



## Executive Summary

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# ASSOCIATIONS BETWEEN PROVIDER TRAINING AND EDUCATION AND OTHER QUALITY INDICATORS IN LOW-INCOME CHILDREN'S PRIMARY CARE ARRANGEMENTS AT 24 MONTHS OF AGE

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## OVERVIEW

Researchers have consistently found associations between child care quality and children's developmental outcomes in early childhood (for example, Burchinal et al., 2000; McCartney, Dearing, Taylor, & Bub, 2007; NICHD-ECCRN, 2000, 2002, 2003). However, many of these studies have focused on center-based programs for preschoolers; fewer have focused on early care for infants and toddlers, and for children in home-based settings. In addition, data regarding the quality of child care provided to children of low-income families have generally not been based on nationally representative samples; instead, they have tended to come from localized samples (Knox, London, Scott, & Blank, 2003; Pine, 1999), large studies with samples representing a broad range of income levels (for example, NICHD-ECCRN, 2001), or studies of specific early childhood interventions (for example, Campbell, Pungello, Miller-Johnson, Burchinal, & Ramey, 2001; Schweinhart et al., 2005).

Recent analyses of nationally representative samples of low-income infants and toddlers have revealed that these children are more likely to be cared for in home-based settings than in center-based settings (Halle et al., 2008; Iruka & Carver, 2006). Similar patterns have been found in child care data within individual states (Lippman, Vandivere, Keith, & Atienza, 2008). However, there is little research base examining the indicators of quality in home-based settings (see Doherty, Forer, Lero, Goelman, & LaGrange, 2006, for a recent study) and it has not differentiated the features of quality that may be most important for children of different ages. Additional studies need to explore the factors within home-based settings that are important for low-income infants' and toddlers' developmental outcomes.

Recent innovations in the study of child care quality have begun to focus on specific aspects of quality and how they relate to the multiple domains of child development (Child Trends, 2008; Forry, Vick, & Halle, 2009). However, as a first step in understanding the relations between specific facets of child care quality and domains of children's development, we need to understand what factors are associated with quality in the early care and education setting (Zaslow, Tout, Halle, & Forry, 2009).

The analyses described in this brief focus on understanding what professional development factors are associated with quality in both center-based and home-based early care and education settings that serve toddlers. These analyses were performed on a sample of children in low-income

families from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B), a nationally representative data set.

## KEY FINDINGS

### **The demographic characteristics of low-income children in home-based versus center-based settings at 24 months of age differs.**

- The proportion of low-income children using home-based and center-based care differs by race/ethnicity and birthweight status.
- Mother's education level does not distinguish the type of nonparental primary care arrangement among low-income children at 24 months of age.
- Low-income children in home-based care are more likely to have mothers who are employed either part-time or full-time than are their peers in center-based care.
- Low-income children in home-based care are more likely to have mothers who are married than are their counterparts in center-based care.
- Low-income children in home-based care have been in the provider's care for more months than have low-income children in center-based care.

### **The child care quality indicators as reported by parents and providers in center-based versus home-based settings serving low-income children at 24 months of age are different.**

- Children in center-based care have providers who participated in training in the last 12 months and who have higher levels of education than children in home-based care.
- Child-adult ratios are higher, on average, in center-based settings than in home-based settings.
- More developmentally appropriate materials are found in center-based settings than in home-based settings.
- Language and literacy activities are more prevalent in center-based than in home-based settings, whereas participation in enriching outings is more prevalent in home-based than in center-based settings.
- Children in center-based care settings had providers who were more likely than their counterparts in home-based settings to disagree with behavior management practices that reflect a high level of control.

## Differences in the relationships among provider training and education and other reported indicators of quality are apparent in home-based versus center-based settings used by low-income children at 24 months of age.

- Provider training predicts more indicators of quality than provider education in home-based settings. Additionally, provider training and provider education predict different indicators of quality.
- Provider training and education predict fewer indicators of quality in center-based settings compared to home-based settings. Provider training and education also predict different indicators of quality in center-based settings compared to home-based settings.

## REFERENCES

- Burchinal, M., Roberts, J. E., Riggins, R., Zeisel, S. A., Neebe, E., & Bryant, D. (2000). Relating quality of center-based child care to early cognitive and language development longitudinally. *Child Development, 71*, 338-357.
- Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology, 37*(2), 231-242.
- Child Trends. (2009). *Roundtable on developing the next wave of quality measures for early childhood and school-age programs*. Prepared for the Administration for Children and Families, U.S. Department of Health and Human Services. Available online at [www.childcareresearch.org](http://www.childcareresearch.org).
- Doherty, G., Forer, B., Lero, D. S., Goelman, H., & LaGrange, A. (2006). Predictors of quality in family child care. *Early Childhood Research Quarterly, 21*(3), 296-312.
- Forry, N., Vick, J., & Halle, T. (2009). *Evaluating, developing, and enhancing domain-specific measures of child care quality*. Washington, DC: Child Trends.
- Halle, T., Nuening, M., Weinstein, D., Vick, J., Forry, N., & Kinukawa, A. (2009). *Primary child care arrangements of U.S. infants: Patterns of utilization by poverty status, family structure, maternal work status, maternal work schedule, and child care assistance*. Washington, DC: Child Trends.
- Iruka, I. U., & Carver, P. R. (2006). *Initial results from the 2005 NHES Early Childhood Program Participation Survey*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Knox, V., London, A. S., Scott, E. K., & Blank, S. (2003). *Welfare reform, work, and child care: The role of informal care in the lives of low-income women and children*. New York: MDRC.
- Lippman, L., Vandivere, S., Keith, J., & Atienza, A. (2008). *Child care use by low-income families: Variations across states*. Washington, DC: Child Trends.
- McCartney, K., Dearing, E., Taylor, B. A., & Bub, K. L. (2007). Quality child care supports the achievement of low-income children: Direct and indirect pathways through caregiving and the home environment. *Journal of Applied Developmental Psychology, 28*(5-6), 411-426.
- NICHD Early Child Care Research Network. (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Science, 4*(3), 116-141.
- NICHD Early Child Care Research Network. (2001). Before Head Start: Income and ethnicity, family characteristics, child care experiences, and child development. *Early Education and Development, 12*(4), 545-576.
- NICHD Early Child Care Research Network. (2002). Child care structure-process-outcome: Direct and indirect effects of child care quality on young children's development. *Psychological Science, 13*(3), 199-206.
- NICHD Early Child Care Research Network. (2003). Does quality of child care affect child outcomes at age 4 1/2? *Developmental Psychology, 39*, 451-469.
- Pine, B. A. (1999). *Caring for Connecticut's children: Perspectives on informal, subsidized child care*. Farmington, CT: Child Health and Development Institute of Connecticut.
- Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.
- Zaslow, M., Tout, K., Halle, T., & Forry, N. (2009). *Multiple purposes for measuring quality in early childhood settings: Implications for collecting and communicating information on quality*. Washington, DC: Child Trends.

## CONCLUSIONS

Overall, these findings demonstrate the need to carefully consider the meaning of quality across home-based and center-based care for low-income toddlers. They also suggest that policies or initiatives aimed at promoting professional development opportunities, especially among home-based providers, may yield benefits for the low-income children in their care. This knowledge is timely because states are actively developing quality initiatives. However, additional information is needed to fully inform quality initiatives. For example, *policy makers* may want to consider how to obtain quality information about programs in efficient and cost-effective ways. Further work is also needed to identify strategies to engage home-based providers in professional development activities. Additionally, further examination of the links between more nuanced measures of provider education and training (for example, measures with more depth on factors such as content, dosage, and quality of the training) and child outcomes using national data sets is needed.