Family Participation and Involvement in Early Head Start Home Visiting Services:

Relations with Longitudinal Outcomes

Executive Summary

Carla A. Peterson & Dong Zhang

Iowa State University

Lori Roggman

Utah State University

Beth Green

Portland State University

Rachel Chazan Cohen

George Mason University

Jane B. Atwater

University of Kansas

Lorraine McKelvey

University of Arkansas for Medical Sciences

Jon Korfmacher

Erikson Institute

Background and Purpose

Home visiting is an intervention approach used widely to provide individualized services to families living in poverty and children facing risks for poor development. Home visiting programs are often, by design, an indirect means to promote healthy child development and employ a variety of strategies ranging from checking child health and safety to encouraging positive parenting to helping parents access education and employment opportunities. Most home visiting programs, however, state that promoting child development is their overarching goal. Most home visitors work with parents to facilitate "developmental parenting," a term introduced by Roggman, Boyce, and Innocenti (2008) to describe healthy parent-child interactions likely to support positive outcomes for their children. Promoting developmental parenting captures the overall approach of Early Head Start (EHS) home-based programs (Administration on Children and Families, 2002), the focus of this report.

Early Head Start programs use a two-generation approach: they aim to enhance the adult family members' capacity to promote their children's health and developmental outcomes, as well as their own health and self-sufficiency. To do this, EHS programs identify and prepare staff members to work effectively with families and facilitate building informal and formal community supports. During 2011, EHS programs enrolled nearly 110,000 infants, toddlers, and pregnant women in more than 1,000 programs (Office of Head Start, 2011); nearly half these families participated in home-based programs. While EHS is only one of several large-scale home visiting programs that serve families with young children, EHS has been identified as an evidence-based program (Administration on Children and Families, 2011). Thus, it is likely that EHS will expand and/or that new home visiting models will be fashioned after EHS guidelines. Estimates are that home visiting programs serve as many as 500,000 children at a cost of nearly \$1 billion per year (Gomby, 2005; Stoltzfus & Lynch, 2009) and are likely to expand given recent federal legislation (Caudell-Feagan, Doctors, & Newman, 2011).

The research literature on home visiting is growing but remains limited regarding how within-program variations in parent involvement in home visiting services are related to longitudinal outcomes for children and families. Korfmacher and colleagues (2008) argue that documenting parent involvement is key to both understanding home visiting programs and guiding program improvements to reduce attrition and enhance effectiveness. Korfmacher et al. proposed a framework for describing the intervention process and experiences in home visiting programs that includes two related but qualitatively different dimensions of parent involvement – participation and engagement. Participation describes the overall amount of services a family receives as measured by enrollment duration and frequency and length of visits. Engagement describes the quality of the family's participation in home visits and relationships with the service providers.

The present study, following from the framework proposed by Korfmacher et al. (2008), and nested within the Early Head Start Research and Evaluation Project (EHSREP), was undertaken to describe family participation and engagement in program services and examine the long-term relations participation and engagement have with child and family outcomes. Researchers have identified relations among home visiting experiences, outcomes on parenting identified when children were age two, and child development outcomes at age three (Raikes et al., 2006). Here, we seek to explore the influence of early home visiting experiences, while the children were infants and toddlers, on child and family status during the children's preschool and elementary school years.

Research Questions

Four specific research questions guided this study: (1) What proportion of families enrolled in EHS home-based programs were in each of four service participation groups representing overall levels of participation? (2) What were the demographic characteristics of the families in each service participation group? (3) What were the home visiting experiences of the families in each service participation group? and (4) How did family involvement in EHS home visiting services relate to outcomes experienced?

Participants and Methodology

Participants in this study were 1,053 families assigned randomly to the EHS services (program or experimental) group at 11 sites that participated in the EHSREP. These 11 programs included those in which over 80% of the families received home visits and were located in both rural and urban areas in the western, midwestern, and eastern United States. All participating families were enrolled in the EHS program at their respective sites when their children were less than 12 months old. In this sample, 42% of the children's primary caregivers (almost all mothers) were Caucasian, 29% were African American, 24% were Hispanic, and another 5% were from other ethnic groups. The vast majority (78%) of the respondents used English as their primary language at home. About two-thirds (62%) of the children were first born, and about a third (36%) of the mothers were teenagers at the time of the child's birth. Accordingly, 47% percent of the respondents had not finished high school at enrollment into the EHSREP, and 19% were enrolled in school or training. Only 27% of the mothers lived with a husband; another 35% lived with other adults.

The EHSREP dataset includes an extensive collection of measures of family characteristics, child developmental status and academic achievement, parent-child interaction, parent outcomes, and parent involvement collected at five different points in the children's development: 14, 24, and 36 months of age, prior to kindergarten entry (age 5), and during fifth grade (age 10). Measures of home visiting services included: (1) duration of program enrollment; (2) total number of home visits received; (3) total minutes of home visitation received; (4) the average percentage of each visit that was spent on child-focused, family-focused, and relationship-building activities; and (5) staff ratings, collected at program exit, of the quality of each family's engagement in program services.

To address the first three research questions, each family was classified into one of four service participation groups: Intensive participation (enrolled at least 12 months, four or more home visits per month), Consistent participation (enrolled at least 12 months, two to four visits per month), Limited participation (enrolled at least 12 months, less than two visits per month), and Early exit (enrolled less than 12 months). Next, using logistic regression and descriptive analyses, the service participation group variable was used to examine the relations among family demographic characteristics and group assignment, as well as to describe the home visiting intervention experiences of participants classified into each group. Next, longitudinal structural equation modeling (SEM) was used to simultaneously test the influence of the set of home visiting variables, family involvement, (enrollment duration, intensity of home visiting, overall engagement with the program) on child and family outcomes at prekindergarten and fifth grade.

Results

Family Participation in EHS Home Visiting. The majority of families were classified into the Intensive or Consistent service participation groups while less than one-fourth of participants left their EHS programs after fewer than 12 months of home visiting services.

Logistic regression analyses revealed that Caucasian families were more likely than those from other ethnic groups to be classified into the Intensive service participation group. As well, families facing a moderate level of risks were more likely than those facing either fewer or more risks to be classified into the Intensive participation group. Teen mothers and those with less than a high school education were more likely to be classified into the Limited participation group than were older mothers and/or mothers with more education.

Families classified into the different service participation groups had quite different EHS program experiences. As expected and by definition, families in the Intensive and Consistent service participation groups were enrolled for significantly more months and had, on average, more visits per month, than families in the Limited participation or Early Exit groups. Early exit families, nevertheless, received as many home visits per month, on average, as families in the groups with stronger participation levels, and there were no differences among the service participation groups in the average length of home visits. Staff ratings of overall family engagement with the EHS program were significantly higher for families in the Intensive and Consistent service participation groups than for those in the other two groups.

It is important to note that families in the different service participation groups spent their time during home visits engaged in different types of activities. Families in the Intensive and Consistent service participation groups spent greater percentages of their time on child-focused activities than did families in the other two groups. These greater percentages of time, along with longer duration of enrollment and more frequent home visits, translated into significantly more total minutes spent on child-focused activities.

Program Experiences and Outcomes. Structural equation modeling revealed that higher levels of family involvement in EHS home-based services were associated with more favorable child outcomes and parent-teacher relationships when the children were in fifth grade. As well, higher levels of family involvement with the EHS home-based program were related to better prekindergarten child developmental status; better child developmental status at prekindergarten was associated with and partially mediated both more favorable child developmental and academic status and parent parent-teacher relationships when the children were in fifth grade. Additionally, families who had higher levels of involvement with the EHS home-based program provided more stimulating and nurturing home environments at both the prekindergarten and fifth grade time points and enjoyed more favorable parent-teacher relationships when their children were in fifth grade.

Implications for Research, Practice, and Policy

The associations between intensive and sustained participation in EHS home-based programs and positive child and family outcomes identified in this study adds to the accumulating evidence that within-program variations in home visiting program involvement makes a difference in outcomes. Within the EHS home-based programs, those parents who persisted in enrollment and received more intensive home visiting services were those who experienced more positive outcomes for both children and their families. Families in the Intensive and Consistent service participation groups, as compared to families with more limited participation, experienced home visits where a greater percentage of time was devoted to child-focused activities; this, combined with overall intensity of home visits, translated into substantially more child-focused intervention. In practical terms, this represents time home visitors spent facilitating parents' responsive and developmentally supportive interactions with their young children, providing information about child health and development,

and supporting parents' development of goals for their children, all of which are important efforts in optimizing children's development. Additionally, families who persisted and participated actively were rated by EHS home visitors as more highly engaged in the program. It is not possible to determine whether highly engaged families participated more fully or home visitors were likely to perceive families who participated actively as highly engaged. Nonetheless, this association supports the assumption that families who participated actively over a longer period of time had not only more extensive opportunities to receive parenting support during home visits, but also were more receptive to and likely to benefit from both that support and additional supports available from other program staff and services, including group socialization activities provided weekly by EHS home-based programs.

The positive relations identified in the current study between home visiting services during the infant and toddler years and family and child outcomes in middle childhood is especially noteworthy. Relationships between home visiting experiences and such long-term outcomes have seldom been identified, and this study provides further evidence that both child and home factors are related to later outcomes. As well, this study demonstrated that positive effects on children's developmental and academic status and parent-teacher relationships when the children were in fifth grade, were mediated by the child's developmental status at prekindergarten. Thus, earlier outcomes related to child status mediated later outcomes in multiple areas; this contrasts with mediation effects that have been identified previously.

Researchers have demonstrated that early, positive impacts of EHS home visiting on parenting outcomes mediated positive impacts on children's social-emotional and cognitive functioning at age 3 (Raikes et al., 2012) and that EHS impacts on parenting during the first five years of life contributed to positive child outcomes at prekindergarten (Chazen-Cohen et al. 2009). The Nurse Family Partnership program, similarly, has shown positive impacts, on both maternal life course and child development outcomes, four years after participation (Olds, et al., 2004). This study revealed that both child and home factors influence later outcomes and that the mediation effects of earlier positive child developmental status are diffuse.

Quality implementation of program specifications has been related positively to child and family outcomes previously (Jones Harden, Chazan-Cohen, Raikes, & Vogel, in press). These findings illustrate that the duration of enrollment and frequency of home visits, sometimes called participation, and the quality of engagement, together, are related to outcomes. Clearer and more frequent description of intervention experiences can contribute to a more nuanced understanding of families' actual intervention experiences. Clear description of families' intervention experiences in home visiting programs is an essential first step in elucidating the relations between program goals and program activities; the relative match between these can guide model refinements. Clearly articulating program activities provides, in turn, guidance on identifying the desirable skills and characteristics staff members, as well as the training and support activities they will need to enhance families' involvement with the program. Finally, identifying the pathways through which program activities effect outcomes will guide future evaluation efforts effectively. Enhancing the efficacy of home visiting programs is a crucial goal. The broad public investment in home visiting programs and the fact that these programs are serving some of the most vulnerable families in our country make these efforts imperative to optimize services for families, maximize investment, and enhance public will to embrace making family support programs work for all children in all kinds of families a collective endeavor (Daro, 2012).

References

- Administration for Children and Families (2002, December). *Pathways to quality and full implementation in Early Head Start programs*. Washington, DC: U.S. Department of Health and Human Services.
- Administration on Children and Families (2011, October). *Home visiting evidence of effectiveness review: Executive summary.* Washington, DC: U.S. Department of Health and Human Services.
- Caudell-Feagan, M., Doctors, J. V., & Newman, M. M. (2011). *States and the new federal home visiting initiative: An assessment from the starting line.* Washington, DC: The Pew Charitable Trusts. Retrieved from http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=61051.
- Chazan-Cohen, R., Raikes, H., Brooks-Gunn, J., Ayoub, C., Pan, B. A., Kisker, E. E., . . . & Fuligni, A. S. (2009) Contributions of the parenting environment during the first five years of life to child outcomes at kindergarten entry in a low-income sample. *Early Education and Development*, 20, 958-977.
- Daro, D. (2012). *Perspective on Systems Thinking.* Address at the National Summit on Quality in Home Visiting Programs, Washington, D.C., February.
- Gomby, D. S. (2005). *Home visitation in 2005: Outcomes for children and parents.* Washington, DC: Committee on Economic Development, July.
- Jones Harden, B., Chazan-Cohen, R., Raikes, H. H., & Vogel, C. (2012). Early Head Start Home Visitation: Role of Implementation in Bolstering Program Benefits. *Journal of Community Psychology*, 40, 438-455.
- Korfmacher, J., Green, B. L., Peterson, C., Roggman, L., Cook, G., Rector, F., . . . & Schiffman, R. (2008). Parent involvement in early childhood home visiting. *Child Youth Care Forum, 37,* 171-196.
- Office of Head Start (2011). Early Head Start program facts: Fiscal year 2011. Retrieved at www.ehsnrc.org/PDFfiles/ehsprogfactsheet.pdf.
- Olds, D. L., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D. W., . . . & Holmberg, J. (2004). Effects of Nurse Home-Visiting on Maternal Life Course and Child Development: Age 6 Follow-Up Results of a Randomized Trial. *Pediatrics*, 114, 1550-1559.
- Raikes, H., Green, B. L., Atwater, J., Kisker, E., Constantine, J., & Chazan-Cohen, R. (2006). Involvement in Early Head Start home visiting services: Demographic predictors and relations to child and parent outcomes. *Early Childhood Research Quarterly*, *21*, 2-24.

- Raikes, H. H., Roggman, L. A., Peterson, C. A., Brooks-Gunn, J., Schiffman, R. F., Chazan-Cohen, R., & Zhang, X. (2012). Theories of Change and Outcomes in Home-Based Early Head Start Programs. Unpublished manuscript.
- Roggman, L. A., Boyce, L. K., Innocenti, M. S. (2008). *Developmental parenting: A guide for early childhood practitioners*. Baltimore, MD: Paul Brookes Publishing Co.
- Stoltzfus, E., & Lynch, K. E. (2009). *Home visitation for families with young children*. Washington, DC: Congressional Research Service, October.