



Research on Quality in Infant-Toddler Programs

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Concern about the quality of infant-toddler care programs has grown recently in response to two factors. The first is the need for infant-toddler care by employed parents. By 1997, a nationally representative study (Ehrle, Adams, & Tout, 2001) documented that 73% of children under 3 years regularly spent time in nonparental care. The second factor is the research that emphasizes the importance of brain development in the early years. Yet the National Child Care Staffing Study (NCCSS) (Whitebook, Howes, & Phillips, 1990) of 227 infant and preschool centers in five major cities reported that the quality of care was barely adequate. The Cost, Quality, and Outcomes Study Team (1995, p. 40) reported for 400 centers that “most child care—especially for infants and toddlers—is mediocre” (see also NICHD Early Child Care Research Network, 2002). This Digest introduces some of the many issues related to the quality of infant-toddler care.

Measuring the Quality of Care

The quality in infant-toddler programs is measured by examining *structural* variables, such as space, number of babies per caregiver, or group size, and by examining *process* variables, such as the richness of “turn-taking-talk” and the amount of warmth and cuddling between caregivers and babies. Fenichel and colleagues (1999), summarizing strategies synthesized from discussions at the National Leadership Forum on Quality Care for Infants and Toddlers in 1998, identified eight aspects of high-quality infant care: (1) health and safety; (2) small groups of 3 to 4 infants per caregiver; (3) assigning each baby to a primary caregiver; (4) ensuring continuity of care with the same provider over time; (5) caregiver responsiveness to infant signals; (6) meeting each infant's needs in group care with a focus on *individual* learning style and temperament; (7) cultural and linguistic sensitivity; and (8) provision of a physical environment with variety, stimulation, and planned activities.

The process variables that have received the most attention in research to date involve the caregiver, including the relationships among turnover, training, and teacher-child interactions. The NCCSS study reported an average annual caregiver turnover rate of 41% across participating centers (Whitebook, Howes, & Phillips, 1990). In addition, less than one-fifth of teachers and assistants had attended two workshops or conferences during the year. Yet research has shown that the number of training workshops and courses in child development attended by teachers is significantly more likely to account for higher-quality interactions between teachers and young children than the number of years that center providers have worked in child care (Honig & Hirallal, 1998). In licensed child care homes with moderate group sizes (averaging around six children), caregiver training or education was a better predictor of child care quality than child-to-adult ratios. Caregivers with training were less detached with the children (Clarke-Stewart et al., 2002). In

this research, none of the structural characteristics predicted caregiver sensitivity.

Research on Child Outcomes

Research on Aggression. Some early studies indicated that when group care for babies of low-income at-risk families emphasized cognitive enrichment, the children were more likely to act aggressively (kicking, hitting, and pushing) in kindergarten. However, when social skills training was added to the curriculum, graduates were not more aggressive in kindergarten than graduates of the control group (Haskins, 1985). Park and Honig (1991) reported also that children who attended full-time child care in their first year were rated higher in aggression by their preschool teachers than children who had not been in full-time care. However, teachers (unaware of infant care conditions for each child) also rated those preschoolers as having better abstract thinking skills. The preschoolers did not show elevated levels of assertiveness (compared with peers who had less than full-time care as babies), contrary to the interpretations of some researchers. In his summary of reports of U.S. infant day care, Belsky (1992) noted that infants in nonparental care for more than 20 hours per week in the first year of life exhibited heightened aggression and noncompliance during the preschool and early school-age years (in addition to slightly higher rates of attachment insecurity).

Longitudinal Studies of Effects. Research suggests that high-quality care is associated with “better language and mathematics skills, better cognitive and social skills, and better relationships with classmates” (“In Early-Childhood Education and Care: Quality Counts,” 2002). The Syracuse Family Development Research Project reported long-term beneficial effects of a high-quality infant-toddler care program serving low-income, low-education, single-parent families. The results included decreased juvenile delinquency rates and less severe delinquency during adolescence, compared with a control group (Lally, Mangione, & Honig, 1988). Ramey and colleagues (2000), in a follow-up of 111 African American infants from at-risk families who attended high-quality early care in the Abecedarian Project, reported that at age 21, twice as many program graduates had fewer children of their own and were still in school compared with the control group.

The National Institute of Child Health and Human Development (NICHD) has supported an ongoing national study of the development of more than 1,000 children (followed from birth) in 10 early child care sites (NICHD Early Child Care Research Network, 2002, p. 135). Participation in centers, and particularly in higher-quality centers, was a better predictor of academic skills and language ability for children at 4 years of age than participation in other forms of infant-toddler care. This study uses careful and frequent observational assessments of quality. The major NICHD

finding is that choice of high-quality care is critical for children's learning, language, and behavioral outcomes.

Regulated Care. Research shows that infant care regulated by a state agency is of higher quality than unregulated care, and that stricter state regulations are associated with better quality (Clarke-Stewart et al., 2002). For example, official licensing agencies require more than 35 square feet of space per child. In an unlicensed facility, with less than 25 square feet per child, children have been observed to be more aggressive and destructive, and to engage in random physical activity. Clarke-Stewart (1992) notes that the purpose of regulation should be to "identify a reasonable floor of quality and eliminate or modify care that fell below that floor" (p. 123). Among infants of working parents, 23% are placed in a child care center. Most infant-toddler nonparental care is provided by relatives (29%), family day care providers (18%), and nannies (6%), and these settings are less likely to be regulated than are centers (Clarke-Stewart & Allhusen, 2002).

Other Variables to Consider in Infant-Toddler Care

Research has not yet fully addressed a number of other variables related to the particular vulnerabilities of infants and toddlers in center care. For example:

Length of stay could affect an infant's experience of child care. Separation anxiety and acute distress resulting from being away from the primary caregiver (usually the mother) are quite common in babies, reaching a peak at about 18 months and gradually decreasing after age 2 (Kagan, Kearsley, & Zelazo, 1978). Thus, even a high-quality center may be stressful for a toddler left for 8 or more hours a day.

Infant temperament also matters. Shy babies may be overwhelmed by group care in a center but flourish in a small family care setting. Older toddlers bored in a small family care setting may engage enthusiastically with play materials and peers available in the larger world of center care.

Age at entry, schedules, flexibility, and individualization may make a difference to the quality of children's experiences. Infants and toddlers are developing rapidly and are starting to explore the world. A "high-quality" program for the toddler, for example, may need to include flexibility of schedule for choice of activity, for sleeping, and for toilet learning. A setting rich in activity but with highly structured and strictly scheduled activities may not provide sufficient experience of experimenting with choices for toddlers. Individual attention to the capabilities and needs of infants and toddlers appears to be a critical element of a high-quality environment.

Conclusion

Research indicates that choice of high-quality care is critical for children's optimal development. These findings can alert families to look for quality factors as they set out to find infant-toddler care (Honig, 2002) and sharpen public demand for providing training to ensure quality.

For More Information

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