



Child Care and Its Impact on Young Children (0–2)

JAY BELSKY, PhD

Birkbeck University of London, UNITED KINGDOM

(Published online November 19, 2003)

(Revised October 6, 2005)

Topic

Child care (0-5 years)

Introduction

Although few contemporary experts in child development view the first two years of life as a “critical” period during which the path of future development is determined, this stage of development is still regarded by many as being a “sensitive” period, during which trajectories are first established. Because developmental trajectories can be self-sustaining (if not impossible to alter), experiences that shape early development have important ramifications for both science and social policy. In particular, early rearing experiences are thought by many to play an important role in shaping early developmental trajectories, including non-maternal child-care experiences.¹

Subject

Over the past 25 years, the United States has experienced major changes in rearing arrangements for young children. This transformation stems, in part, from changes in the roles women now play in society — especially changes in maternal employment at an early stage in children’s lives. Today, the majority of mothers in the U.S. who return to work after having a child do so before their child’s first birthday. Recent figures (from 1998–1999) indicate that 58% of all women with infants under one year of age are in the labour force.² Comparable rates in 1970 and 1985 stood at 27% and 46%, respectively.³ Consequently, non-maternal care initiated in the first year of life has virtually become the norm for many children and their families.

Research Context

Much debate has surrounded what might be regarded as a core developmental question of the modern age: How does the early non-maternal child-care experience affect child development? Several views have been advanced, with varying degrees of empirical support.⁴⁻⁵ One view is that because development is largely shaped by genes rather than by experience, the effects of non-maternal child care, like the effects of care provided by mothers, will be rather minimal once a basic threshold of care that is “good enough” has been provided.⁶⁻⁷ Others have argued that when children spend a great deal of time in non-maternal care arrangements during the early years of life, they will be more likely to develop insecure attachments to parents and evince heightened, though by no means clinical, levels of externalizing problem behaviour (e.g. aggression or disobedience).⁸⁻¹⁰

Still others contend that it is not the amount of routine child care that affects development, but the quality of care — that is, whether non-maternal care-providers are attentive, nurturant and stimulating.¹¹⁻¹³

Challenges

Sorting out these alternative perspectives has not been easy for a variety of reasons, most of which have to do with limitations in available research literature. To answer questions regarding early-experience effects, children would be randomly assigned to different rearing conditions. But this strategy is virtually impossible to implement, as few parents would agree to place their children with an unskilled caregiver for 40 hours a week beginning early in the first year of life, in the name of science. The alternative has been to study natural variations in child-care experiences and determine how such experiences relate to individual differences in children's functioning. Since children receiving varying degrees of non-maternal child care, varying degrees of quality care or different types of care often come from families with varying characteristics, researchers must attempt to control for these kind of pre-existing differences before any inferences can be drawn about child-care effects. Such controls have not always been applied, or have only been considered to a limited extent. In addition, few studies have simultaneously examined the multiple features of child care, since most focus on the quality or type of care, thereby disregarding issues such as the amount of care provided or the age of entry into care.¹⁰

Recent Research Results

In the face of such challenges and the limits of past research, in the early 1990s, the American government initiated the largest and most extensive study of the effects of non-maternal child care ever conducted, called the NICHD Study of Early Child Care. (NICHD — The National Institute of Child Health and Human Development — a government funding agency). The families of more than 1,300 children (under one month of age) drawn from 10 different locations (though not representative of the U.S. population), were recruited in an intensive study of non-maternal child-care experiences. Extensive assessments of family characteristics were conducted so that family factors likely to create differences between children could be statistically controlled for prior to estimating the effects of child care. Repeated and extensive observational evaluations of child care quality were also conducted when children were 6, 15, 24, 36, and 54 months of age, along with assessments of the children's socioemotional and cognitive development at these ages and into their primary-school years. Moreover, the amount of time spent in care and type of care experienced were repeatedly measured. This research design enabled the NICHD Study to move beyond simplistic debates about whether early child care is good or bad for children, to elucidate the conditions under which child care enhanced or undermined various aspects of development.¹⁴

Results to date reveal

1. that children are somewhat more likely to develop insecure attachments to their mothers by 15 months of age when they experience more than 10 hours of care per week in the first year of life, or more than one child-care arrangement across the first year, or low-quality child care *and* mothering that is relatively low in sensitivity;¹⁵ when attachment is measured again at 36 months, however, only the

- amount of time in care through age three (i.e. >10 hours) continues to predict elevated rates of insecure attachment (when it coincides with low levels of maternal sensitivity);¹⁶
2. that patterns of mother-child interaction from six to 36 months are somewhat less harmonious when children spend more rather than less time in any kind of child care (irrespective of its quality), and that the same is true, though to a lesser extent, when children experience poorer- rather than higher-quality child care;¹⁶ when mother-child interaction is followed up through first grade, more time in care across the first 54 months of life continues to be a predictor of somewhat less harmonious patterns of mother-child interaction for whites and somewhat more harmonious patterns of interaction for blacks;¹⁷
 3. that children evince higher levels of externalizing problems (as reported by caregivers, mothers and/or teacher) when they spend more time in child care across their first two, or first 4 1/2 years of life, irrespective of child-care quality, and that this is true when problem behaviour is measured at two years of age, 54 months of age, and in kindergarten and the first grade;^{18,19} this effect is no longer apparent, however, by the time children are in third grade, around the age of eight, though at this time, more time in care through the first 54 months of life is a predictor of less teacher-reported social competence and poorer academic work habits;²⁰
 4. that children who spend more time in child-care centres also evince higher levels of problem behaviour, even after taking into account time spent in any kind of child care, and this is so through third grade;^{19,20}
 5. that children who experience a higher rather than a lower quality of child care evince somewhat higher levels of cognitive-linguistic functioning at two, three, four and five years of age.²⁰⁻²⁴

Conclusions

In certain respects, all of the seemingly competing perspectives highlighted earlier pertaining to the question of the effects of child care have been supported in the NICHD Study and related research.^{1,5,10} First, placing children in an average non-maternal care facility for long hours does seem to be associated with some (modest) developmental risk, especially with respect to the mother-child relationship (through first grade for white children), problem behaviour (through first grade), and social competence and academic work habits (by third grade), and such outcomes are not merely by-products of low-quality child care. Second, in keeping with more than two decades of research, cognitive-linguistic development seems to be (somewhat) enhanced by high-quality child care. But third, in no case are these child-care effects, or those pertaining to the type of care (i.e. centre care associated with greater cognitive-linguistic competence *and* more problem behaviour), particularly sizeable in magnitude. Indeed, such effects are often dwarfed by the effects of family factors and processes (e.g. income, maternal sensitivity, maternal depression, paternal presence).

Implications for Policy and Services

The fact that a growing number of children seem to be spending more and more time at younger and younger ages in child-care arrangements that are often of questionable

quality suggests that even those effects of child-care quality, quantity, and type that are modest in magnitude should not be discounted.²³ After all, small effects (be they positive or negative) on many children may be of far greater consequence to society than large effects on just a few.²⁴ This said, the modest child-care effects detected in the NICHD Study and other research may not lead to immediate recommendations for any single family or child struggling with decisions about childrearing and child care. Nevertheless, from the standpoint of public policy, the NICHD Study results, along with those of other studies, provide grounds for recommending:

1. that parental leaves be extended (and preferably paid) to match the duration provided for in some Scandinavian countries;
2. that tax policies support families raising infants and toddlers in ways that afford parents the freedom to make the childrearing arrangements they deem most appropriate for their children, thereby reducing the economic coercion that pushes many to leave the care of their children to others, against their wishes;
3. that, given the clear benefits of high-quality child care, more of these services are called for. Indeed, all of these recommendations could be justified on humanitarian grounds alone.¹⁰

REFERENCES

1. Schonkoff JP, Phillips DA, eds. *From neurons to neighbourhoods: The science of early childhood development*. Washington, DC: National Academy Press; 2000.
2. U.S. Census Bureau. *Statistical abstract of the United States*. Washington, DC: U.S. Government Printing Office; 1999. Available at: <http://www.census.gov/prod/www/statistical-abstract-us.html>. Accessed October 28, 2003.
3. Kamerman SB. Parental leave policies: An essential ingredient in early childhood education and care policies. *Social Policy Report* 2000;14(2):3-15.
4. Fox N, Fein GG, eds. *Infant day care: The current debate*. Norwood, NJ: Ablex; 1990.
5. Lamb ME. Nonparental child care: Context, quality, correlates, and consequences. In: Sigel IE, Renninger KA, eds. *Child Psychology in Practice*. New York, NY: J. Wiley; 1998:73-134. Damon W, ed-in-chief. *Handbook of Child Psychology*. 5th ed; vol 4.
6. Scarr S. American child care today. *American Psychologist* 1998;53(2):95-108.
7. Deater-Deckard K, Pinkerton R, Scarr S. Child care quality and children's behavioral adjustment: A four-year longitudinal study. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 1996;37(8):937-948.
8. Bates JE, Marvinney D, Kelly T, Dodge KA, Bennett DS, Pettit GS. Child care history and kindergarten adjustment. *Developmental Psychology* 1994;30(5):690-700.
9. Belsky J. The "effects" of infant day care reconsidered. *Early Childhood Research Quarterly* 1988;3(3):235-272.
10. Belsky J. Emanuel Miller Lecture: Developmental risks (still) associated with early child care. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 2001;42(7):845-859.
11. Burchinal MR, Roberts JE, Nabors LA, Bryant DM. Quality of center child care and infant cognitive and language development. *Child Development* 1996;67(2):606-620.
12. Howes C, Phillips DA, Whitebook M. Thresholds of quality: Implications for the social development of children in center-based child care. *Child Development* 1992;63(2):449-460.
13. Phillips D, McCartney K, Scarr S, Howes C. Selective review of infant day care research: A cause for concern. *Zero to Three* 1987;7(3):18-21.
14. NICHD Early Child Care Research Network. *Child care and child development: Results from the NICHD study of early child care and youth development*. New York, NY: Guildford Press; 2005.
15. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security. *Child Development* 1997;68(5):860-879.
16. NICHD Early Child Care Research Network. Child-care and family predictors of preschool attachment and stability from infancy. *Developmental Psychology* 2001;37(6):847-862.

CHILD CARE (0-5 YEARS)

17. NICHD Early Child Care Research Network. Early child care and mother-child interaction from 36 months through first grade. *Infant Behavior and Development* 2003;26(3):345-370.
18. NICHD Early Child Care Research Network. Early child care and self-control, compliance and problem behavior at twenty-four and thirty-six months. *Child Development* 1998;69(4):1145-1170.
19. NICHD Early Child Care Research Network. Does amount of time spent in child care predict socioemotional adjustment during the transition to kindergarten? *Child Development* 2003;74(4):976-1005.
20. NICHD Early Child Care Research Network. Early child care and children's development in the primary grades: Follow-up results from the NICHD Study of Early Child Care. *American Educational Research Journal* 2005;43:537-570.
21. NICHD Early Child Care Research Network. The relation of child care to cognitive and language development. *Child Development* 2000;71(4):960-980.
22. NICHD Early Child Care Research Network. Child-care structure → process → outcome: Direct and indirect effects of child care quality on young children's development. *Psychological Science* 2002;13(3):199-206.
23. NICHD Early Child Care Research Network. Early child care and children's development prior to school entry: Results from the NICHD study of Early child care. *American Educational Research Journal* 2002;39(1):133-164.
24. NICHD Early Child Care Research Network. Does quality of child-care affect child outcomes at age 4 ½? *Developmental Psychology* 2003;39(3):451-469.

ACKNOWLEDGEMENTS: Preparation of this document was supported by a cooperative agreement with the U.S. National Institute of Child Health and Human Development (U10-HD25420). The author wishes to express his appreciation to all collaborating investigators of the NICHD Study of Early Child Care.

To cite this document:

Belsky J. Child care and its impact on young children (0-2). Rev ed. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2005:1-6. Available at: http://www.child-encyclopedia.com/documents/BelskyANGxp_rev-Child_care.pdf. Accessed [insert date].

Copyright © 2003-2005