Goodling Institute for Research in Family Literacy (Impact of Adult Participation on Children)

Askov, E.N., Grinder, E.L., & Kassab, C. (2005). Impact of family literacy on children (Update section). *Family Literacy Forum*, 4(1), 38-39.

The literature led us to ask the following two research questions from the Pennsylvania family literacy data: (1) Does pre-school children's participation in the family literacy program lead to gains in developmental skills, particularly literacy-related skills; and (2) Does parental participation in a particular component of family literacy affect child development scores?

Method

A quasi-experimental design was used to test the two research questions of interest. Data were collected from families who participated in Pennsylvania's family literacy programs between July 1, 2001 and June 30, 2002 (2001-2002 program year).

To assess children's growth and development family literacy programs chose from among three criterion-referenced assessment instruments to assess children who ranged in age from birth to 5 years of age. The instruments for children age three to five (inclusive) included the High/Scope Child Observation Record (COR) and the Learning Accomplishment Profile-Revised (LAP-R). For children who ranged from birth to 3 years of age programs were able to use the Early Learning Accomplishment Profile (ELAP).

Each of these instruments measures essentially the same developmental skills using a slightly different definition for each depending upon the methodology of the instrument. The developmental skills that the COR measures include initiative, social relations, creative representation, music and movement, language and literacy, logic and mathematics, and the average across these domains. The LAP-R and ELAP both measure the following domains: gross motor, fine motor, cognitive, language, and selfhelp.

Slight differences exist with these two instruments where the LAP-R measures personal/social and pre-writing while ELAP measures social/emotional and no writing domain.

In order to address the first research question, children's posttest scores on the COR, LAP-R, and ELAP after at least 90 days in the family literacy program were compared with the pretest scores of a comparable age group of children in order to determine whether participation in the program influenced pre-school children's scores, controlling on the variables listed above. Results indicate that children's posttest scores after at least three months in the family literacy program were significantly higher (p<0.05) than the pretest scores of a comparable age group of children who were just beginning their participation in the program for all domains of the COR, and most of the LAP-R and ELAP domains. The self-help domain was not statistically significant on the LAP-R, and the gross motor domain was not statistically significant for the ELAP. These results were evident after controlling on the variables listed above.

In order to test the second research question, a series of models were estimated that included variables indicating whether hours of parental participation in a particular component influenced developmental skills, as measured by the COR, LAP-R, and ELAP. Results indicate that intensity of participation in adult education had a significant effect on most of the developmental skills measured by the ELAP, which is administered to children less than three years of age. Specifically, greater participation in adult education was associated with higher fine motor, cognitive, self-help, and social/emotional posttest scores on the ELAP. Greater participation in parenting education was associated with higher ELAP language posttest scores.

For the LAP-R, there was a tendency for children in families with more interactive literacy between parents and children (or PACT) hours to have higher posttest scores on the cognitive domain. However, participation in adult education, parenting education, or interactive literacy did not seem to result in higher posttest scores for the other domains on the LAP-R or any of the domains on the COR. **Discussion**

The results for the first research question indicate that family literacy program participation is associated with improvements in participating children's developmental skills. Children who had participated in family literacy programs for at least 90 days had significantly higher scores on the ELAP, LAP-R, and COR.

The second research question examined the impact of hours of parental participation in each of the components of family literacy on children's assessment scores. The results indicated that intensity of participation in adult education influenced children's posttest scores on several domains on the ELAP (for age 3 and younger), while greater participation in parenting education was associated with higher posttest scores on the language domain of the ELAP.

The results of these analyses raise several thought-provoking questions, particularly in terms of the curricula that programs are implementing for parenting education and interactive literacy. Family literacy programs can determine their own curricula for the four components, and these may vary in their intensity, how much focus is placed on literacy, or how children develop. This variability in curricula may explain the varied results found for the impact of hours of participation in each component on children's developmental growth as assessed by the ELAP, COR, and LAP-R.

The finding that adult education and parenting education (in the case of language skills) were associated with ELAP posttest scores also has interesting implications. This result may have occurred because these components lead to increased self-esteem or selfconfidence

among adult participants, and this in turn may lead to more positive interaction with their very young children. Darling and Lee (2003) speculate that adult education provides two functions to parents by attending family literacy programs. First, by increasing their education, parents are able to provide a more economically stable environment for their children. Second, and more importantly for this article, through family literacy programs, parents may "change their perspective on literacy, recognizing and capitalizing on their role as their child's first and most important teacher" (p. 383). Further research needs to be conducted to examine changes in parents' understanding of learning and their perspective on literacy after participating in the components of family literacy.

The influence of intensity of parental participation hours in adult education on scores on the ELAP assessment instrument emphasizes the importance that should be placed on parents working with children who are birth to 3 years of age. Research (e.g.,

Bennett, Weigel, & Martin, 2002; Senechal & LeFevre, 2002) stresses that the precursors to learning to read begin at home in infancy, including phonological awareness, vocabulary, and speech discrimination among other language and literacy skills. Through family literacy programs parents are gaining the tools and skills to be able to provide their children with an environment that is optimal for their child's growth and development. In particular, family literacy programs provide parents with the knowledge of how to support their children's learning of specific literacy skills that provide the foundation for reading success.

This research, furthermore, supports the efficacy of the family literacy model. As parents develop their own literacy skills, they are better equipped to foster the literacy and language growth in their very young children. This relationship is most clearly evident in very young children (ages birth to 3 years old) where the parents are not only the primary teachers but also the greatest developmental influence. This study demonstrates the important linkage that exists between the parents' education and children's literacy and language development. It reaffirms the assumption of family literacy programs that parents are indeed the child's first and most important early teacher.