

# Current Research on Child Care Effects

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## **Introduction**

Child care may be defined as care for young children, provided by adults who are not their parents. Informal child care by relatives, nannies, or home care providers typically takes place in a home setting (either the child's home or the adult's home), while formal care by trained and untrained caregivers takes place in school or care centre settings.

## **Subject**

Child care is now an ordinary part of life for children in most western countries. More than half of infants are placed in some form of child care for at least ten hours during their first year of life, and more than three-quarters of families with young children depend on child care as a support for maternal employment. Formal child care can also provide early childhood education. In fact, child care, nursery school, and preschool programs are often indistinguishable in their activities.<sup>1</sup>

## **Problem**

The rapid increase in maternal employment over the past 25 years has led to an increase in reliance on child care for young children, from birth to 5 years of age. This increase represents a

dramatic shift in child rearing styles, and has prompted concerns as to whether child care poses any risks to healthy child development.

## **Research Context**

There have been three waves of child care research. The first wave focused on simplistic comparisons between children in child care and children in exclusive maternal care. There were two problems with these studies: Researchers could not draw definitive conclusions about child care effects, because these two groups of children differ in myriad ways; and child care was treated as a uniform experience. The second wave focused on variations in child care quality and controlled statistically for pre-existing differences among families. The third wave has extended this research by modeling how the family and child care contexts jointly influence child development.

## **Key Research Questions**

Four questions have driven research on child care over the past ten years. Chief among them is whether extensive child care in the first year of life disrupts the mother-child attachment relationship. For example, theorists<sup>2</sup> hypothesized that daily separations might cause infants to lose confidence in the availability and responsiveness of their parents and reduce opportunities for interactions. The second area of inquiry concerns the impact of variations in child care quality on children's development, especially with respect to school readiness skills. The third question focuses on hours in care as a risk factor for behaviour problems, such as aggression. The fourth area of inquiry concerns the effects of the types of care that have been examined.

## **Recent Research Results**

### *Mother-Child Attachment*

Early studies yielded mixed results regarding whether early, extensive child care posed a risk for the development of secure attachment relationships. For this reason, the National Institute of Child Health and Human Development launched their Study of Early Child Care and Youth Development, a longitudinal study of 1,350 children, from birth until the sixth grade. To assess children's attachment relationships with their mothers, the investigators used a procedure called the Strange Situation, which consists of a series of separations and reunions between the baby and mother in the presence of a stranger.<sup>3</sup> All children experience stress during separations.

However, secure children are soothed by their mothers' return. Associations between security and five child care parameters were examined, namely age of entry into child care, continuity of care, type of care, quality of child care, and amount of care. None of these associations were significant. Not surprisingly, maternal sensitivity predicted children's security status with their mothers.

### *Child Care Quality*

Child care quality can be assessed via structural features of the child care setting. For example, child-staff ratio, group size, and caregiver education and training. These kinds of variables are policy relevant, because governments can and do regulate child care programs. For example, a ratio of 3 or 4 infants to 1 teacher is generally accepted to be a quality threshold in western countries. Child care quality can also be assessed based on observations of behaviours that reflect positive interactions between children and their teachers as well as peers. In quality centers, teachers are sensitive and responsive to children's needs, offer a language-rich environment, organize activities that promote development, and encourage children to behave in pro-social ways.

In advanced, controlled studies, the effects of differences in family background among children are controlled statistically in an effort to isolate the importance of child care. Results from a large number of studies demonstrate that child care quality matters. In fact, the importance of child care quality is one of the most robust findings in developmental psychology. Children who experience high-quality child care have higher scores on achievement and language tests, show better social skills and fewer behavioural problems.<sup>4</sup> Child care can also function as an intervention for children from at-risk families. Children from families with fewer economic resources who attend quality programs begin school with skills that can increase their chances of academic success.

### *Hours in Child Care*

Although the literature is mixed, there is increasing evidence that hours in child care may constitute a risk factor for the development of behaviour problems, including aggression. Some researchers link such a risk with infant child care in particular;<sup>5</sup> however, other researchers have failed to replicate this finding, even when using the same data set.<sup>6</sup> The NICHD researchers found that the more time children spend in any of a variety of non- maternal care arrangements across

the first 4.5 years of life, the more acting-out problem behaviour (ie, aggression and disobedience) and conflict with adults they manifested at 54 months of age and in kindergarten.<sup>7</sup> Surprisingly, these findings do not vary as a function of child care quality. It is important to qualify that the effects are relatively small, that most children with extensive child care experience do not have behaviour problems, and that the direction of such effects is not clear — in other words, parents with more difficult children may enrol their children in child care for more hours. In future work, it will be important to identify the processes through which hours in care may pose a risk. For example, some researchers have speculated that large group sizes (exposure to many peers) may increase the frequency of acting out behaviours that go unnoticed, and therefore uncorrected, by caregivers.

### *Type of Care*

There are both disadvantages and advantages associated with formal arrangements, like child care centers. There is consistent evidence that more formal arrangements with more children pose a health risk. Children attending center care and child care homes have higher rates of early communicable illnesses, including ear infections, upper respiratory illnesses, and gastrointestinal illnesses.<sup>8</sup> More formal arrangements also promote school readiness skills.<sup>9</sup>

## **Conclusions**

The main conclusion regarding child care is that its effects are complex and vary primarily as a function of the quality of care provided. In other words, whether child care poses a risk to children, protects them from disadvantaged homes, or promotes good developmental outcomes depends on the quality of care. There is some indication that individual differences among children with respect to characteristics like temperament, curiosity, cognitive ability, and gender influence how children experience child care, although more research is needed on these variables. In most studies, family variables are typically better predictors of children's development than are child care variables. Indeed, the effect of child care often depends on family factors. For example, quality child care may buffer the negative influence of maternal depression with respect to children's social and emotional development. Families making decisions about child care arrangements should be heartened by the knowledge that, when all is said and done, it is the care they provide to their children that matters most.

## **Implications**

Quality child care programs promote children’s intellectual, language, and social development. Yet most children do not have access to high-quality programs because their parents cannot afford the fees.<sup>10</sup> Researchers continue to voice concerns that most child care settings do not meet standards for quality. For example, in the NICHD Study of Early Child Care, 56% of settings were observed to be of poor quality.<sup>11</sup> Evidence of poor quality is hardly surprising, given that child care staff members are typically untrained and receive poor wages. Social policy efforts aimed at improving child care quality are underway in most western countries. Efforts range from teacher training to stricter regulations to subsidized programs, especially for children from families with fewer economic resources. For these programs to be successful, governments must be willing to invest in the early education and care of young children. Cost-benefit analyses suggest that these investments will result in better school performance in years to come.<sup>12</sup>

## References

1. National Research Council. *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press; 2001.
2. Sroufe LA. A developmental perspective on daycare. *Early Childhood Research Quarterly* 1988;3(3):283-291.
3. NICHD Early Child Care Research Network. The effects of child care on infant-mother attachment security: Results of the NICHD study of early child care. *Child Development* 1997;68(5):860-879.
4. Lamb M. Nonparental child care: Context, quality, correlates, and consequences. In: I. Sigel I & Renniger K, eds. *Handbook of child psychology: Vol. 4. Child psychology in practice*. 5<sup>th</sup> ed. New York, NY: Wiley; 1998:73-134.
5. Baydar N, Brooks-Gunn J. Effects of maternal employment and child care arrangements on preschoolers’ cognitive and behavioral outcomes: Evidence from the children of the national longitudinal survey of youth. *Developmental Psychology* 1991;27(6):932-945.
6. Ketterlinus RD, Henderson SH, Lamb ME. Les effets du type de garde de l’emploi maternel et de l’estime de soi sur le comportement des enfants [The effect of type of child care and maternal employment on children’s behavioral adjustment and self esteem]. In: Pierrehumbert B ed. *L’accueil du jeune enfant: Politiques et recherches dans les différents pays* [Child care in infancy: Policy and research issues in different countries]. Paris, France: Les Editions Sociales; 1992:150-163.
7. 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.
8. Johansen A, Leibowitz A, Waite L. Child care and children’s illness. *The American Journal of Public Health* 1988;78(9):1175-1177.
9. 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.
10. Helburn SW, Bergmann BR. *America’s Child Care Problem*. New York, NY: Palgrave; 2002.
11. NICHD Early Child Care Research Network. The interaction of child care and family risk in relation to child development at 24 and 36 months. *Applied Developmental Science* 2002;6(3):144-156.
12. Barnett WS. Long-term effects on cognitive development and school success. In: Barnett WS, Boocock SS, eds. *Early care and education for children in poverty: Promises, programs, and long-term results*. Albany, NY: State University of New York; 1998:11-44.