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Child Care and the Development of Young Children (0–2)

Margaret Tresch Owen, PhD

University of Texas at Dallas, USA

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Introduction

Given the importance attributed to maternal care in cultural ideals[1] and psychological theories,[2] and the working role assumed by the majority of mothers with very young children, there has been widespread concern about effects of non-maternal child care for young children, and for infants in particular.

Subject

Rates of employment for the mothers of infants and preschoolers have tripled in the US since 1969. In fact, in the U.S., the majority (63%) of women with children under 3 spends time in the labor force and their children experience considerable amounts of non-maternal care. Reliance on non-maternal child care beginning in the first year of life has become normative.[3,4] The number of weekly hours of paid employment among mothers has also grown, along with the number of hours of child care. In 1998, 38% of women with children under 3 worked full time throughout the year, compared with 7% in 1969. The very young children of unemployed

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mothers experience child care on a regular basis too.[3] Figures from the National Household Education Survey in 2001 indicated that 53% of 1-year-olds and 59% of 2-year-olds received regularly scheduled child care in the United States.[5] Are there systematic effects for young children of early child care experiences in the first two years of life?

Problems

To understand the effects of early child care, we must address many facets of the care experience — the amount, type and quality of child care provided, the age at which care was initiated, and the stability or changes introduced regarding care and caregivers. Moreover, the effects of child care may depend on characteristics in individual children (especially child temperament and gender) and families (such as income, attitudes towards working, and quality of parenting). For example, longer hours of child care during infancy or more changes in care may be harmful for children with certain temperamental characteristics, but beneficial or benign for others. Measuring the effects of early child care must rely largely on non-experimental, correlational designs that disentangle the true effects of early child care from differences among the families who use child care services.

In the early 1990s, the National Institute for Child Health and Human Development initiated the NICHD Study of Early Child Care, a large-scale longitudinal study of children and their families. To investigate the short-term and long-term effects of the child care experience, a sample of over 1,200 children from all over the United States were monitored from birth.

This study carefully examined the characteristics of the child care contexts chosen by the children's families, the characteristics of the families, the children's experiences within the family, and multiple domains of child outcomes over time (see NICHD Early Child Care Research Network[6] for a comprehensive overview). The families were representative of the various local populations from which they were recruited. Most of the children experienced child care beginning early in their first year.[3] Greater use of child care in infancy was related most strongly to family economic factors, but the mothers' education, personality, and beliefs, as well as family size were also associated with child care use. A variety of types of care were used in infancy, including centre care, family child care, relative care, in-home care, and father care. Both low-income and high-income families had their children in higher-quality child care centres in infancy; higher-quality care in homes was associated with higher incomes. Current understanding of the effects of early child care stems largely from widely published results of

this large-scale study, but also from other notable studies conducted both in the United States and internationally.

Research Context

Recent research has emphasized the long-lasting effects of early environmental influences[5] and their significance for emotional security, cognitive development, and learning skills. Indeed, the effects of child care need to be addressed by examining the nature of child care experiences and accompanying family experiences. Early research on the effects of child care has largely ignored selection biases, and such biases may still be under-controlled in research. But attempts to disentangle family from child care effects may also lead to underestimating child care effects,[5,7] given the reciprocal effects between child care and families. Thus, for the past decade, research into the effects of early child care for infants and toddlers has been based on an ecological model of development that addresses environmental influences in family and child care contexts in conjunction with child characteristics and how experiences in one setting may shape the effects of experiences in the other.

Key Research Questions

Widespread concerns about the effects of routine non-maternal care in a child's first 2 years of life have focused primarily on how such experiences may affect the developing mother–child relationship, but have also addressed effects on a child's developing language and cognitive development, social competencies, problem behaviours, and peer relations. An additional focus has been the concern that parents may suffer a loss of influence over their children's development when non-parental caregivers provide significant amounts of care on a daily basis.

Recent Research Results

Child care and the mother–infant relationship

The more hours children spend in child care, the less time parents spend with their children,[8] but the hypothesized link to diminished parental sensitivity has not been confirmed. Analyses of maternal time-use data indicate that mothers of infants who spent more than 30 hours a week in child care spent 32% less time with their infants than mothers of infants not in child care, but they were not less sensitive in interactions with their infants.[9] Other reports from the NICHD Study of Early Child Care have shown that more hours of child care across infancy and

toddlerhood are associated with less sensitive and engaged mother-child interactions throughout infancy and early childhood, after controlling for multiple factors related to child care choices,[10] but only for Caucasian children; for non-Caucasian children, more hours of care were associated with more sensitive mother-child interactions. Higher quality child care experience was consistently associated with somewhat more sensitive and engaged mother-child interactions.

The NICHD Study of Early Child Care is considered to be the most thorough investigation of the effects of child care on infant–mother attachment despite limitations that include a sample that is not nationally representative of the United States and the possibility that the poorest quality child care arrangements were likely not sampled. Contrary to meta-analytic findings of the earlier literature that focused only on the effects of the amount of care provided without adequately controlling for selection effects, the NICHD Study found that a number of features of child care (the amount of child care, age of entry into care, and the quality and stability of child care) were unrelated to the security of infant–mother attachments or to an increased likelihood of avoidant attachments, except when mothers provided less sensitive parenting of their infant.[11] For the children who received less sensitive maternal care, extended experience with child care, lower-quality child care, and more changes in child care arrangements were each associated with an increased likelihood of developing an insecure attachment with their mothers. The strongest predictor of security in the infant–mother attachment, regardless of children's experiences with child care, was the sensitivity in a mother's care of her infant (which includes a positive regard for her infant, responsiveness, and lack of intrusiveness or hostility), suggesting that it is the quality of mother–child interactions rather than maternal absence or child care experiences per se that determine the quality of attachment.

Results from a longitudinal study conducted in Israel have indicated that infants' experiences with very low-quality centre care was associated with increased rates of insecure infant–mother attachment,[12] regardless of the sensitivity of the mothers' caregiving. The quality of care observed in the Israeli centres was generally poorer than that typically observed in the NICHD Study in the U.S., thereby enhancing our knowledge regarding associations between quality of child care and the mother–child relationship. The children who received care in family child care settings or who received kibbutz (collective community in Israel) home sleeping, both care types that likely supported closer caregiving relationships than the poor quality centers, were more likely to be securely attached to their mothers.

Some studies have found that non-parental care experiences appear to lessen links between parent–child relationships and child development.[13-15] However, evidence from the NICHD Study and other studies have indicated that family influences are consistently stronger and more pervasive than the effects of child care on child development.[16-19]

Effects on cognition and language

Positive associations have been consistently demonstrated between higher-quality child care and greater cognitive and language development, even after taking into account associations with family selection factors, and other potentially confounding correlates, such as the cognitive stimulation received in the home, and a mother's language abilities.[20-22] In addition, more experience with centre-based care was found to be related to greater language development (more language production) at 15 and 24 months as well as better cognitive development at age 2, controlling for family factors as well as language stimulation in the care setting.[22] Longer-term benefits of higher quality child care for better academic and cognitive functioning now extend through middle childhood and adolescence.[23,24]

Effects on peer and teacher relations, compliance, and behaviour problems

Early child care experience is generally accompanied by greater exposure to peers at early ages and possible associated effects on early peer competencies. Indeed, more experience in child care settings with other children is associated with positive skills with peers in those settings but is also associated with caregiver ratings of negativity.[6] The effect of child care on child compliance and behaviour problems has been controversial but fairly consistent. More hours of child care have been related to heightened behaviour problems, beginning at age 2 and extending into early middle childhood.[23,25-27] In addition, early centre-care experience is associated with more problem behaviours.[28] The negative effects of child care hours in the NICHD Study have been found to be more strongly related to externalizing behaviour in early childhood when children received poorer care from their child care providers and when children spent a greater proportion of time with a group of peers that was larger in size than recommended by experts.[29]

Children who experience higher quality early child care characterized by better relationships with their care providers have subsequently better relationships with their teachers in school.[30] Positive teacher-child relationships appear to persist over time, as shown by links found between the quality and style of early relationships with child care providers, subsequent relationships

with care providers and preschool teachers, and relationships with kindergarten teachers. Such positive relationships in early child care are important for children's social and cognitive development and their success in school.[31]

Conclusions

The positive linkages between child care quality and a variety of positive outcomes are among the most pervasive findings in developmental science. Higher-quality child care (in the form of responsive and stimulating care) is associated with better cognitive and language development, positive peer relations, compliance with adults, fewer behaviour problems, and better mother–child relations. While there have been fewer consistent relations to different types of child care experiences, centre-based care appears to be beneficial to children's cognitive development, although it may also be associated with problematic social relations. Unless child care quality is very poor, or the mother is insensitive to a child's needs, non-parental child care does not appear to undermine the security of the infant–mother attachment per se, but there are indications that this relationship may be more vulnerable when the mother herself provides less sensitive care and her child experiences poorer quality care, more changes in arrangements or many hours of care.

Implications for Policy and Services

Non-parental child care is experienced by a majority of young U.S. children beginning at very early ages. The implications of research into the effects of child care clearly support the provision of high-quality care and parental access to such care. Poorer-quality child care may be harmful to children's healthy development and relationships with their parents, while good-quality care appears to be beneficial to their development and relationships. Research implications regarding which type of care should be promoted and which type of care parents should choose for their infants and toddlers are not clear, given that the benefits of centre-based care in the cognitive and language development of children, even when the quality of care is high, may be accompanied by problems in social development. It is clearer, however, that young children benefit from child care experience when the quality of caregiving they receive is responsive to their social-emotional needs and cognitively stimulating.

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