, and 2% stepmothers, siblings or other relatives.

Seventy-one percent were White, 16% African American, 12% Hispanic, and 2% Asian or other race. Ninety-five percent of the fathers or stepfathers were employed; 53% of the mothers were employed. In 85% of the household both parents were present; in 15% of the households one parent was present.

Of the 815 parents, 8% had less than a high school diploma; 38% had a high school diploma or equivalent; 29% had attended a vocational/technical school after high school or some college; 12% had a college degree; and 13% had attended graduate school. Income levels were fairly evenly distributed, with 29% reporting income of less than \$20,000 per year; 35% reporting income less than \$40,000 per year; and 27% reporting income less than \$75,000 per year.

According to parents' reports, 31% of the children in the sample households were three years old, 30% were four years old, 32% were five years old, and 7% were six years old but had not entered 1st grade. Forty-four percent of the children were female; 56% were male. About 40% were in no formal early childhood program; 31% were in nursery school, prekindergarten, or Head Start programs; and 28% were in kindergarten. More than half of the children in this sample were in child care (some children were in both an early childhood program and child care). Fifteen percent were in home-based, non-relative care; 13% in daycare, and 27% in before or after kindergarten child care. Approximately one quarter of the children in child care attended for 15 hours or fewer per week, 17% attended for 16 to 35 hours per week, 12% attended for 36 to 50 hours per week, and 3% attended for more than 50 hours per week.

**Participation in adult education.** A large number (61%) of parents of preschool age children had participated in adult education sometime since they left high school. Thirty-nine percent of the parents in the sample for this study had never participated in any form of adult education. Of those participating in adult education, 36% had participated within the last 12 months, 15% had not participated within the past 12 months but had participated within the previous three years, and 10% had participated in adult education more than three years prior to the survey.

Figure 1 shows that parents who did not graduate from high school are much less likely to participate in adult education than parents with at least a high school degree or more, and they are also less likely to complete the course they take. Participation rates are about the same for high school graduates, those with some college, and college graduates. However, increasing levels of school attainment appears to increase the likelihood of completion of adult education courses.

---

INSERT FIGURE 1 HERE

---

Most of the parents in the sample who participated in adult education took part-time courses, although some (8%) were in full-time programs. About half of the parents taking courses took just one, 7% took two courses, and 10% took three or more courses. Approximately 78% of those who took one course completed the course; 84% of those taking two courses completed both, 90% of those taking three courses completed them, and 87% of those taking four courses completed all four courses.

The top four reasons for participating in adult education were: job-related (29%), required for a degree (13%), required by employer (13%), or required for a license or certificate (10%). Sixty-six percent felt taking a course would benefit their careers and 43% felt taking a course would benefit their basic skills.

Figure 2 shows the barriers to participation in adult education reported by white and minority parents of preschoolers. The top five barriers for both minority and white respondents were: conflicts with family responsibilities, lack of child care, conflict with work schedule, meeting time of classes, and cost. However, there were some particularly noteworthy differences in some of the barriers reported by white and minority parents. Transportation was a much more significant barrier to minority families' participation (32%) than to white parents (5%) in this sample. Double the percent of minority families (32%) than white families (16%) reported that they lacked information about courses available, the location of courses was inconvenient, and no interesting classes were available. Nearly 20% more white than minority parents reported that family responsibilities conflicted with their participation in adult education.

---

INSERT FIGURE 2 HERE

---

**Support for learning in the home.** Most (86%) of the parents reported that they had 10 or more books for children in their home. Forty percent said that they read to their child every day and another 44% reported that they read to their child three times per week.



Parents were also asked about their use of educational resources in the community. Almost all of the parents in this sample had taken their child to the park or a movie within the last year, many (84%) had been to the library within the year, and approximately three quarters of the parents had taken their children to a concert, a museum, or a zoo within the past year.

Figure 3 presents the percent of parents reporting that they conducted various learning activities with their children by levels of parent education. These learning activities, as a group, represent the types of readiness practices helpful for school success. The figure shows that the children of parents who did not graduate from high school in this sample are being provided with fewer school readiness activities at home. Parents with a high school degree, some college, or a college degree show a similar pattern of results to each other; although there are some differences in their conduct of the individual practices.

---

INSERT FIGURE 3 HERE

---

### **Statistical Analyses**

For each of the three main questions of this study: (1) t-tests were conducted to determine the significance of mean differences on key variables for participants and non-participants in adult education; (2) correlations between variables were used to identify important variables for the regression models; and (3) multiple regression analyses were conducted to determine the independent effects of key variables on participation in adult education, completion of courses, and parenting practices.

## Results

### Descriptive Results

Panels A, B, and C in Table 1 present results of the t-tests on mean differences for participants and non-participants in adult education on variables related to the three research questions of this study. Panel A indicates that parents participating in adult education are significantly more likely to have higher levels of education and less likely to be African-American or Hispanic. Parents participating in adult education are significantly more likely than non-participants to have their children in child care, specifically in a day care center. The income levels of households, the age of the child, and the number of hours per week in child care were not significantly different for participants and non-participants.

Panel B indicates that parents who completed at least one course are significantly more likely than non-completers to have higher education, higher household income, and are less likely to be African-American or Hispanic. Children of parents who completed the course they took were much more likely to be in child care, particularly a day care center, and to be in care for more hours per week. The age of a child was not significantly different for parents who completed or did not complete a course; nor was the reason for taking a course different for completers and non-completers.

Panel C indicates that parents who participate in adult education activities are more likely to have children that watch fewer hours of television per day, read to their child more often, and provide more books for their child at home than parents who do not participate in adult education.

---

INSERT TABLE 1 HERE

---

### Bivariate Results

Table 2 displays zero-order correlations conducted on the main dependent variables with the independent and background variables. These results generally support the descriptive results reported in Table 1. Participation in adult education (PARTICIP) is highly correlated with taking a course for an employment-related reason. Parents participating in

adult education are also more likely to have higher education, have their child enrolled in a day care center, and have their children enrolled for a greater number of hours. Minority status shows a moderate, but significant negative correlation with adult education participation. Participation in adult education is also significantly associated with parents reporting that their children watch TV for fewer number of hours per day and that they read to their child frequently.

Completing at least one course (COMPLETE) shows similar patterns of associations as participation, and confirms the descriptive results reported in Table 1. However, both the income level of the household and the number of children's books at home appear to also be related to whether parents completed the course they took.

The number of hours a child watches television (HOURSTV) is significantly correlated with all of the key variables, except race. The frequency of reading to a child (RDOFTEN) is significantly correlated with higher parent education, higher income, and race, with white parents reading more frequently to their child. Similar correlations are found for the number of children's books at home (MANYBOOK). For the three parenting indicators, the results reported in Table 2 confirm the t-test results reported in Table 1, except for the association between adult education participation and the number of children's books at home.

---

INSERT TABLE 2 HERE

---

## Multivariate Results

Table 3 presents the results of the multiple regression analyses conducted to determine the significant independent predictors of participation in adult education for this sample of parents of preschool age children.

Column 1 in Table 3 indicates that 62% of the total variance in *participation* in adult education is mainly predicted by the parents' motivation to take a course for an employment-related reason (FORJOB). Higher parental education in the household (PARED), lower income levels (INCOME), and more hours in child care (HRSCARE) are also significant predictors. The significant correlation between participation and minority status presented

in Table 2 is eliminated in these analyses, probably due to the influences of parental education and income.

Column 2 in Table 3 presents the results of the multiple regression analyses conducted to determine the significant independent predictors of *completion* of adult education courses. The analyses show that completion of an adult education course is mainly predicted by parents' motivation to take a course for an employment-related reason (FORJOB), higher parental education in the household (PARED), not being a member of a minority group (MINORITY), enrollment of a child in a daycare center (DAYCARE), and more hours of child care (HRSCARE). The correlation between income and completion of a course reported in Table 2 does not hold up in these analyses as an independent influence, once the other more important variables are taken into account.

---

INSERT TABLE 3 HERE

---

Table 4 presents the results of the multiple regression analyses conducted to determine the significant independent predictors of three parenting indicators of home support for children's learning.

The analyses show that the number of hours per day the child watches television (HOURSTV) is mainly predicted by the child and family background variables of higher parental education (PARED); their parent being a member of a minority group (MINORITY); by higher income levels (INCOME); and by having an older preschool age child (AGE). With these variables controlled, parents participating in adult education (PARTICIP) have children that watch fewer number of hours of television per day.

Participation in adult education was not a significant independent predictor of reading frequency. The frequency of parents reading to their child (RDOFTEN) is predicted mainly by the child and family background variables of higher parental education in the household (PARED); by not being a member of a minority group (MINORITY); and by having an older preschool child (AGE).

The number of children's books in the home (MANYBOOK) is mainly predicted by higher parental education (PARED), by not being a member of a minority group (MINORITY), by having a younger preschool age child (AGE), and by the child being enrolled in daycare (DAYCARE).

---

INSERT TABLE 4 HERE

---

**Summary of Results.** Participation in adult education (Question 1) is strongly influenced by the participant's motivation to meet employment needs. Parents in this sample participated in adult education primarily to improve their skills for their current job or to prepare for another job. Previous educational experiences also impact current participation in adult education. Parents who had more prior education are more likely to pursue further education. The analyses suggest that this may be because fewer minority students establish a successful "pattern of pursuit" in the mandatory education system. Parents who participate in adult education, by necessity, have their children in child care for longer periods of time.

Most parents in this sample who participated in adult education completed at least one course that they took. Completion of adult education courses (Question 2) is strongly influenced by having an employment-related reason for participation, higher parental education, not being a member of a minority group, enrollment of a child in daycare, and more hours in child care. The variables used in the regression analyses (Table 3) predict participation ( $R^2 = .62$ ) slightly better than completion ( $R^2 = .49$ ), suggesting that other important motivators and conditions also affect completion.

Of the three parenting indicators related to home support for learning explored in Question 3 (television hours, reading frequency, number of books), participation in adult education was found to be a significant predictor only of parents reporting that their children watch fewer number of hours of television per day. Older preschool children enrolled in day care, in homes with higher income levels and higher parental education, watch less television per day. Higher parental education, not being a member of a minority group, and being a younger preschool child were important predictors for both how often a parent reads to a child and the number of children's books available in the home.

## Discussion

This study was best able to address the research questions (1 and 2) related to participation in and completion of adult education by parents of preschool children with the NHES data. There are three important conclusions, linked to public policy, suggested by the results.

***Patterns of pursuit of further education are set by high school graduation.*** The critical "marker" for participation in adult education appears to be the high school diploma. As public policy, encouraging and assisting students to complete high school is important for enabling more parents to continue further education and retain gainful employment. Completion of adult education courses is strongly related to the participant's "base" level of schooling attained. Completing high school thus encourages a "pattern of pursuit." The attainment of each successive educational goal increases the likelihood of continued completion of adult education courses.

When one persists in reaching an educational goal — such as a high school diploma, completion of one course, completion of a degree — the skills and habits necessary for completing courses successfully become part of the adult's lifestyle. Individuals who pursue further education and participate in adult education come to understand the "role of a student" and how this role is integrated with other adult roles as worker, mother, wife, etc. (Pallas, 1993).

***Employment needs drive participation in adult education.*** Parents who are motivated to improve their skills participated and completed adult education courses more than other parents. Most participants expected that participation would benefit their career. Unfortunately, it is not possible to determine from these data whether participation actually resulted in career benefits or improvement in skills, leaving a dearth of information on the effectiveness of employment training programs (Morra, 1994).

Enrollment in job-related training is highest for workers 25 to 44 years old (Kopka & Peng, 1994), precisely the peak years of child-bearing and raising. Public policy reforms are increasingly targeting poor parents with young children by linking the receipt of benefits or entitlements to mandates for parent participation in further education or job training — e.g., such as in the JOBS program — (Ross, 1995a). Even "start up" jobs are important for initiating activities for adult self-improvement, especially if the jobs are tied to further education and employment opportunities.

A project of the Center on Families, Communities, Schools and Children's Learning, The Family Education and Training Program, represents a good example of an effort to link adult education activities with jobs. In this project, pre-employment training in the field of early childhood care and education is offered to low-income women whose children are enrolled in a Head Start program. The goals of the program are to assist participants in obtaining appropriate credentials for work in the child care field, obtaining jobs in early care and education, and strengthening parenting and personal development skills (Kagan et al., 1992; 1993). Early results suggest that participants have been successful in obtaining child care credentials or pursuing further education in the field, and in obtaining jobs in child care.

The results of this study are also consistent with findings suggesting that African-American and Hispanic individuals are less likely to participate in adult education (Hamilton, 1992; Kopka & Peng, 1994). Although the effects of race on participation and completion are partly explained by prior schooling and employment, minority parents in this sample were much more likely than white parents to report that they did not participate in adult education because they could not find a class that was of interest to them, the location was not convenient, or they did not have the necessary transportation to attend the class.

In order to increase the participation of minority parents in adult education, greater efforts must be made to assess minority parents' adult education needs and interests, and to develop programs that are located where minority parents live and work. Community or school-based family literacy programs have the potential to be responsive to minority families' concerns, at least as an initial educational experience (National Center for Family Literacy, 1993; Connors, 1994). Nonformal educational opportunities and adult education tied to community economic development may be more successful at least initially in increasing the participation rates of African-American and Hispanic parents (Hamilton, 1992).

***The availability of child care is critical to the participation of parents of preschool age children in adult education.*** Parents of young children are not different from most adults in the reasons why they participate in adult education. However, in order for parents of young children to participate in adult education they do need something that other adults may not — child care of good quality, easily accessible, and available for sufficient periods of time. Parents who participate in adult education and complete the courses they take are more likely to have their children in child care for more hours, most likely because they are also employed.

In many communities in the United States, good child care is not available to all families (Hofferth, West, & Henke, 1994). The cost of child care adds another barrier to

employment or participation in adult education and training programs for low-income parents (Ross, 1995b). Results of another study with the NHES data, using the full sample of the early childhood component, found that enrollment in day care was associated with higher parental education and income, and non-Hispanic status (West, Hausken, & Collins, 1993). Participation in center-based care may facilitate the development of children from some families (Hofferth, West, & Henke, 1994). As public policy, we need to insure that all families who need child care have access to good quality, affordable care.

The results of analyses performed to determine the independent predictors of the three parenting indicators of home support for learning (Question 3) are less conclusive. With other family background variables controlled, parents that participate in adult education have children that watch less television per day. This is an important finding given the long standing concern with the effects of excessive television viewing on children's development (van der Voot & Valkenburg, 1994; West & Brick, 1991). Recent reports have called for greater parental involvement in monitoring children's viewing habits (Puig, 1995). It is not clear from these data whether parents limited their children's television viewing because of information they learned in adult education, or because they and their children were out of the home for longer periods of time.

Although there were initial differences favoring parents who participated in adult education in the frequency with which they read to their children and the number of children's books available in the home, the effects of participation in adult education on these parenting activities were not sustained once the background variables were controlled in the regression analyses. This indicates that other family factors, particularly parents' own education, affect the frequency of parents reading with their children and the number of children's books at home. In these data, it was not possible to identify the type of adult education experience parents participated in to see if parents in a family literacy program were more likely to emphasize these reading behaviors with their children.

## Conclusions

The purpose of this study was to learn more about the participation in adult education of parents with young children and to explore the potential impact of this participation on young children. The National Household Education Survey (NHES) permits the investigation of these questions with a large, national sample, but the NHES was not explicitly designed for this purpose. The results discussed in this paper are limited because



the data did not include detailed information on the opportunities for participation in adult education available to respondents; nor on the content, duration, or intensity of the adult education courses taken by those who did participate. There were no data on parenting practices before participation in adult education or on other family or community-related factors that might impact children's home support for learning.

Nevertheless, this study adds good information to an understanding of who participates in adult education and why, for the particular subgroup of parents of preschool age children. We have utilized the data from the NHES in new ways by matching parents and children from the same household and using information from both the adult education and early childhood components to conduct our analyses. Previous studies with the NHES data set have used just one component of the survey: Hofferth, West, & Henke, (1994), West & Brick (1991) and West, Hausken & Collins (1993) have conducted analyses with the early childhood component; Kopka & Peng (1993; 1994) have analyzed the adult education component only.

This study has confirmed and extended our findings from the field-based studies --that employment needs and job preparation are prime motivators for participation in adult education, that child care is an important factor in enabling families to participate in adult education, and that income and prior levels of education are important influences on completion. We have also learned more about the effect of race on participation in and completion of adult education courses.

Family literacy programs, if they provide adequate child care, respond to the needs and interests of participants, assist parents without high school diplomas or other credentials necessary for employment to obtain them, and link further education with employment opportunities, are poised to increase the participation of parents with preschool children in adult education (Connors 1993; 1994, National Center for Family Literacy, 1993; Wagner & Venezky, 1995).

## References

- Anderson, R. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: The National Institute of Education.
- Askov, E.N., Maclay, C.M., & Bixler, B. (1992). An intergenerational study of the impact of computer-assisted instruction with low-literate parents. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues*. (pp. 149-158). Norwood, NJ: Ablex.
- Comer, J.P. (1980). *School power*. New York, NY: Free Press.
- Connors, L.J. (1993). *Project SELF HELP: A family focus on literacy*. (Report No. 13) Baltimore: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Connors, L.J. (1994). *Small wins: The promises and challenges of family literacy*. (Report No. 22) Baltimore: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Crandall, J. & Imel, S. (1991). Issues in adult literacy education. *The ERIC Review*, 1, (No. 2), 2-7.
- Darling, S., & Hayes, A.E. (1989). *Breaking the cycle of illiteracy: The Kenan family literacy model program*. Kentucky: The National Center for Family Literacy.
- Datta, L.E. (1992). Youth interventions: Literacy. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues* (pp. 41-60). Norwood, NJ: Ablex.
- Dolan, L.J. (1992). *Project SELF HELP: A first-year evaluation of a family literacy program*. (Report No. 8) Baltimore: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Duffy, T.M. (1992). What makes a difference in instruction? In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues* (pp. 61-83). Norwood, NJ: Ablex.
- Hamilton, E. (1992). The challenge to serve minority groups. In *Adult Education for Community Development* (pp. 113-136). New York: Greenwood Press.

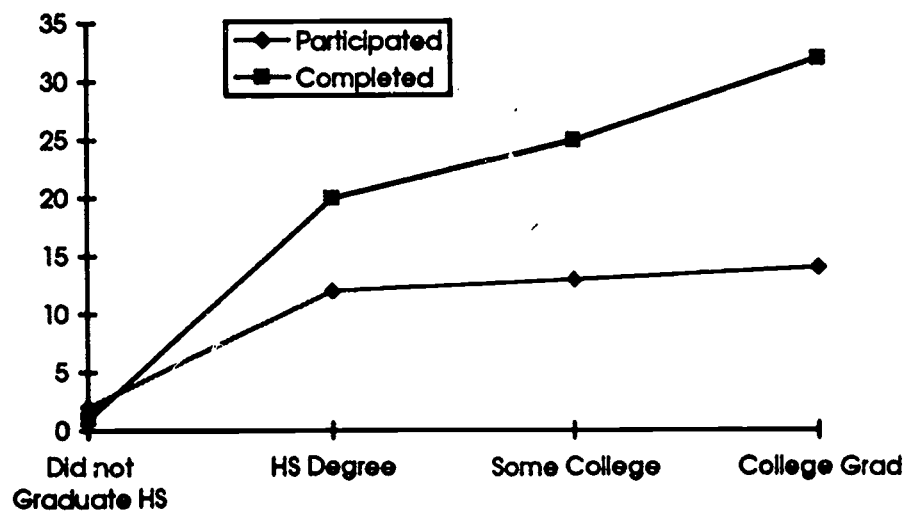
- Hayes, A.E. (1991). *Undoing the oversimplification of a complex matter: Issues in defining evaluative criteria, data collection, and reporting for intergenerational literacy programs*. Paper presented at the annual meetings of the American Educational Research Association: Boston .
- Heberle, J. (1992). Pace: Parent and child education in Kentucky. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues* (pp. 136-148). Norwood, NJ: Ablex.
- Heller, M. (1991). The emergence of reading and writing. In *Reading-Writing Connections: From Theory to Practice* (pp. 16-62). New York: Longman.
- Hess, R., & Holloway, S. (1979). *The intergenerational transmission of literacy* (Report). Washington, DC: National Institute of Education.
- Hofferth, S. L., West, J., & Henke, R. (1994). *Access to early childhood programs for children at risk* (NCES 93-372). Washington, DC: National Center for Education Statistics.
- Kagan, S. L., Costley, J., Landesman, L., Marx, F., Neville, P., Parker, S., & Rustici, J. (1992). *Family Education and Training: Obstacles, Opportunities, and Outcomes for Low-Income Mothers*. (Report No. 4) Baltimore, MD : Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Kagan, S. L., Neville, P., & Rustici, J. (1993). *Family Education and Training: From Research to Practice — Implementation Plan*. (Report No. 14) Baltimore, MD: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Kirach, I.S., Jungeblut, A., Jenkins, L., & Kolstad, A. (1993). *Adult literacy in America: A first look at the results of the National Adult Literacy Survey*. Washington, DC: US Government Printing Office.
- Kopka, T. C., & Peng, S. S. (1994). *Adult education: Employment-related training* (No. NCES 94-471). Washington, DC: National Center for Education Statistics.
- Mikulocky, L. (1992). National adult literacy and lifelong learning goals. *National Center on Adult Literacy Newsletter*, Pennsylvania: National Center on Adult Literacy.
- Morra, L. G. (1994). *Multiple employment training programs: Most Federal agencies do not know if their programs are working effectively* (GAO/HEHS-94-88). Washington, DC: General Accounting Office.

- Morisset, C.E. (1993). *Language and emotional milestones on the road to readiness* (Report No. 18) Baltimore: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.
- Mullis, I. (1992). *Trends in school and home contexts for learning* (NCES 92-070) Washington, DC: National Center for Education Statistics.
- National Center for Education Statistics (1992). *National Household Education Survey: User's Manual* (NCES 92-019). Author.
- National Center for Family Literacy (1993). *The power of family literacy* Kentucky: Author.
- Pallas, A. M. (1993). Schooling in the course of human lives: The social context of education and the transition to adulthood in industrial society. *Review of Educational Research*, 63 (No.4), 409-447.
- Park, R.J. (1992). Commentary on three programs for the intergenerational transfer of cognition. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues*. (pp. 159-168). Norwood, NJ: Ablex.
- Puig, C. (1995, March 7, 1995). Execs, Advocates Debate TV's Role in Shaping Values. *Albuquerque Journal*, p. B5.
- Ross, J. L. (1995a). *Means-tested programs: an overview, problems, and issues* (GAO/T-HEHS-95-76). Washington, DC: General Accounting Office.
- Ross, J.L. (1995b). *Child care: Recipients face service gaps and supply shortages* (GAO/T-HEHS-95-96). Washington, DC: General Accounting Office.
- Scott-Jones, D. (1992). Family and community interventions affecting the development of cognitive skills in children. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume 1: Programs, policy, and research issues* (pp. 84-108). Norwood, NJ: Ablex.
- Seaman, D.F. (1992). Follow-up study of the impact of the Kenan Trust model of family literacy. *Adult Basic Education*, 2 (2), 71-83.
- Snow, C. (1991). *The theoretical basis of the home-school study of language and literacy development*. Paper presented at the annual meetings of the American Educational Research Association, Chicago.

- St. Pierre, R., Layzer, J., & Barnes, H. (1994). *Variation in the design, cost, and effectiveness of two-generation programs*. Paper presented at the Eighth Rutgers Invitational Symposium on Education: New Directions for Policy and Research in Early Childhood Care and Education, Princeton, NJ.
- St. Pierre, R., Swartz, J., Murray, S., Langhorst, B., & Nickel, P. (1993a). *National evaluation of the Even Start family literacy program: Second interim report*. Cambridge, MA: Abt Associates.
- St. Pierre, R., Swartz, J., Murray, S., Deck, D., & Nickel, P. (1993b). *National evaluation of the Even Start family literacy program: Report on effectiveness*. Cambridge, MA: Abt Associates.
- Sticht, T. G., & McDonald, B. A. (1990). *Teach the mother and reach the child: Literacy across generations*. Washington, DC: Unesco International Bureau.
- Sticht, T. (Ed.). (1975). *Reading for working*. Alexandria, VA: Human Resources Research Organization.
- Sticht, T.G. (1992). The intergenerational transfer of cognitive skills. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume I: Programs, policy, and research issues* (pp. 1-9). Norwood, NJ: Ablex.
- van der Voot, T. H., & Valkenburg, P. M. (1994). Television's impact on fantasy play: A review of research. *Developmental Review, 14*, 27-51.
- VanFossen, S., & Sticht, T. G. (1991). *Teach the mother and reach the child: results of the intergenerational literacy action research project of Wider Opportunities for Women*. Washington, DC: Wider Opportunities for Women, Inc.
- Wagner, D. A., & Venezky, R.L. (1995) Adult Literacy: The Next Generation. *Connections*, (May). Philadelphia, Penn.: National Center for Adult Literacy.
- West, J., & Brick, J. M. (1991). *The National Household Education Survey: A look at young children at risk*. Paper presented at the annual meetings of the American Statistical Association, Atlanta, Ga.
- West, J., & Hausken, E. G. (Collins, M.). *Profile of preschool children's child care and early education program participation* (NCES 93-133). Washington, DC: National Center for Education Statistics.
- Zigler, E., & Styfco, S.J. (1993). Using research and theory to justify and inform Head Start expansion. (Volume VII, No. 2). *Social Policy Report*. Chicago: Society for Research in Child Development.

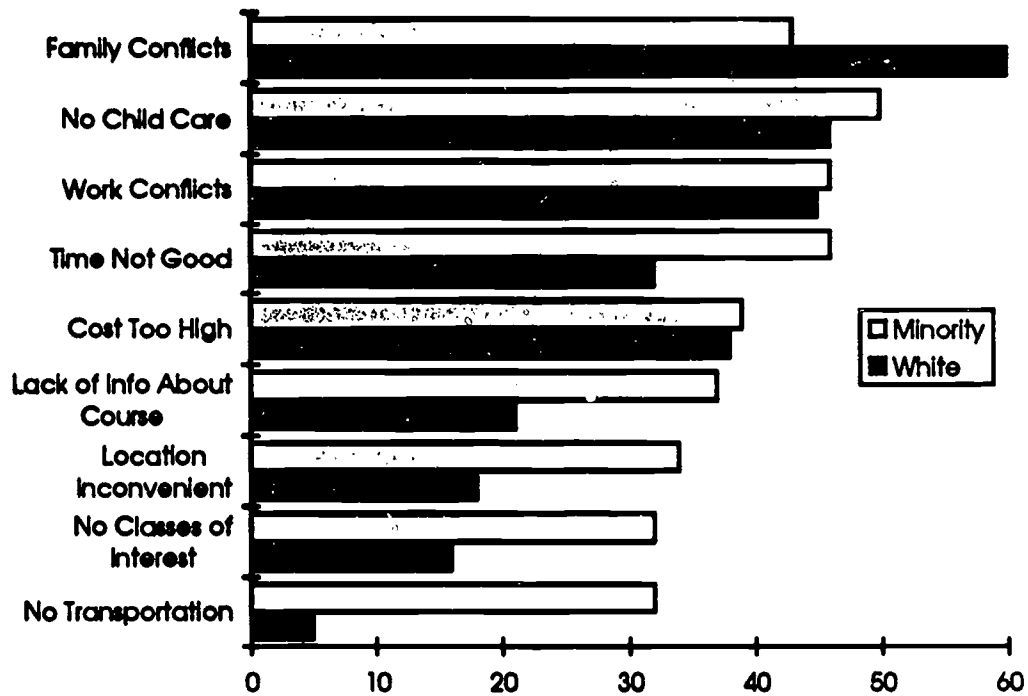
- Sticht, T. G., & McDonald, B. A. (1990). *Teach the mother and reach the child: Literacy across generations*. Washington, DC: Unesco International Bureau.
- Sticht, T. (Ed.). (1975). *Reading for working*. Alexandria, VA: Human Resources Research Organization.
- Sticht, T.G. (1992). The intergenerational transfer of cognitive skills. In T.G. Sticht, M.J. Beeler, & B.A. McDonald (Eds.), *The intergenerational transfer of cognitive skills, Volume I: Programs, policy, and research issues* (pp. 1-9). Norwood, NJ: Ablex.
- van der Voot, T. H., & Valkenburg, P. M. (1994). Television's impact on fantasy play: A review of research. *Developmental Review*, 14, 27-51.
- VanFossen, S., & Sticht, T. G. (1991). *Teach the mother and reach the child: results of the intergenerational literacy action research project of Wider Opportunities for Women*. Washington, DC: Wider Opportunities for Women, Inc.
- Wagner, D. A., & Venezky, R.L. (1995) Adult Literacy: The Next Generation. *Connections*, (May). Philadelphia, Penn.: National Center for Adult Literacy.
- West, J., & Brick, J. M. (1991). *The National Household Education Survey: A look at young children at risk*. Paper presented at the annual meetings of the American Statistical Association, Atlanta, Ga.
- West, J., & Hausken, E. G. (Collins, M.). *Profile of preschool children's child care and early education program participation* (NCES 93-133). Washington, DC: National Center for Education Statistics.
- Zigler, E., & Styfco, S.J. (1993). Using research and theory to justify and inform Head Start expansion. (Volume VII, No. 2). *Social Policy Report*. Chicago: Society for Research in Child Development.

**FIGURE 1**  
**PERCENT OF PARENTS OF PRESCHOOL AGE CHILDREN WHO PARTICIPATED IN ADULT EDUCATION IN THE PAST 3 YEARS AND THOSE COMPLETING AT LEAST ONE COURSE BY LEVEL OF SCHOOLING**



Source NHES, 1991

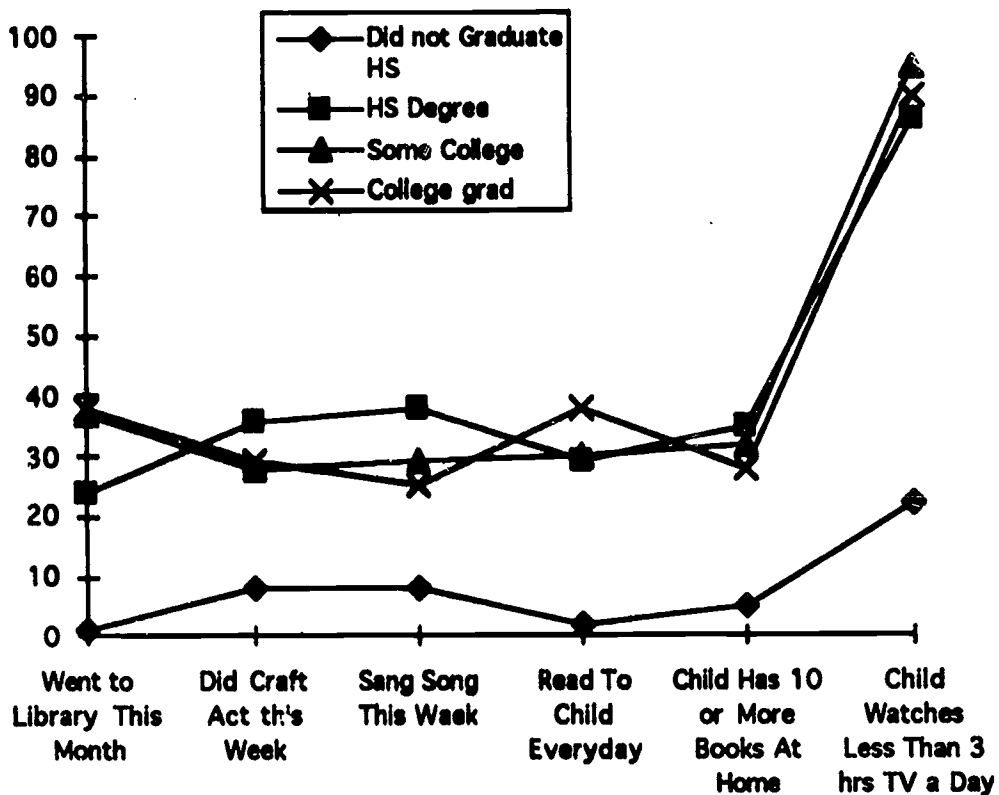
**FIGURE 2**  
**PERCENT OF PARENTS OF PRESCHOOLERS REPORTING**  
**SPECIFIC BARRIERS TO PARTICIPATION IN ADULT EDUCATION BY RACE**



Source NHES, 1991 (Minority=African-American or Hispanic)



**FIGURE 3**  
**PERCENT OF PARENTS REPORTING THEY CONDUCT**  
**VARIOUS LEARNING ACTIVITIES WITH THEIR CHILDREN**  
**BY PARENT EDUCATION**



Source NHES, 1991

**TABLE 1**  
**MEANS OF KEY VARIABLES BY PARTICIPATION IN**  
**AND COMPLETION OF ADULT EDUCATION**

<b>PANEL A (N=815)</b>	<b>PARTICIPANT</b>	<b>NON- PARTICIPANT</b>	<b>t-test</b>
PARED	3.12	2.64	5.99*
MINORITY	.21	.33	-3.84*
INCOME	2.20	2.09	1.72
AGE	4.12	4.16	-.68
ANYCARE	.64	.53	3.08*
DAYCARE	1.21	1.07	5.27*
HRSCARE	1.31	.90	1.72
<b>PANEL B</b>			
<b>(N=288)</b>	<b>COMPLETED ONE COURSE</b>	<b>DID NOT COMPLETE</b>	<b>t-test</b>
FORJOB	.82	.78	.71
PARED	3.29	2.74	3.83*
MINORITY	.13	.32	-2.95*
INCOME	2.43	1.79	5.17*
AGE	4.11	4.05	.43*
ANYCARE	.66	.50	2.13***
DAYCARE	1.23	1.12	2.27***
HRSCARE	1.37	.98	2.35***
<b>PANEL C</b>			
<b>(N=815)</b>	<b>PARTICIPANT</b>	<b>NON- PARTICIPANT</b>	<b>t-test</b>
HOURSTV	3.38	2.96	4.27*
RDOFTEN	4.30	4.11	3.25*
MANYBOOK	3.83	3.77	1.50***

\*p<.05 \*\*p<.01 \*\*\*p<.001

<b>VARIABLE NAME</b>	<b>MEANING</b>	<b>SCORING</b>
PARED	parental education	1-4, low to high
MINORITY	African-American or Hispanic	1=minority, 0=white
INCOME	income level of household	1-4, low to high
AGE	age as of 1/1/1991	3-6
ANYCARE	regular, non-parental care	0=no, 1=yes
DAYCARE	daycare center	1=no, 2=yes
HRSCARE	hours of care per week	1-4, low to high
FORJOB	current or new job reason	0=no, 1=yes
HOURSTV	number of hrs of tv daily	1-5, high to low
RDOFTEN	how often read to child	1-5, low to high
MANYBOOK	number of books at home	1-4, low to high

**TABLE 2**  
**ZERO-ORDER CORRELATIONS FOR KEY VARIABLES USED IN ANALYSES**

KEY VARIABLES	PARTICIP N=815	COMPLETE N=288	HOURSTV N=815	RDOFTEN N=815	MANYBOOK N=815
FORJOB	.78***	.68***	.10**	.07*	.02
PARED	.20***	.28***	.28***	.34***	.30***
MINORITY	-.13***	-.17***	-.00	-.31***	-.30***
INCOME	.06	.16***	.26***	.22***	.13***
AGE	-.02	.00	.14***	-.10**	-.08*
ANYCARE	.10***	.13***	.11***	-.02	.05
DAYCARE	.19***	.21***	.10**	-.08*	.06
HRSCARE	.17***	.19***	.14***	-.04	.01
HOURSTV	.14***	.17***			
RDOFTEN	.11**	.13***			
MANYBOOK	.05	.10***			

\*p<.05 \*\*p<.01 \*\*\*p<.001

**TABLE 3**  
**EFFECTS OF MOTIVATION, BACKGROUND, AND CHILDCARE**  
**ON PARENT PARTICIPATION IN ADULT EDUCATION AND COMPLETION OF COURSES**

INDEPENDENT VARIABLES	PARTICIPATION N=815 B=	COMPLETION N=288 B=
FORJOB	.75*	.62*
PARED	.07*	.12*
MINORITY	-.03	-.06***
INCOME	-.06***	.01
AGE	.00	.02
ANYCARE	-.02	-.00
DAYCARE	.01	.05***
HRSCARE	.09***	.09***
Adjusted R squared	.62	.49
Standard Error	.30	.75
F=	163.15*	100.61*

\*p<.05 \*\*p<.01 \*\*\* p<.001

**TABLE 4**  
**EFFECTS OF PARTICIPATION IN ADULT EDUCATION,**  
**BACKGROUND, AND CHILDCARE ON PARENTING INDICATORS**

INDEPENDENT VARIABLES	HOURSTV N=815 B=	RDOFTEN N=815 B=	MANYBOOK N=815 B=
PARTICIP	.09***	.03	-.05
PARED	.19*	.25*	.27*
MINORITY	.09***	-.23*	-.27*
INCOME	.18*	.03	-.06
AGE	.16*	.09***	-.07***
ANYCARE	.01	.00	.10**
DAYCARE	.04	-.05	.12*
HRSCARE	.10	-.02	-.10
Adjusted R squared	.15	.17	.16
Standard Error	1.29	.75	.51
F=	18.21*	22.56*	20.90*

\*p<.05 \*\*p<.01 \*\*\* p<.001