



Child care - Early childhood education and care

Last update: February 2021

Topic Editor:

John Bennett, M.Ed., PhD, OECD, France

Table of content

Synthesis	5
Child Care and the Development of Young Children (0–2) MARGARET TRESCH OWEN, PHD, FEBRUARY 2011	9
Child Care Policy: A Comparative Perspective RIANNE MAHON, PHD, MARCH 2018	17
Introduction: Early Childhood Education and Care ^JOHN BENNETT, MED, PHD, FEBRUARY 2011	24
Child Care and Its Impact on Young Children JAY BELSKY, PHD, FEBRUARY 2011	33
Child Care and Its Impact on Young Children LIESELOTTE AHNERT ¹ , PHD, MICHAEL E. LAMB ² , PHD, SEPTEMBER 2018	40
Current Research on Child Care Effects KATHLEEN MCCARTNEY, PHD, FEBRUARY 2007	46
Child Care and Its Impact on Young Children’s Development ELLEN S. PEISNER-FEINBERG, PHD, FEBRUARY 2007	51
Child Care and Its Impact on Children 2–5 Years of Age. Commenting: McCartney, Peisner-Feinberg, and Ahnert and Lamb W. STEVEN BARNETT, PHD, FEBRUARY 2011	58
Early Childhood Education and Care Systems: Issue of Tradition and Governance ^JOHN BENNETT, MED, PHD, FEBRUARY 2011	63

Experiential Education: Making Care and Education More Effective Through Well-Being and Involvement 68

FERRE LAEVERS, PHD, FEBRUARY 2011

Diversity in Early Childhood Services 72

MICHEL VANDENBROECK, PHD, MARCH 2018

Democracy as First Practice in Early Childhood Education and Care 79

PETER MOSS, EMERITUS PROFESSOR OF EARLY CHILDHOOD PROVISION, SEPTEMBER 2021

Early Day Care and Infant-Mother Attachment Security 88

JAY BELSKY, PHD, MAY 2020

Origins of Attachment Security in Day Care and at Home: Comments on Belsky 94

ROSS A. THOMPSON, PHD, FEBRUARY 2021

Topic funded by:



Margaret & Wallace McCain
Family Foundation

Synthesis

How Important Is It?

Early Childhood Education and Care (ECEC) has become the norm in many European and North American countries, where most children of 3 years and upwards attend a regulated early education service. In addition, early childhood services represent much more than a drop-off location for working parents, but play an important role in child development by giving children an opportunity to engage in a range of educational and social activities. The increasing number of children in formal ECEC is largely attributed, on the one hand, to the convergence of research showing the positive influence of early education on school readiness and, on the other, to the rise in maternal employment, although even children of stay-at-home mothers are likely to attend some type of child care. In the U.S., for example, the majority (63%) of women with children under 3 years spend time in the labour force and their children experience considerable amounts of non-maternal care.

Despite the increasing take-up of early development services, their quality is frequently low because of the costs associated with maintaining quality. High quality is characterized by a qualified, well-paid and stable staff, low adult-child ratios, and efficient management. Research suggests, however, that much formal child care in the United States is of weak quality and is associated with some modest but long-term developmental risks, especially when very young children (below the age of 18 months or so) spend long hours in such services. Adverse outcomes are not merely by-products of low-quality child care but stem also from stress caused by separation, which suggests that parental leaves should be extended to one year, which is the increasing practice in European countries.

What do we know?

Society and child care

There are many differences in the organization of early education and care systems. In most OECD countries, early education for children 3-6 years is a shared responsibility between the family and the state and is often free and fully subsidized. The situation is more mixed where ECEC for children under 3 years is concerned: many governments generously subsidise and

support parents to access child care, but others see child care as primarily a parental responsibility. A laissez-faire approach to young children and families, characterized by weak state support and the predominance of private provision, can produce significant inequalities in access. The recruitment of migrant care providers in child care can also generate imbalances in the roles played by states, families, and markets in the child care sector in both North and South. Governments that see care and education as a public responsibility increasingly integrate their care and education systems and are able, in consequence, to ensure better regulation, more equitable access and provide higher quality services to all children.

The current discourse on choice for parents needs realistic assessment. Although parents are assumed to be free to choose the facilities they deem most appropriate for their child, access to high quality care is, in fact, often limited and unequal. This is a particular challenge in systems dominated by private for-profit provision. Low-income parents can “choose” only what is available to them and must often resign themselves to restricted choice and poor quality. In short, while early childhood care and education may be viewed as a central plank of inclusive policy, the reality is that these services serve, in too many countries, to widen the education gap. This is particularly the case for immigrant and ethnic children, the parents of whom are greatly limited in their choice of services by environmental and economic constraints.

Democracy should be the fundamental principle that guides the provision and elaboration of ECEC services not only at the early childhood level by encouraging shared decision-making at local level, but also at community and political levels by making early education a matter of public debate and collective responsibility. In a democracy, individuals express not only personal preferences; they also make public and collective choices related to the common good of their society.

The impact of child care on child development

Child care settings have been linked to both positive and negative consequences for child development. Despite contradictory earlier findings about the effects of child care on cognitive and linguistic development, more recent research has consistently documented the enduring and positive effects of high-quality child care. Much research evidence exists to show that high quality early education provides a solid foundation for school readiness and academic achievement but selection bias is a potential problem for most studies of child care as it may confound variations in child and family characteristics with variations in child care contexts. Learning experiences in

ECEC can also help children develop democratic values as well as social skills. A close bond with a care provider is also an index of the quality of future relationships. A caring environment is particularly valuable for children who experience insensitive care at home by reducing the risk of behavioural problems, serving as a protective factor and by providing opportunities for improved cognitive and language development. On the other hand, when combined with social and economic stressors at home, inadequate ECEC arrangements (poor quality child care, long hours, and instability) represent a double-threat to children's attachment security. However, it is often difficult to identify ECEC as the cause of various developmental outcomes because of inseparable confounding factors, such as, issues of stability in care-giving and the characteristics of individual children and their families. The effect of child care is likely to vary not only based on these characteristics, but also as a function of the child's personal traits and the ideologies surrounding child care in a specific cultural context.

What can be done?

Enhancing children's experience in early child care requires that families, staff, administrators, and policy makers work together to address current challenges. In the early childhood centres, more attention needs to be given to appropriate pedagogies that reinforce the well-being and involvement of young children. At the family level, parents are encouraged to fulfill their child's needs for close and private interactions and to create supportive connections between life at home and in the child care setting.

Children's experience can also be improved through the quality of ECEC services they receive. A high quality facility is one with qualified, well-paid, and regular care providers, reasonable adult-child ratio, and proper management. ECEC providers can boost the quality of care by being sensitive and empathic toward the child, e.g., helping them deal with the transition from home to child care and by providing activities that stimulate the child's participation and communication. The aim should be to provide enriched interactions that encourages deep rather than shallow learning, exchange of ideas. Children's involvement can be improved through activities that support the child's autonomy (e.g., the introduction of new and challenging activities; responding to children's ideas and interests; encouraging movement and exploration; allowing children to have a say in rule-setting). Policy makers and care providers are also responsible for ensuring that all children have access to the same quality and amount of care. Close attention should be given to emotional and developmental problems so that early interventions can be integrated into the child's routine. The child care setting should also provide a healthy and safe physical environment with a high adult-child ratio to ensure children's well-being.

The democratic administration of child care services can play a key role in enhancing the child care setting by involving community, staff, parents and children in the decision-making process. A good child care program is one that acknowledges diversity, is unbiased and offers affordable high quality care to and offers affordable high quality care to disadvantaged and at-risk children. Appropriate remuneration, a solid education and ongoing training for all child care providers are essential to promoting the standing of the early childhood sector.

Improving the child care system is highly dependent on government support. Concrete actions by policy makers, already practised in many countries, are: matching paid parental leave to the rate and duration observed in Scandinavian countries; providing adequate public funding and developing tax policies that allow parents to make appropriate child-rearing choices, paying greater attention to children from poor or diverse backgrounds; integrating child care and early education under one ministry or agency and thereby enhancing quality, qualification requirements, accessibility and affordability.

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

Margaret Tresch Owen, PhD

University of Texas at Dallas, USA

February 2011, Éd. rév.

Introduction

Given the importance attributed to maternal care in cultural ideals¹ 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 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 Network⁶ 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 influences⁵ 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.

References

1. Steiner GY. *The futility of family policy*. Washington, DC: Brookings Institution; 1981.
2. McCartney K, Phillips D. Motherhood and child care. In: Birns B, Hays DF, eds. *The different faces of motherhood. Perspectives in developmental psychology*. New York, NY: Plenum Press; 1988:157-183.
3. NICHD Early Child Care Research Network. Child care in the first year of life. *Merrill-Palmer Quarterly* 1997;43(3):340-360.
4. Employment characteristics of families. Table 6. Employment status of mothers with own children under 3 years old by single year of age of youngest child, and marital status, 2008-09 annual averages. Washington, D.C.: Bureau of Labor Statistics, U.S. Department of Labor; 2010.
5. Mulligan GM, Brimhall D, West J. *child care and early education arrangements of infants, toddlers, and preschoolers: 2001 (NCES 2006-039)*. Washington, DC: U.S. Department of Education. National Center for Education Statistics; 2005.
6. NICHD Early Child Care Research Network. Child care and children’s peer interaction at 24 and 36 months: The NICHD Study of Early Child Care. *Child Development* 2001;72(5):1478-1500.
7. Blau DM. The effect of income on child development. *Review of Economics and Statistics* 1999;81(2):261-276.
8. Flouri E, Buchanan A. What predicts fathers' involvement with their children? A prospective study of intact families. *British Journal of Developmental Psychology* 2003;21:81-98.
9. Booth CL, Clarke-Stewart KA, Vandell DL, McCartney K, Owen MT. Child care usage and mother infant “quality time.” *Journal of Marriage and the Family* 2002;64:16-26.
10. NICHD Early Child Care Research Network. Early child care and mother-child interaction from 36 months through first grade. *Infant Behavior and Development* 2003;26:345-370.

11. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security: Results of the NICHD study of early child care. *Child Development* 1997;68(5):860-879.
12. Aviezer O, Sagi-Schwartz A. Attachment and non-maternal care: Towards contextualizing the quantity vs. quality debate. *Attachment and Human Development* 2008;10:275-285.
13. Egeland B, Hiester M. The long-term consequences of infant day-care and mother-infant attachment. *Child Development* 1995;62(2):474-485.
14. Jaeger E, Weinraub M. Early nonmaternal care and infant attachment: In search of process. *New Directions for Child Development* 1990;49(Fall):71-90.
15. Oppenheim D, Sagi A, Lamb ME. Infant adult attachments on the kibbutz and their relation to socioemotional development 4 years later. *Developmental Psychology* 1988;24(3):427-433.
16. Clarke-Stewart KA, Gruber CP, Fitzgerald LM. *Children at home and in day care*. Hillsdale, NJ: L. Erlbaum Associates; 1994.
17. NICHD Early Child Care Research Network. Relations between family predictors and child outcomes: Are they weaker for children in child care? *Developmental Psychology* 1998;34(5):1119-1128.
18. NICHD Early Child Care Research Network. Parenting and family influences when children are in child care: Results from the NICHD Study of Early Child Care. In: Borkowski J, Ramey S, Bristol-Power M., eds. *Parenting and the child's world: Influences on intellectual, academic, and social-emotional development*. Mahwah, NJ: Erlbaum; 2001b:99-123.
19. NICHD Early Child Care Research Network. *Child care effect sizes for the NICHD Study of Early Child Care and Youth Development*. *American Psychologist* 2006;61:99-116.
20. 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.
21. Galinsky E, Howes C, Kontos S, Shinn M. *The study of children in family child care and relative care: Highlights of findings*. New York, NY: Families and Work Institute; 1994.
22. NICHD Early Child Care Research Network. The relation of child care to cognitive and language development. *Child Development* 2000;71(4):960-980.
23. Belsky J, Vandell DL, Burchinal M, Clarke-Stewart KA, McCartney K, Owen MT, The NICHD Early Child Care Research Network. *Are there long-term effects of early child care?* *Child Development* 2007;78:681-701.
24. Vandell DL, Belsky J, Burchinal M, Steinberg L, Vandergrift N, the NICHD Early Child Care Research Network. *Do effects of early child care extend to age 15 years? Results from the NICHD Study of Early Child Care and Youth Development* *Child Development*. In press.
25. Lamb, M. Nonparental child care: context, quality, correlates, and consequences. In: Damon W, ed. *Handbook of child psychology: Child psychology in practice*. New York: John Wiley & Sons; 1998: 73-134.
26. 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.
27. Magnuson K, Meyers M, Ruhm C, Waldfogel J. Inequality in preschool education and school readiness. *American Educational Research Journal* 2004;41:115-157.
28. NICHD Early Child Care Research Network. Type of child care and children's development at 54 months. *Early Childhood Research Quarterly* 2004;19:203-230.
29. McCartney K, Burchinal P, Clarke-Stewart A, Bub KL, Owen MT, Belsky J, the NICHD Early Child Care Research Network. Testing a series of causal propositions relating time spent in child care to children's externalizing behavior. *Developmental Psychology* 2010;46:1-17.
30. Howes C, Phillipsen LC, Peisner-Feinberg E. The consistency of perceived teacher-child relationships between preschool

and kindergarten. *Journal of School Psychology* 2000;38:113-132.

31. Hamre BK, Pianta RC. Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development* 2005;76:949-967.

Child Care Policy: A Comparative Perspective

Rianne Mahon, PhD

Chancellor's Professor and Director, Institute of Political Economy, Carleton University, Canada

March 2018, 2e éd. rév.

Introduction

Growing recognition of the importance of child care has brought with it increased acknowledgement of the need for some form of government support. Yet, just as the reasons behind the growing demand for child care vary, so too do the forms of government involvement. Comparative analysis of these patterns of choice can contribute to the identification of best practices.

Subject

Decades of comparative research have led to a general agreement on the basic requirements for a good system of non-parental child care and recognition that the establishment of such a system requires government support. Comparative policy analysis shows that a few countries, like Denmark and Sweden, come close to the ideal. In other countries, there are real “islands of excellence” (e.g., Emilia Romagna in Italy). Yet many systems offer substantially less than this and recent developments suggest that the trend is not necessarily one of progress toward the ideal.

Issues

There is quite widespread agreement within the research community on the following core issues:

1. The system should be accessible. No child should be excluded on the basis of income, parental employment status, place of residence, or formal citizenship. Yet in many systems, access is a problem as there are insufficient spaces and fees represent a barrier to quality child care for many families.
2. The program should be high quality. Numerous studies have documented the importance of quality child care in the form of a healthy, safe, and stimulating physical environment; appropriate staff:child ratios; and a pedagogical program that recognizes the child as an

actor in the here and now. This requires public investment, not only to deal with affordability, but also to provide well-educated staff who will receive fair wages.

3. The program should be comprehensive. While promoting universal accessibility, the system also needs to recognize the diversity of needs, including respect for the cultural and linguistic diversity of the population. This too requires government involvement. The achievement of these goals, in turn, depends on the establishment of an effective governance structure to meet the challenges of integration, coordination and local diversity

Research Context

Initial comparative research on child care policy was carried out under the auspices of the Organisation for Economic Development and Cooperation (OECD) in the 1970s. Additional applied policy research was conducted by the important, but short-lived, European Commission Network on Childcare in the 1990s, as well as the OECD's more recent initiatives. In the 1990s, academic interest in the topic spread beyond experts in early childhood development as feminist students of the welfare state drew attention to the challenges posed by the growing "care crisis." A separate line of investigation has highlighted the development of "global care chains,"¹ that is, the recruitment of women from the global south (or Eastern Europe) to provide child care in the homes of families in Western Europe and North America.¹

Research Questions

What are the diverse ways that governments shape the scope and quality of non-parental child care arrangements? How have different countries responded to the governance challenges? Finally, to what extent have governments turned to recruitment through global care chains to meet the growing demand for child care?

Research Results

The early research conducted under the auspices of the OECD highlighted the need to integrate *day care*, a service originally provided for children whose mothers needed to work to sustain family incomes, and *kindergarten*, preschool education usually for children 3 to 6 years old, often on a part time basis and, in many countries, largely available to upper income families.^{2,3,4} By showing the need to combine the two, these studies highlighted the need to meet the demand created by women's rising labour force participation by providing programs of quality, service to

the developmental needs of the child, and quantity. Not all systems were designed to achieve this, however. The studies identified three patterns of provision: (a) The laissez-faire approach, characterized by the co-existence of several systems, partially age-related, with auspice often proprietary or voluntary, typical of the Anglo-American countries; (b) the dual system, based on an age break (crèches for infants and toddlers, preschools for those 3 years old to school-age), typified by France and Italy; and (c) the coordinated system, then being pioneered in the Nordic countries.

The various ways different countries combined (or failed to combine) education and care continued to be a focus of research within the early child development literature.⁵ Until the 1990s, those interested in broader patterns of social policy tended to ignore child care, focusing instead on social insurance and cash benefits. Feminist researchers, interested in issues of gender equality began, however, to call attention to the social policy challenges posed by the growing need for child care.^{6,7,8} National responses were divided between *male-breadwinner* and *female-friendly* regimes, with the latter more inclined to take an active role. Mainstream welfare regime research subsequently picked up on the issue, focusing on the way in which child care policies reflected broader assumptions about the respective roles of states, markets and families.^{a,9-13}

The welfare regime literature added two key points. First, this research showed that the ways countries deal with the demand for child care tend to reflect broader assumptions about the respective roles of states, families, markets and the voluntary sector. Second, by locating child care within wider welfare regimes, it showed that state involvement in this field is not limited to countries where the public sector plays a key role in financing and provision. All states have an impact on the respective roles played by the state, the family, the markets, and the community sector. In some, they work to support a market for care via information provision and corporate and individual tax deductions; in others, policies that might include generous family benefits, long parental leaves and part day or part week preschool, favour parental care.

Research Gaps

There has been some research on governance models, well-reflected in the OECD's *Starting Strong*, which focused specifically on the importance of coordinated policy development at the central level and the coordination of central and local levels to balance equity and diversity objectives.¹⁴ While recognising the critical role to be played by development of a coherent national framework, Peter Moss's recent work also highlights the importance of a degree of local

autonomy and capacity for making child care centres “sites of democratic practice.”¹⁵ Thus far, there has been less attention to this important aspect by students of welfare states, but there is growing interest in the way that different central-local (or, in federal states, such as Canada, central-provincial-local) arrangements affect governance of the child care sector.^{16,17,18}

Understandably, comparative research on child care policy has focused on national systems of provision. Yet globalization is having an impact on child care policy, notably through the development of global care chains. This aspect initially received even less attention internationally, with the partial exception of North American researchers, conscious of the critical role played by low wage earning immigrants in providing affordable child care within the home.^{19,20} Subsequent research however suggests this practice is not confined to “liberal” Anglo-American countries. In Western Europe the combination of immigration policies and new forms of support for in-home child care is actively promoting recruitment of migrant care providers.²¹ Nor do care workers simply move from South-to-North.^{22,23,24} There is considerable intra-regional movement within Asia and Latin America. While this may provide an inexpensive solution to the growing demand for care in the North, it creates a different set of relations governing the respective roles played by states, families, and markets.^b

A second globalization issue is the growing influence of international organizations on this field. In the first decade of the new millennium, the OECD undertook two substantial studies, one under the Directorate for Employment, Labour and Social Affairs (*Babies and Bosses*) and the other under the Education Directorate. The World Bank, UNESCO and the European Union have also shown growing interest in the issue, as have international foundations such as Soros, which is playing an important role in Eastern Europe. Further research needs to be done on the diverse policy solutions being purveyed, from the more instrumental (child care as a means to promote women’s labour force participation) to the rights-centred view articulated by UNESCO.²⁵

Finally, work inspired by poststructuralist theorists challenges the developmentalist perspective that has contributed to a standardised view of quality that is heavily reliant on quantitative indicators. This new line of research highlights the importance of “complexity and multiplicity, subjectivity and context, provisionality and uncertainty.”²⁶ As such, it underpins an open, dialogical conception of quality that is very much in line with the pedagogy practiced in Reggio Emilia. Unfortunately, the OECD seems to have embraced a narrower view, given its plans to launch a ‘baby-PISA’.^{27,28}

Conclusions

Specialists in early childhood education and care largely agree on the main features of a good, high quality, inclusive child care system. The establishment of such a system depends, however, on effective government support. This is where the comparative analysis of child care policies, drawing on interdisciplinary research tools and concepts, can make a contribution. Early systems of classification of policy patterns highlighted the important question of whether existing policies fostered the development of an integrated system of early childhood education and care. More recent research, informed by the work of sociologists and political scientists, has helped to locate child care within the wider set of relations governing the respective roles played by states, families, and markets.

Implications

Comparative analysis of child care policies can help to identify best practices and some of the institutional and political impediments to their adoption. It is important, however, that such research does not restrict its focus to the national level. Arrangements governing the respective roles of national and local governments constitute an important component of the governance structures, limiting or enhancing capacities for overall coordination as well as for adjustment to local needs. In addition, researchers need to direct their gaze beyond the national level, and include analyses of the ways in which global inequalities combine with national migration and welfare regimes to shape a global care chain.

References

1. Yeates N. Global care chains: critical reflections and lines of inquiry. *International Feminist Journal of Politics* 2004;6(3):369-391.
2. OECD. *Care of children of working parents MS/S/74.9*. Directorate for Social Affairs. Manpower and Education. Social Affairs and Industrial Relations Division for the Working Party on the role of Women in the Economy. Paris, France: OECD; 1974.
3. Kahn AJ, Kamerman SB. *Child Care Programs in Nine Countries: a report prepared for the OECD Working Party on the Role of Women in the Economy*. Paris, France: OECD; 1976.
4. Heron A. *Early Childhood Care and Education: Objectives and Issues*. Washington, DC: OECD; 1977.
5. Cohen B, Moss P, Petrie P, Wallace J. *An excellent example is A New Deal for Children? Re-forming education and care in England, Scotland and Sweden*. Bristol, UK: Policy Press; 2004.
6. Orloff AS. Gender and the social rights of citizenship: The comparative analysis of gender relations and welfare states. *American Sociological Review* 1993;58(3):303-338.
7. Lewis J. Gender and welfare regimes: Further thoughts. *Social Politics* 1997;4(2):160-177.

8. Jenson J. Who cares? Gender and welfare regimes. *Social Politics* 1997;4(2):182-187.
9. Esping-Andersen G. *Social Foundations of Postindustrial Economies*. Oxford, UK: Oxford University Press; 1999.
10. Mahon R. The OECD and the work/family reconciliation agenda: competing frames. In: Lewis J, ed. *Children, Changing Families and Welfare States*. Cheltenham, UK: Edward Elgar Pub; 2006.
11. Parreñas RS. *Servants of globalization: Women, migrants and domestic work*. Palo Alto, CA: Stanford University Press; 2001.
12. Parreñas RS. Care crisis in the Philippines: children and transnational families in the new global economy. In: Ehrenreich B, Hoschild AR, eds. *Global woman: nannies, maids, and sex workers in the new economy*. New York, NY: Metropolitan Books; 2003.
13. Pyle J. Globalization and the increase in transnational care work: the flip side. *Globalizations* 2006;3(3):297-315.
14. OECD. *Starting strong II: Early childhood education and care*. Paris, France: OECD; 2006:13.
15. Moss P. Bringing Politics into the Nursery: Early Childhood Education as a Democratic Practice. Bernard Van Lees Foundation; 2007: 13. Working papers in Early Childhood Development No. 43.
16. Wincott D. Paradoxes of new labour's social policy: Toward universal child care in europe's "most liberal" welfare regime? *Social Politics* 2006;13(2):286-312.
17. Turgeon L. Territorial politics and the Development of Early childhood Education and Child Care in France, Great Britain and Sweden. Paper presented at: the 2007 CPSA Annual Conference. May 31, 2007; Saskatoon, SA.
18. Jenson J, Mahon R. *Bringing Cities to the Table: Child Care and Intergovernmental Relations*. Ottawa, ON: Canadian Policy Research Network Inc; 2005
19. Glenn EN. From servitude to service work: historical continuities in the racial division of paid reproductive labor. *Signs* 1992;18(1):1-43.
20. Bakan AB, Stasiulis DK. *Not one of the family: foreign domestic workers in Canada*. Toronto, ON: University of Toronto Press; 1997.
21. Lister R, Williams F, Anttonen A, Bussemaker J, Gerhard U, Heinen J, Johansson S, Leira A, Siim B, Tobio C, Gavanoas A. *Gendering Citizenship in Western Europe: new challenges for citizenship research in a cross-national context*. Bristol, UK: Policy; 2007.
22. Martinez-Franzoni J. Welfare regimes in Latin America: Capturing constellations of markets, families and policies. *Latin American Politics and Society* 2008;50(2):67-100.
23. Kofman E, Raghuram P. *Gendered migration and global social reproduction*. Springer, 2015.
24. Peng I. Explaining exceptionality: Care and migration policies in Japan and South Korea in *Gender, migration, and the work of care: A multi-scalar approach to the Pacific rim*, S. Michel and I. Peng, eds. Palgrave-Macmillan, 2017.
25. Mahon R. Early childhood education and care in global discourses in Karne Mundy, Alan Green, Robert Lingard and Antoni Verger, eds. *The Handbook of global politics and policy-making in education*. London: Wiley-Blackwell, 2016:224-40.
26. Dahlberg G, Moss P. *Ethics and Politics in Early Childhood Education*. New York, NY: Routledge; 2005.
27. Moss P. Early years PISA testing. *Early Years Educator*, 2016. <http://dx.doi.org/10.12968/eyed.2016.18.6.14>.
28. Pence A. Baby PISA: Dangers that can arise when foundations shift. *Journal of Childhood Studies* 2017; Vol. 41, No. 3.

Notes:

ª Esping-Andersen's typology focuses on three systems: (a) liberal (programs targeted at low income, at-risk, or other families added, at best, via individual or corporate tax deductions), (b) conservative corporatist (support for at-home care), and (c) social

democratic (public financing and provision of universal child care). For an alternative classification of care issues in the South, where children are left with grandparents or other kin while their mothers provide care for children in the North, see^{10,11,12,13}

^b In Canada, Alan Pence's work has been very important in this regard.

Introduction: Early Childhood Education and Care

^aJohn Bennett, MEd, PhD

February 2011

Introduction

Since the first version of the Encyclopedia, this section has increased in scope and now addresses early education as well as “child care.” In so doing, it seeks to go beyond an earlier conceptualization of children’s services which saw them as “child care for working parents” and which adopted a predominantly economic view of the sector focused on the needs of the service economy rather than on the development of the young child. Influenced by the growing body of research on brain development and on the critical consequences of the first years of life, the section underlines the importance of ensuring the development of the child’s language, cognitive development and school readiness, whatever the child’s age or whether placed in a “child care” or “early education” setting.

The range of authors has also been expanded to include three new European contributions. One would have wished – and this can perhaps be a goal for the next edition of the section – to achieve a more balanced representation of views from all parts of the world. Studies from the developing regions and from the BRIC countries (Brazil, Russia, India and China) have yet to be included, though the great majority of the world’s families and children live in these countries. For a number of reasons, early childhood research is still dominated by the OECD countries, in particular, by the United States and other English-speaking countries.

Though diverse in their approaches and contents, the nine articles included here present two main focuses. The first four articles – written by Jay Belsky¹ (United States), Lieselotte Ahnert (Austria) & Michael E. Lamb² (United Kingdom), Margaret Tresch Owen³ (United States), and W. Steve Barnett (United States)⁴ – present research on the impact of child care services on young children. As expressed by Barnett,⁴ “the greatest hope has been that child care may significantly improve the lives and development of young children, especially those most at risk of poor outcomes ... The greatest fear has been that child care may disrupt parent-child relationships and damage children’s social and emotional development.” Despite a certain cacophony in early childhood research – due often to faulty design, special interest and the fragmentation of

research by specialization – all five researchers are optimistic about the positive effects of high quality services on the development of young children, in particular, young children from deprived backgrounds. Tresch-Owen writes, for example, that the positive linkages between child care quality and a variety of positive outcomes in the first two years of life 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 behavior problems, and better mother-child relations.

By high quality is meant, according to Ahnert and Lamb,² ensuring that “care environments are developmentally appropriate... (and) adult-child ratios in child care kept low. Group size and composition also need to be considered as mediators of the quality of individual care provider-child relationships.” It is also important to keep in mind the dynamic of child care - infants depend, for example, on a caring dyadic relationship with a parent or a parent figure whereas for older children, the relationship of the carer with the whole group becomes more important. “Because caring for others’ children (in groups) requires different care strategies than caring for ones’ own children, care providers need to be valued by society, well compensated, and enriched by careful education and/or training.”

Belsky¹ warns, however, that placing children even in an average (American), 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), social competence and academic work habits (by third grade) and, in adolescence, by impulsivity and risk taking.” Belsky¹ notes that according to the NICHD Study, such adverse outcomes are not merely by-products of low-quality child care but stem rather from stress caused by separation. For this reason, he underlines – as the OECD Starting Strong policy studies from 2001-2006 also recommended – that “from the standpoint of public policy, the NICHD Study results, along with those of other studies, provide grounds for recommending that:

- Parental leaves be extended (and preferably paid) to match the duration provided for in some Scandinavian countries;
- Tax policies support families raising infants and toddlers in ways that afford them 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;

- Given the clear benefits of high-quality child care, more of these services are called for.

Margaret Tresch-Owen remarks, however, that measuring the effects of early child care is an extremely complex task. Not only should the research design be reliable, but many facets of the care experience need to be taken into account: the quality of child care provided, the age at which care was initiated, issues of stability in care-giving, the characteristics of individual children and their families, etc. 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. In short, to measure the quality of care and caregivers, researchers 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.

The Canadian and European contributions focus on wider public policy issues: John Bennett⁵ (Ireland) on the issue of the governance of early childhood systems; Ferre Laevers⁶ (Belgium) on what constitutes an appropriate curriculum for young children; Rianne Mahon⁷ (Canada) on the increasing globalization of the childcare sector; Michel Vandebroek⁸ (Belgium) on diversity in early childhood services; and Peter Moss⁹ (United Kingdom) on democracy as first practice in early childhood education and care.

According to John Bennett,⁵ the type of governance structure in place strongly influences the coverage and quality of early childhood services within a country. The experience of the OECD reviews suggests that the splitting of “child care” and “early education” into two different systems often leads, on the one hand, to a weakly regulated child care sector and, on the other, to a “junior school” approach in early education. In the child care sector, the quality of the learning environment is often poor because of weak state investment, low staff qualifications and stressful work conditions. The quality of provision for young children is further put at risk by the lack of regulation of for-profit and informal providers. In Europe, almost all children, from the age of three years, are in regulated early education services, but in too many countries, the sector follows a primary school model characterized by high child:staff ratios, an academic curriculum and a neglect of the child's natural learning strategies, such as free play, active learning and exploration. The integrated systems of the Nordic countries offer a more balanced approach to care and education. These countries provide remunerated parental leave of about one year;

affordable and comprehensive early childhood networks for all families needing services; and their approach to child development and learning is respectful of the young child's age, strengths and needs.

In his entry, Ferre Laevers⁶ identifies what is important – from the child’s perspective – in an early childhood curriculum. Experiential Education focuses on two process dimensions: the “emotional well-being” and the “level of involvement” of the child. “Well-being” indicates that the basic needs of the child are satisfied and refers to the degree to which children feel at ease, act spontaneously, show vitality and self-confidence. “Involvement” is evident when children are interested and fascinated, concentrated and focused, and operating at the very limits of their learning capabilities. To facilitate the measurement of these indicators and ensure inter-rater reliability, Leuven University has developed a five-point scale, known as the Leuven Involvement Scale. This scale includes a methodology and a range of applications, for example a screening procedure through which practitioners assign scores for both well-being and involvement based on their observations over a period of several weeks. This group screening is the starting point for a further analysis focusing on children with lower levels of well-being or involvement, in order to understand why these children do not feel good within the setting or do not engage in activities. This analysis forms the basis for improved interventions toward individual children, toward the general context, and/or to teacher approaches.

Taking a comparative perspective, Rianne Mahon⁷ underlines that decades of comparative research have led to a general agreement on the basic requirements for child care systems and on the need for government supervision and support. Specialists largely agree on the main features of a high quality, inclusive child care system, namely that it should be accessible to all and implement high quality programs, including: healthy, safe, and stimulating physical environments for young children; integrated care and learning; appropriate staff:child ratios; appropriate pedagogical programs; well-educated staff who receive fair wages; and, in present circumstances, a recognition of diversity that includes respect for the cultural and linguistic diversity of populations. The achievement of these goals requires the development of effective governance structures to meet the challenges of integration, coordination and local diversity.

How have different countries responded to the governance challenge? Studies identify three patterns of provision:

1. The laissez-faire approach, typical of the Anglo-American countries and characterized by the

co-existence of several systems, partially age-related, with auspice often proprietary or voluntary;

2. the dual system, based on an age break (crèches for infants and toddlers, preschools for those three-years-old to school-age), typified by France and Italy; and
3. the integrated system pioneered in the Nordic countries. Comparative policy analysis suggests that the Nordics come closest to the ideal, although in other countries, there are also “islands of excellence,” as, for example, in Emilia Romagna in Italy.

Globalization is also having an impact on child care policy, notably through the development of global care chains. Recent research suggests that this practice is not confined to “liberal” Anglo-American countries. In Western Europe the combination of immigration policies and new forms of support for in-home child care actively promotes the recruitment of migrant care providers.¹⁰ While this may provide an inexpensive solution to the growing demand for care in the North, it creates in turn a different set of relations governing the respective roles played by states, families, and markets in both North and South.

The issue of diversity and the growing education gap between immigrant and mainstream children is taken up by Michel Vandebroek.⁸ A fundamental principle here is that children from disadvantaged environments need services tailored to their backgrounds and specific needs. For many of these children, their enrolment in an early childhood service represents a first step into society. It presents them with a mirror reflecting how society looks at them and thus how they should look at themselves, since it is only in a context of sameness and difference that identity can be constructed. In this public mirror, every child is confronted with a critical existential question: Who am I? And is it OK to be who I am? A positive self-image is closely linked to well-being and the capacity to succeed in school.¹¹ Because of this, a child-centred curriculum needs also to be a family-centered curriculum.

In this respect, an appropriate early childhood curriculum needs to balance between two pitfalls: denial and essentialism.^{12,13} Denial of diversity implies that one treats “all children the same,” implying that the educator addresses what she (or occasionally, “he”) considers to be an “average” child. Most often this average child is constructed as a middle-class, white child, living in a traditional nuclear family. This may easily lead to what is sometimes labeled as “racism by omission,” as the ongoing research study “Children of Immigrants in Early Childhood Settings in Five Countries: A Study of Parent and Staff Beliefs” suggests.

The other (and opposite) pitfall is essentialism. This implies that a child is reduced to her family, ethnic or cultural background. It is common practice, for example, in some “multicultural” programs to assume that there is such a thing as “Muslim practices” or “African culture,” denying not only the huge diversity within these cultures but also the agency with which parents as well as children shape their own multiple belongings and multiple identities.

Administrations need to think beyond stereotypical notions that particular social categories or ethnic families do not value education enough or are so possessive of their children that they will not send them to early childhood services. Whereas initially some scholars thought that culture may explain the weak enrolment of diverse groups, it is now clear that the reality is much more complex. Parents from all classes and ethnic groups attach importance to good quality services, but parental choices for a specific type of service are greatly influenced by environmental and economic constraints. Differences in preferences often reflect restricted child care options and in this respect, one needs to criticize the notion of “choice.” To put it simply: parents can only “choose” what is available to them and generally resign themselves to that (restricted) choice. Studies from across Europe show that quality care is hardly accessible for immigrant families in Finland, France, Italy and Portugal. Similarly, in the case of Belgium, quality child care is more readily available in affluent neighbourhoods where enrolment criteria generally favour double-income, white, middle-class families.¹⁴ In short, while early childhood care and education may be viewed theoretically as a central plank of inclusive policy, the reality is that these services serve, in too many countries, to widen the education gap.

In a final entry, Peter Moss⁹ examines the central importance of democracy in early childhood and education systems, a theme greatly valued by major educational thinkers of the last century, such as John Dewey, Paolo Freire and Loris Malaguzzi. Today, the discourse of democratic education is in danger of being drowned out by two other discourses, that of “quality” and that of markets. The discourse of quality is strongly managerial and understands education as a technology for delivering predetermined outcomes. It is concerned to bring children, teachers and institutions into conformity with expert-derived norms. By contrast, the discourse of markets favours deregulation but understands early childhood education and care as a commodity for sale to parent-consumers. Neither discourse values democracy in the practice of early childhood education and care. In a democracy, individuals do not only express personal preferences; they also make public and collective choices related to the common good of their society.

Democratic practice in early childhood education and care must operate at several levels: not just the institutional, that is, the nursery or preschool, but also at national or federal, regional and local levels. The task at national level is to provide a national framework of entitlements, expectations and values – and the material conditions to make these a reality – that express democratically agreed national entitlements, goals and values, including democracy as a fundamental value. At the level of local government, democratic practice may mean developing a “local cultural project of childhood.”¹⁵ This term captures the idea of political commitment, citizen participation and collective decision-making to enable a community to take responsibility for its children and their education (understood in the broad sense). Responsibility not just for providing services but for how they are understood. Several Italian communes (including, but not only, Reggio Emilia) have undertaken such collective, democratic ventures. Bringing democratic politics into the nursery – or the crèche, preschool, kindergarten, nursery school or any of the other terms we use to describe early childhood education and care services – also means that citizens, both children and adults, should be engaged in decision-making about the purposes, the practices and the environment of the nursery, addressing John Dewey’s principle that “all those who are affected by social institutions must have a share in producing and managing them.”¹⁶

An important implication of this approach is the need to reexamine the values framework of early childhood and education systems. One cannot be content with identifying “what works;” one needs also to examine constantly the purposes of education, not only the literacy and science skills necessary for the development of our economies, but also the fundamental values and attitudes that our children will need to sustain open, democratic societies. The nurturing of democratic practice in early childhood institutions – such as the involvement of parents and respect for the natural learning strategies and agency of young children – needs also certain material conditions and tools that government should provide. Examples include: adequate and stable public funding, a well qualified workforce educated to be democratic professionals; appropriate pedagogical practices; and critical support structures, such as ongoing professional development.

References

1. Belsky J. Child care and its impact on young children. Bennett J, topic ed. Rev ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-7. Available at: http://www.child-encyclopedia.com/documents/BelskyANGxp3-Child_care.pdf. Accessed February 14, 2011.
2. Ahnert L, Lamb ME. Child care and its impact on young children (2-5). Bennett J, topic ed. Rev ed. In: Tremblay RE, Boivin

- M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-5. Available at: <http://www.child-encyclopedia.com/documents/Ahnert-LambANGxp2.pdf>. Accessed February 14, 2011.
3. Owen MT. Child care and the development of young children (0-2). Bennett J, topic ed. Rev ed. In: Tremblay RE, Boivin M, Peters RDeV, Barr RG. eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-7. Available at: <http://www.child-encyclopedia.com/documents/OwenANGxp2.pdf>. Accessed February 14, 2011.
 4. Barnett WS. Child care and its impact on children 2-5 years of age. Commenting: McCartney, Peisner-Feinberg, and Ahnert and Lamb. Bennett J, topic ed. Rev ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-6. Available at: <http://www.child-encyclopedia.com/documents/BarnettANGxp2.pdf>. Accessed February 14, 2011.
 5. Bennett J. Early childhood education and care systems in the OECD countries: the issue of tradition and governance. Bennett J, topic ed. Rev ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-5. Available at: <http://www.child-encyclopedia.com/documents/BennettANGxp2.pdf>. Accessed February 14, 2011.
 6. Laevers F. Experiential education: Making care and education more effective through well-being and involvement. Bennett J, topic ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-4. Available at: <http://www.child-encyclopedia.com/documents/LaeversANGxp1.pdf>. Accessed February 14, 2011.
 7. Mahon R. Child care policy: A comparative perspective. Bennett J, topic ed. Rev ed. In: Tremblay RE, Peters RDeV, Boivin M, Barr RG, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-6. Available at: <http://www.child-encyclopedia.com/documents/MahonANGxp2.pdf>. Accessed February 14, 2011.
 8. Vandebroek M. Diversity in early childhood services. Bennett J, topic ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-6. Available at: <http://www.child-encyclopedia.com/documents/VandebroekANGxp1.pdf>. Accessed February 14, 2011.
 9. Moss P. Democracy as first practice in early childhood education and care. Bennett J, topic ed. In: Tremblay RE, Boivin M, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development; 2011:1-7. Available at: <http://www.child-encyclopedia.com/documents/MossANGxp1.pdf>. Accessed February 14, 2011.
 10. Lister R, Williams F, Anttonen A, Bussemaker J, Gerhard U, Heinen J, Johansson S, Leira A, Siim B, Tobio C, Gavanas A. *Gendering Citizenship in Western Europe: new challenges for citizenship research in a cross-national context*. Bristol, UK: Policy; 2007.
 11. Laevers F. Assessing the quality of childcare provision: "Involvement" as criterion. *Researching Early Childhood* 1997;3:151-165.
 12. Preissing C. *Berliner Bildungsprogramm für die Bildung, Erziehung und Betreuung von Kindern in Tageseinrichtungen bis zu ihrem Schuleintritt*. Berlin, Germany: Senatsverwaltung für Bildung, Jugend und Sport; 2004.
 13. Vandebroek M. *The view of the Yeti: Bringing up children in the spirit of self-awareness and kindredship*. The Hague, Netherland: Bernard Van Leer Foundation; 2001.

14. Vandenbroeck M, de Visscher S, van Nuffel K, Ferla J. Mothers' search for infant child care: the dynamic relationship between availability and desirability in a continental European welfare state. *Early Childhood Research Quarterly* 2008;23(2):245-258.
15. Fortunati A. *The Education of young children as a community project: The experience of San Miniato*. Azzano San Paolo, Italy: Edizioni Junior; 2006.
16. Dewey J. *Democracy and educational administration*. *School and Society* 1937;45:457-468.

Note:

^aDr. John Bennett was project leader of the OECD early childhood reviews of early childhood policy. He is also co-author of the two Starting Strong volumes (OECD, 2001, 2006). At present, he is a Visiting Fellow at the Thomas Coram Research Unit, Institute of Education, London, England.

Child Care and Its Impact on Young Children

Jay Belsky, PhD

Birkbeck University of London, United Kingdom

February 2011, 2e éd. rév.

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 three decades, 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. By the turn of the century, 58% of all women with infants under one year of age were 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

Finally, there is also the view that the developmental benefits of non-maternal care and especially high-quality care will accrue disproportionately to children from at-risk families (e.g., low income, low education).¹⁴

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.¹⁵

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;¹⁶ 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);¹⁷
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;¹⁷ 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;¹⁸
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;^{19,20} 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;²¹

4. That children who spend more time in child-care centers 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 sixth grade;^{20,21,22}
5. That children who spent more time in any kind of non-familial child care (i.e., not just centers) were more impulsive and engaged in more risk-taking behaviour at age 15, according to adolescent self reports;²³
6. 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.^{21,24-27}
7. That children who experience a higher rather than a lower quality of child care scored somewhat higher on tested academic achievement at age 15, extending effects discerned across the primary-school years, and also scored lower on externalizing problems, according to adolescent self reports.²³

Also of special note are the results of a recent large-scale Canadian study which relied exclusively on maternal reports and found that (only) in the case of children of mothers with very low levels of education (i.e., lacking a high school education), experience of (mostly home-centered) non-maternal care in the first 2.5 years (and especially the first 9 months) reduced the risk of children being highly aggressive across their first 5 years of life.²⁸ This result is consistent with others studies,¹⁴ though not with data from the large-scale NICHD Study,²⁹ showing that non-maternal care is sometimes associated with better developmental outcomes among high-risk children.

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 Caucasian children), problem behaviour (through first grade), social competence and academic work habits (by third grade) and, in

adolescence, impulsivity and risk taking; and such adverse outcomes are not merely by-products of low-quality child care. Second, at the same time there is evidence, at least in some work, that for children from at risk families, non-maternal child care functions as a protective factor, reducing the likelihood of otherwise anticipated problematic outcomes (e.g., atypically elevated aggression levels). Third, in keeping with more than two decades of research, cognitive-linguistic development seems to be (somewhat) enhanced by high-quality child care. But fourth, 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 age 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.²⁶ 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.²⁷ 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

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.

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.
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*. 5th ed. New York, NY: J. Wiley; 1998:73-134. Damon W, ed-in-chief. *Handbook of Child Psychology*; 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. Caughy MOB, DiPietro JA, Strobino DM. Day-care participation as a protective factor in the cognitive development of low-income children. *Child Development* 1994;65:457-471.
15. 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: Guilford Press; 2005.
16. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security. *Child Development* 1997;68(5):860-879.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.

22. Belsky J, Vandell D, Burchinal M, Clarke-Stewart KA, McCartney K, Owen M, the NICHD Early Child Care Research Network. Are there long-term effects of early child care? *Child Development* 2007;78:681-701.
23. Vandell DL, Belsky J, Burchinal M, Steinberg L, Vandergrift N, the NICHD Early Child Care Research Network. Do effects of early child care extend to age 15 Years? *Child Development* 2010;81:737-756.
24. NICHD Early Child Care Research Network. The relation of child care to cognitive and language development. *Child Development* 2000;71(4):960-980.
25. NICHD Early Child Care Research Network. Child-care structure à process à outcome: Direct and indirect effects of child care quality on young children's development. *Psychological Science* 2002;13(3):199-206.
26. 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.
27. 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.
28. Côté S, Boivin M, Nagin DS, Japel C, Xu Q, Zoccolillo M, Junger M, Tremblay RE. The role of maternal education and nonmaternal care services in the prevention of children's pshycial aggression problems. *Archives of General Psychiatry* 2007;64:1305-1312.
29. 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;6:144-156.

Child Care and Its Impact on Young Children

Lieselotte Ahnert¹, PhD, Michael E. Lamb², PhD

¹University of Vienna, Austria

²University of Cambridge, United Kingdom

September 2018, 2e éd. rév.

Introduction

All over the world, children typically live with and are cared for primarily by their parents but also receive care from extended family members, neighbours, friends, and paid care providers. In industrialized countries, increased reliance on paid child care, often provided by publicly subsidized child care provisions, has fostered intense research on the effects (both positive and negative) on children's health, cognitive capacity, adjustment, and social relationships.¹ Although there is consensus that parents remain the most important influences on children's well-being and development, it is equally clear that nonparental care can also have a substantial impact. Consequently, researchers have focused on the nature of nonparental care and the ways how children from different family backgrounds, with different educational, developmental, and individual needs are affected.

Research Context

Despite a voluminous body of literature on the effects of early child care, the major findings have been profoundly clarified by findings obtained in multi-site studies, such as the US NICHD Early Child Care Study (NICHD-SECC),² the Norwegian Mother and Child Cohort Study (MoBa),³ the British Effective Pre-School and Primary Education Study (EPPE)⁴ or the German National Study of Child Care in Early Childhood (NUBBEK)⁵ with large numbers of participants.

However, researchers still need to focus, not only on children's experiences when they are in nonparental care facilities, but also on other aspects of the broader ecology, including the intersection between parental and nonparental care. For example, children in child care have different experiences at home than do children who only experience parental care.^{6,7,8} Thus, researchers need to determine whether differences between children at home and children who also attend child care settings are attributable to their experiences in care or to their different experiences at home (or both!). At minimum, researchers need to control for children's home

experience when they investigate the effects of children’s nonparental care experiences. They must also seek to improve the clarity of the findings by conducting meta-analyses that summarize the results of multiple studies.^{9,12}

Key Research Questions

Researchers have explored the effects of child care on many aspects of development, although research on cognitive and language development (especially in the context of compensatory educational programs) as well as social-emotional development and stress reactivity have been especially informative. Scholars and politicians who question the value and appropriateness of child care have been particularly concerned that children cannot maintain supportive relationships with their parents when they attend child care centres. They have also argued that experiences of nonparental care create stresses that adversely affect children’s behavioural adjustment. By contrast, those who value child care have emphasized that children need to develop good relationships with care providers and peers in order to benefit fully from their enriching experiences in nonparental care. They also acknowledge that stimulating care at home is influential and that it complements the effects of formal educational strategies and programs.

Recent Research Results

The transition from home to child care is stressful for many children,^{10,11} so care providers need to help children manage their responses to this stress. Children adapt to the new child care environments successfully only if the centres keep levels of stress low or moderate by ensuring that care providers establish meaningful and positive relationships with children and provide care of high quality.^{12,13}

Care providers, of course, are able to develop significant relationships with children but the quality or security of those relationships depends on the care providers’ behaviour towards the group as a whole, rather than on the quality of interactions with individual children. Indeed, the emerging relationships between care providers and children reflect the characteristics and dynamics of the group whereas infant-parent attachments seem to be influenced more directly by dyadic interactions.⁹ Researchers who have studied the behaviours, childrearing beliefs, and attitudes of care providers have shown that their group-oriented behaviours affect not only the formation of care provider-child attachments¹⁴ but also classroom climates, and harmonious peer play.¹⁵ In addition, attitudes and beliefs affect care providers’ behaviours, particularly when

children of different cultural backgrounds are being cared for. Not sharing the care provider's ethnic heritage can make the relationship difficult.^{5,16,17}

Whether or not children in child care maintain good relationships with their parents depends upon parents' ability to provide sensitive care at home.¹⁸ Furthermore, it is important that parents establish a balance between home and child care settings, and that they themselves continue to provide types of intimate interaction seldom available in child care centers.¹⁹ Long hours in child care and stressful parent-child relationships are associated with angry aggressive behaviour^{20,21} whereas good relationships with care providers help minimize aggression and behaviour problems.²²

From age two, children begin to interact more extensively with peers. Such encounters provide excellent opportunities for learning the rules of social interaction: how to evaluate social offers, to conduct dialogues, and most importantly, to resolve conflicts with peers constructively. However, children with difficult temperaments are less likely to interact positively with peers, and this is an especially difficult problem in centres of low quality.²³ Moreover, children with difficult temperaments are especially likely to be affected, positively and negatively, by variations in the quality of care.^{24,25} Experiences with peers eventually help children with difficult temperaments to develop better social skills than do counterparts who have not experienced nonparental care.^{26,27}

Despite contradictory earlier findings about the effects of child care on cognitive and linguistic development, more recent research has consistently documented the enduring and positive effects of high-quality child care—even on later school performance.^{2,28,29} Almost all children (not only those from less stimulating home environments) appear to benefit cognitively, with both full- and part-time attendance having similar effects.^{4,30}

Conclusion

Do children in child care develop differently from those without child care experiences? Many scholars were initially worried that nonparental child care might be risky for children and thus sought to determine whether children in child care were as well adapted psychologically and behaviourally as children cared for exclusively at home. Later researchers began to explore the advantages of good-quality care and its potential benefits for children. In particular, they noted that child care offers opportunities for more extensive social contacts with peers and adults, and thus may open extended social worlds for children. Positive child care experiences may also

enhance later educational opportunities, such that those experiencing early nonparental care are better able to benefit from education, adjust to routines, and resist conflicts. Nevertheless, home remains the emotional centre of children's lives and it is important that supportive parent-child relationships not be harmed by child care experiences even when children spend considerable amounts of time in care.

Implications

Because children can profit from experiences in nonparental child care, child care needs to be of good quality and should provide access to a variety of positive social relationships. To ensure that care environments are developmentally appropriate, however, adult-child ratios in child care must be kept low. Group size and composition also need to be considered as mediators of the quality of individual care provider-child relationships.² It is also important that regulations and informed parents ensure and demand the highest possible quality of care. Because caring for others' children (in groups) requires different care strategies than caring for ones' own children, care providers need to be valued by society, well compensated, and enriched by serious and careful education and/or training.

References

1. Lamb ME, Ahnert L. Nonparental child care: Context, quality, correlates, and consequences. In: Damon W, Lerner RM, Renninger KA, Sigel IE eds. *Child psychology in practice*. Hoboken, NJ: Wiley; 2006:950-1016. *Handbook of child psychology*. Vol. 4.
2. NICHD Early Child Care Research Network. Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Psychology* 2000;4(3):116-135.
3. Lekhal R. Do type of child care and age of entry predict behavior problems during early childhood? Results from a large Norwegian longitudinal study. *International Journal of Behavioral Development* 2012;36(3):197-204.
4. Sylva K, Melhuish E, Sammons P, Siraj-Blatchford I, Taggart B, eds. *Early childhood matters: Evidence from the effective pre-school and primary education project*. London, UK: Routledge; 2010.
5. Beckh K, Becker-Stoll F. Formations of attachment relationships towards teachers lead to conclusions for public child care. *International Journal of Developmental Science* 2016;10(3-4):103-110.
6. Ahnert L, Rickert H, Lamb ME. Shared caregiving: Comparison between home and child care settings. *Developmental Psychology* 2000;36(3):339-351.
7. Gordon RA, Colaner AC, Usdansky ML, & Melgar C. Beyond an "Either-Or" approach to home- and center-based child care: Comparing children and families who combine care types with those who use just one. *Early Childhood Research Quarterly* 2013;28(4):918-935.
8. Borge AIH, Rutter M, Cote S, Tremblay RE. Early child care and physical aggression: differentiating social selection and social causation. *Journal of Child Psychology and Psychiatry* 2004;45(2):367-376.
9. Ahnert L, Pinquart M, Lamb ME. Security of children's relationships with nonparental care providers: A meta-analysis. *Child Development* 2003;77(2):664-679.

10. Ahnert L, Gunnar M, Lamb ME, Barthel M. Transition to child care: Associations of infant-mother attachment, infant negative emotion and cortisol elevations. *Child Development* 2004;75(2):639-650.
11. Datler W, Ereky-Stevens K, Hover-Reisner N, Malmberg LE. Toddlers' transition to out-of-home day care: Settling into a new care environment. *Infant Behavior & Development* 2012;35(3):439-451.
12. Geoffroy M-C, MCôté S, Parent S, Séguin JR. Daycare attendance, stress, and mental health. *Canadian Journal of Psychiatry* 2006;51(2):607-615.
13. Groeneveld MG, Vermeer HJ, van Ijzendoorn MH, Linting M. Children's wellbeing and cortisol levels in home-based and center-based child care. *Early Childhood Research Quarterly* 2010;25(4):502-514.
14. Ereky-Stevens K, Funder A, Katschnig T, Malmberg LE, Datler W. Relationship building between toddlers and new caregivers in out-of-home child care: Attachment security and caregiver sensitivity. *Early Childhood Research Quarterly* 2018;42(1):270-279.
15. van Schaik SD, Leseman PP, de Haan M. Using a group-centered approach to observe interactions in early childhood education. *Child Development* 2018;89(3):897-913.
16. Howes C, Shivers EM. New child-caregiver attachment relationships: Entering child care when the caregiver is and is not an ethnic match. *Social Development* 2006;15(4):574-590.
17. Huijbregts SK, Leseman PPM, Tavecchio LWC. Cultural diversity in center-based child care: Childrearing beliefs of professional caregivers from different cultural communities in the Netherlands. *Early Childhood Research Quarterly* 2008;23(2):233-244.
18. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security: Results of the NICHD study of early child care. *Child Development* 1997;68(5):860-879.
19. Ahnert L, Lamb ME. Shared care: Establishing a balance between home and child care settings. *Child Development* 2003;74(4):1044-1049.
20. 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.
21. Belsky J, et al. Are there long-term effects of early child care? *Child Development* 2007;78(3):681-701.
22. Buyse E, Verschueren K, & Doumen S. Preschoolers' attachment to mother and risk for adjustment problems in kindergarten: Can teachers make a difference? *Social Development* 2011;20(1):33-50.
23. Deynoot-Schaub MJG, Riksen-Walraven JM. Peer contacts of 15-month-olds in child care: Links with child temperament, parent-child interaction and quality of child care. *Social Development* 2006;15(4):709-729.
24. Phillips D, Crowell NA, Sussman AL, Gunnar M, Fox N, Hane AA, Bisgaier J. Reactive temperament and sensitivity to context in child care. *Social Development* 2012;21(3):628-643.
25. Pluess M, Belsky J. Differential susceptibility to rearing experience: The case of child care. *Journal of Child Psychology and Psychiatry* 2009;50(4):396-404.
26. Almas AN, Degnan KA, Fox NA, Phillips DA, Henderson HA, Moas OL, Hane AA. The relations between infant negative reactivity, non-maternal child care, and children's interactions with familiar and unfamiliar peers. *Social Development* 2011;20(4):718-740.
27. NICHD Early Child Care Research Network. Social competence with peers in third grade: Associations with earlier peer experiences in child care. *Social Development* 2008;17(3):419-453.
28. Campbell FA, Pungello EP, Miller-Johnson S, Burchinal M, Ramey CT. The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology* 2001;37(2):231-242.
29. NICHD Early Child Care Research Network. The relation of child care to cognitive and language development. *Child Development*

2000;71(4):960-980.

30. Adi-Japha E, Klein PS. Relations between parenting quality and cognitive performance of children experiencing varying amounts of child care. *Child Development* 2009;80(3):893-906.

Current Research on Child Care Effects

Kathleen McCartney, PhD

Harvard University, USA

February 2007, 2e éd.

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.¹

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, theorists² 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.³ 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.⁴ 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;⁵ however, other researchers have failed to replicate this finding, even when using the same data set.⁶ 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.⁷ 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.⁸ More formal arrangements also promote school readiness skills.⁹

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.¹⁰ 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.¹¹ 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.¹²

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*. 5th 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.

Child Care and Its Impact on Young Children's Development

Ellen S. Peisner-Feinberg, PhD

FPG Child Development Institute, University of North Carolina at Chapel Hill, USA

February 2007, 2e éd.

Introduction

As the labour force participation rates for mothers of young children have risen over the past few decades, so has the use of child care, including both child care centres and family child care homes. A substantial majority of young children now regularly experience child care prior to their entry into school: rates of care for preschool-aged children are now higher than for infants and toddlers. Recent estimates indicate that nearly two-thirds of all 3- to 5-year-old children in the United States attend some form of regular child care prior to kindergarten.¹ Given these high child care usage rates, both parents and professionals have sought to understand the impact of these experiences on children's cognitive and social development.

Subject

Because children's outcomes are influenced by the multiple environments they encounter,² including both family and child care settings, there has been growing interest in research about the effects of child care experiences on children's development. Moreover, the reported average quality of child care in the US falls short of the standards recommended by early childhood professionals,³⁻⁶ leading to concerns about how the quality of such environments affects children's development. Coupled with the widespread interest in promoting children's school readiness skills, a number of research studies have examined the extent to which variations in the quality of preschool child care experiences influence children's cognitive and social skills during the preschool years, during the transition to school, and into the elementary school years. Examination of the quality of child care has weighed a variety of factors, including classroom practices (eg, materials, activities, daily organization), teacher-child relationships (eg, teacher sensitivity, warmth and closeness of the relationship with the child), and teacher qualifications (eg, education and training levels).

Problems

One difficulty with examining the impact of child care quality is the issue of family selection factors. Families choose the child care they use, and families with differing characteristics may choose different types and quality of care. In particular, studies have suggested that socio-economically advantaged families tend to choose higher quality care for their children.⁷⁻¹⁰ Therefore, it may not be possible to completely separate the developmental effects of child care quality from the effects generated by family factors. While more recent studies have adjusted statistically for these family selection factors, they may underestimate the effects of child care quality when the two are highly correlated.

A second difficulty in this area of research is the need for longitudinal studies which also include varying levels of child care quality and representative samples of adequate size in order to examine the longer-term effects of child care quality on children's development. While a few studies do exist (most notably, the National Institute of Child Health and Human Development Study of Early Child Care; and the Cost, Quality, and Child Outcomes in Child Care Centers Study), the expense and complexities of undertaking this type of research limit the availability of such data.

Research Context

Evidence regarding the effects of preschool child care on children's development has been derived from two distinct areas of research — early intervention programs for children at risk, and typical community child care. Whereas several studies have explored the longitudinal effects of early intervention programs, few have examined the effects for children attending community child care programs as they make the transition from preschool to elementary school. Several studies of early intervention programs have found long-term positive effects on children's cognitive development and academic achievement that last until the third or fourth grade, and even longer into adolescence and adulthood for broader indicators of school success, such as retention in grade, special education placement, total years of education, and intellectual functioning.⁹⁻¹⁵ These early intervention programs were generally high quality, very intensive, model demonstration programs, and while these studies clearly show lasting positive effects of providing such programs in the preschool years, they do not reflect the typical experiences of most children in child care.

A second area of research has examined the effects of the typical community child care programs utilized by families, which may vary widely in the quality of experiences provided. More

specifically, substantial research literature has developed over the past two decades examining the effects of preschool child care quality on children’s cognitive, social, and emotional development. Research studies have included child care programs selected from those existing within the local communities sampled, as opposed to the model demonstration programs included in the early intervention studies. The strongest evidence has been gathered from studies examining the effects of child care quality after controlling for differences in child or family background characteristics, such as socioeconomic status, maternal education, family structure, gender, or ethnicity, with a view to allowing for differences related to both the selection of child care and to children’s outcomes.

Key Research Questions

Major research questions in this area include the following:

1. Is the level of child care quality in preschool related to children’s cognitive and social development?
2. How long are the influences of child care quality evident?
3. Are there differential effects of child care quality on developmental outcomes for children from different backgrounds?

Recent Research Results

Studies have been conducted in the US as well as other countries, including Canada, Bermuda, and Sweden, to examine the issues around the effects of child care quality on children’s development, both in the short-term, during the preschool years, and over the longer-term, into elementary school. The studies reported below have examined the effects of child care quality after adjusting for family selection factors, in order to disentangle the relations between the selection of child care of a particular quality or type and the effects of the child care itself.

Although there are relatively few longitudinal studies, several studies have found positive associations between child care quality and children’s cognitive development and social competence during the preschool years.^{3,5,8,16-26} These studies suggest that children who attend better quality child care during the preschool years demonstrate better cognitive and social skills during this time period, after accounting for differences in family background characteristics that are also related to children’s development.

A few studies have addressed this issue longitudinally for preschool-age child care, examining the long-term influences of child care quality on both cognitive and social development. Some studies have found modest, positive associations between preschool child care quality and children's school-age cognitive skills.^{27,28} Fewer long-term associations have been found for social development, although some studies have found that better quality preschool child care is related to more positive behaviour and fewer problem behaviours in the early elementary school years.^{29,30}

Although most studies have found influences of child care quality on children's outcomes, a few have found little effect for either cognitive or social development during the preschool years,^{17,30-32} as well as over the longer-term, into elementary school.^{33,34} The absence of effects in these studies may be accounted for by sampling issues in some cases (restricted ranges of child care quality and/or relatively small sample sizes) or by the outcomes measured in others (e.g., very low-frequency behaviours such as social withdrawal).

Another issue of interest is whether the effects of child care quality are stronger among some groups of children, such as those who may already be at greater risk for less optimal development. Only a few studies relating child care quality to preschool children outcomes have examined this question, and fewer have followed children into elementary school. The findings in this area have been mixed, with some evidence of stronger effects for children at greater risk during the preschool years^{20,35-37} and school-age years,²⁸ although these differences were not found consistently for all outcomes studied. In contrast, other studies have found no differential effects of child care quality for children at greater risk.^{21,23} Given the likelihood that children at greater risk may be in lower-quality care, however, this issue merits further consideration.

Conclusions

The research evidence supports the contention that better quality child care is related to better cognitive and social development for children. While these effects of child care quality are in the modest to moderate range, they are found even after adjusting for family selection factors related to both the quality of care and to children's outcomes. Numerous studies have found short-term effects of child care quality on children's cognitive, social, and emotional development during the preschool years. Longer-term effects lasting into the elementary school years have also been found, although fewer longitudinal studies have been conducted to examine this issue.

Moreover, these results indicate that the influences of child care quality are important for children from all backgrounds. While some studies have found even stronger effects for children from less advantaged backgrounds (suggesting that this issue may be even more critical for children already at greater risk for school failure) the findings indicate that children from more advantaged backgrounds are also influenced by the quality of care.

Implications

As a whole, these findings suggest that policies which promote good quality child care during the preschool years are important for all children. Other research suggests that good quality care is expensive to provide; it is associated with well-trained and educated staff, low staff-child ratios, low staff turnover rates, good wages, and effective leadership.^{3,4,38} Given the high cost as well as the relative paucity of good-quality care, consideration needs to be given to both the availability and the affordability of care. The most successful policies will need to take all these factors into account, so that good quality care is a realistic option for all children. Given the high usage rates of child care during the preschool years, such an investment would seem to be an important path to explore in improving children's readiness for and success in school.

References

1. West J, Wright D, Hausken EG. *Child care and early education program participation of infants, toddlers, and preschoolers*. Washington, DC: US Department of Education, National Center for Education Statistics; 1995. Available at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=95824>. Accessed January 21, 2004.
2. Bronfenbrenner U, Morris PA. The ecology of developmental processes. In: Lerner RM, ed. *Handbook of child psychology: Theoretical models of human development*. Vol 1. New York, NY: Wiley; 1998. Damon W, ed. *Handbook of child psychology*: 993-1028
3. Whitebook M, Howes C, Phillips D. *Who cares? Child care teachers and the quality of care in America*. Final report of the National Child Care Staffing Study. Oakland, Calif: Child Care Employee Project; 1989.
4. Cost, Quality, and Outcomes Study Team. *Cost, quality and child outcomes in child care centers*. Denver, Colo: Economics Department, University of Colorado at Denver; 1995.
5. Kontos S, Howes C, Shinn M, Galinsky E. *Quality in family child care & relative care*. New York, NY: Teachers College Press; 1995.
6. Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Sciences* 2000;4(3):116-135.
7. Lazar I, Darlington R, Murray H, Royce J, Snipper A. Lasting effects of early education: A report from the Consortium for Longitudinal Studies. *Monographs of the Society for Research in Child Development* 1982;47(2 suppl. 3):1-151.
8. Dunn L. Proximal and distal features of day care quality and children's development. *Early Childhood Research Quarterly* 1993;8(2):167-192.
9. Schweinhart LJ, Barnes HV, Weikart DP. *Significant benefits: The High/Scope Perry Preschool Study through age 27*. Ypsilanti, Mich: High/Scope Press; 1993.

10. Burchinal MR, Nelson L. Family selection and child care experiences: Implications for studies of child outcomes. *Early Childhood Research Quarterly* 2000;15(3):385-411.
11. Campbell FA, Ramey CT. Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development* 1994;65(2):684-698.
12. Burchinal MR, Campbell FA, Bryant DM, Wasik BH, Ramey CT. Early intervention and mediating processes in cognitive performance of children of low-income African American families. *Child Development* 1997;68(5):935-954.
13. Ramey CT, Campbell FA, Burchinal M, Skinner M, Gardner D, Ramey SL. Persistent effects of early childhood education on high-risk children and their mothers. *Applied Developmental Sciences* 2000;4(1):2-14.
14. Campbell FA, Pungello EP, Miller-Johnson S, Burchinal M, Ramey CT. The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology* 2001;37(2):231-242.
15. Campbell FA, Ramey CT, Pungello EP, Miller-Johnson S, Sparling JJ. Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science* 2002;6(1):42-57.
16. Phillips D, McCartney K, Scarr S. Child care quality and children's social development. *Developmental Psychology* 1987;23(4):537-543.
17. Kontos SJ. Child care quality, family background, and children's development. *Early Childhood Research Quarterly* 1991;6(2):249-262.
18. Schliecker E, White DR, Jacobs E. The role of day care quality in the prediction of children's vocabulary. *Canadian Journal of Behavioural Science* 1991;23(1):12-24.
19. Bryant DM, Burchinal M, Lau LB, Sparling JJ. Family and classroom correlates of Head Start children's developmental outcomes. *Early Childhood Research Quarterly* 1994;9(3-4):289-304.
20. Peisner-Feinberg ES, Burchinal MR. Relations between preschool children's child care experiences and concurrent development: The Cost, Quality, and Outcomes Study. *Merrill-Palmer Quarterly* 1997;43(3):451-477.
21. National Institute of Child Health and Human Development Early Child Care Research Network. Early child care and self-control, compliance, and problem behavior at 24 and 36 months. *Child Development* 1998;69(4):1145-1170.
22. Burchinal MR, Roberts JE, Riggins R, Zeisel SA, Neebe E, Bryant D. Relating quality of center-based child care to early cognitive and language development longitudinally. *Child Development* 2000;71(2):338-357.
23. National Institute of Child Health and Human Development Early Child Care Research Network. The relation of child care to cognitive and language development. *Child Development* 2000;71(4):960-980.
24. Clarke-Stewart KA, Lowe-Vandell D, Burchinal M, O'Brien M, McCartney K. Do regulable features of child-care homes affect children's development? *Early Childhood Research Quarterly* 2002;17(1):52-86.
25. National Institute of Child Health and Human Development 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.
26. National Institute of Child Health and Human Development Early Child Care Research Network. Does quality of child care affect child outcomes at age 4 1/2? *Developmental Psychology* 2003;39(3):451-469.
27. Broberg AG, Wessels H, Lamb ME, Hwang CP. Effects of day care on the development of cognitive abilities in 8-year-olds: A longitudinal study. *Developmental Psychology* 1997;33(1):62-69.
28. Peisner-Feinberg ES, Burchinal MR, Clifford RM, Culkin ML, Howes C, Kagan SL, Yazejian N. The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development* 2001;72(5):1534-1553.
29. Jacobs EV, White DR. The relationship of child-care quality and play to social behavior in the kindergarten. In: Goelman H,

Jacobs E, eds. *Children's play in child care settings*. Albany, NY: State University of New York Press; 1994:85-101.

30. Clarke-Stewart KA, Gruber CP. Day care forms and features. In: Ainslie RC, ed. *The child and the day care setting*. New York, NY: Praeger; 1984:35-62.
31. Goelman H, Pence AR. Effects of child care, family and individual characteristics on children's language development: The Victoria day care research project. In: Phillips DA, ed. *Quality in child care: What does the research tell us?* Washington, DC: National Association for the Education of Young Children; 1987.
32. Kontos S, Fiene R. Child care quality, compliance with regulations, and children's development: The Pennsylvania Study. In: Phillips DA, ed. *Quality in child care: What does the research tell us?* Washington, DC: National Association for the Education of Young Children; 1987.
33. Chin-Quee DS, Scarr S. Lack of early child care effects on school-age children's social competence and academic achievement. *Early Development and Parenting* 1994;3(2):103-112.
34. Deater-Deckard K, Pinkerton R, Scarr S. Child care quality and children's behavioral adjustment: A four-year longitudinal study. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 1996;37(8):937-948.
35. Burchinal MR, Peisner-Feinberg ES, Bryant DM, Clifford RM. Children's social and cognitive development and child-care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science* 2000;4(3):149-165.
36. Hagekull B, Bohlin G. Day care quality, family and child characteristics and socioemotional development. *Early Childhood Research Quarterly* 1995;10(4):505-526.
37. National Institute of Child Health and Human Development 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.
38. Phillipsen LC, Burchinal MR, Howes C, Cryer D. The prediction of process quality from structural features of child care. *Early Childhood Research Quarterly* 1997;12(3):281-303.

Child Care and Its Impact on Children 2-5 Years of Age. Commenting: McCartney, Peisner-Feinberg, and Ahnert and Lamb

W. Steven Barnett, PhD

National Institute for Early Education Research, USA

February 2011, Éd. rév.

Introduction

McCartney, Peisner-Feinberg, and Ahnert and Lamb have surveyed research on the hopes and fears that have emerged as formal child care has become the norm in many nations around the globe. The greatest hope has been that child care may significantly improve the lives and development of young children, especially those most at risk of poor outcomes, and this potential is now well established.^{1,2} The greatest fear has been that child care may disrupt parent-child relationships and damage children's social and emotional development.³ Typically, the change in child care arrangements is attributed to the movement of mothers into paid work outside the home. However, even children whose mothers are not in paid employment now commonly participate in similar arrangements.⁴ In this way, we see that child care has two purposes:

1. Enabling parents to work and conduct other activities away from their children
2. Providing education and social activities for children.

Demand for both has driven changes in care; and attendance in school-like programs for much of the day is now nearly universal in some countries as early as age three.⁵

Research on child care is largely conducted and published in sub-specializations, each with its own perspective, as reflected in the reviews. McCartney describes child care research as evolving in stages; from simple comparisons of children in and out of care to analyses of the effects of quality — controlling for family characteristics — to examinations of the joint influences of child care and family contexts. Peisner-Feinberg categorizes research according to its focus on

1. Interventions seeking to improve education and development, or
2. Ordinary child care available to the general population.

Ahnert and Lamb tend to focus on children's relationships with parents, other caregivers, and other children. The fragmentation of research by specialization limits the clarity of conclusions from their review. Yet, all of the authors recognize the need for research to become more multidisciplinary and to encompass the broader social ecology if it is to increase our understanding of the effects of child care on development.

Research and Conclusions

The authors of these reviews identify as a primary goal of their research the production of estimates regarding the effects of variations in child care experiences on children's language, cognitive, social, emotional, and physical development, and well-being, both concurrently and projected in the future. The dimensions of experience they cite as important include age of entry, hours in care, type of caregiver and setting, and quality. Quality has been defined in terms of both process (activities) and structure (teacher characteristics, class size, etc.) and is poor to mediocre in many countries.⁶⁻⁷ The effects of variations in care are not expected to be uniform; rather, it is expected to vary with the characteristics of the children, their families, and the broader social contexts in which they live. Indeed, researchers have come to view child care and home experiences as being jointly determined.⁸

Overall, the research gives us reason to hope and has allayed some major fears. Nevertheless, these particular reviews raise questions about whether we can expect only modest cognitive and social benefits which may be at least partially offset by modest negative effects on social behaviour and health. In my view, a more optimistic assessment of the potential of child care to improve development is called for based on a somewhat broader review of the research, with a greater emphasis on education.

To date, the immediate and lasting positive effects of quality care on language, cognitive development, and school achievement have been confirmed by converging findings from large, reasonably representative longitudinal studies and smaller, randomized trials with long-term follow-ups.^{1,2,9-13} Contributors to this knowledge base include meta-analytic reviews of interventions and large longitudinal studies conducted in several countries.^{1,2,14,15} Comprehensive meta-analyses now establish that effects of early care decline, but do not disappear, and when initial effects are large, long-term effects remain substantial.^{1,2} Null findings in cognitive and social domains in a few studies may reasonably be attributed to the limitations inherent to their designs, samples, and measures. Child development benefits were most often found for quality

center care, and further research is warranted on the effects of other types of care. Group size is a particularly important contributor to effectiveness in the broader education literature.¹⁶ Results are mixed regarding the extent to which the benefits derived from the quality care (at least in some domains) may benefit disadvantaged children more than other children — but such findings would be generally consistent with results from intervention and education studies.^{11,16}

There also is sufficient research to conclude that child care does not pose a serious threat to children's relationships with parents or to children's emotional development.^{1,2,9} A recent study of preschool centres in England produced somewhat similar results: children who started earlier had somewhat higher levels of anti-social or worried behaviour — an effect reduced but not eliminated by higher quality.¹⁷ In the same study, an earlier start in care was not found to affect other social measures (independence and concentration, cooperation and conformity, and peer sociability), but was found to improve cognitive development. However, some studies find that the quality of publicly subsidized care in some countries is so low that it harms children's development.¹⁸⁻²⁰

When national policies ignore child care quality in setting subsidy rates and regulations they forego the substantial positive benefits from high quality programs and instead reap null or even negative impacts on child development.^{1,9, 20-22}

Selection bias is also a potential problem for most studies of child care as it may confound variations in child and family characteristics with variations in child care contexts. In research relating child care to behaviour problems, selection bias is especially worrisome as causality plausibly runs in the opposite direction. A randomized trial of Early Head Start found that a treatment group received more hours of care and had fewer behaviour problems in the preschool years.²³ Other experimental preschool studies have found lower rates of behaviour problems, conduct disorder, delinquency, and crime into adulthood among subjects placed in child care earlier in life.^{9,24}

Implications for Policy and Service Development

All of the papers find that quality of care is frequently low, the primary reason being the relatively high cost of quality. For example, teacher quality is a compelling influencing factor in overall quality and its benefits for children — a factor that is also highly dependent on compensation.²⁵ Parents appear to have difficulty affording or perceiving the need for quality care. Nations vary in

the extent to which quality child care is viewed as a government responsibility to be supported by regulation and public funding.⁵ Since support for education is widely regarded as an appropriate government function, it would appear that some nations still have an inadequate appreciation of the educative role of child care. Benefit-cost analyses regarding interventions provide wide margins for benefits over costs, suggesting that even small to moderate benefits from quality care are of sufficient value to warrant government regulation and financial support on behalf of all children.²⁶⁻²⁷

When governments inadequately invest in quality and policies even encourage use of poor quality care, poor teaching and care giving may lead to poor developmental outcomes for children and failure to obtain the potential benefits of quality care across all domains of development. The foregone developmental benefits are large relative to the employment benefits to parents from such policies.²⁶ Increased support for quality, particularly enhancing the professional capabilities of child care teachers through preservice education and ongoing training could greatly improve the benefits of child care policy for children, families, and the general public.²⁵

References

1. Camilli G, Vargas S, Ryan, S, Barnett, WS. Meta-analysis of the effects of early education interventions on cognitive and social development. *Teachers College Record* 2010;112(3):579-620.
2. Nores M, Barnett WS. Benefits of early childhood interventions across the world: (Under) Investing in the very young. *Economics of Education Review* 2010;29(2):271-282.
3. Belsky J. Developmental risks (still) associated with early child care. *Journal of Child Psychology and Psychiatry and allied disciplines* 2001;42(7):845-859.
4. Casper LM, Bianchi SM. *Continuity & change in the American family*. Thousand Oaks, CA: Sage Publications; 2002.
5. Kamerman SB, ed. *Early childhood education and care: International perspectives. The report of a consultative meeting*. New York, NY: The Institute for Child and Family Policy at Columbia University; 2001.
6. Tietze W, Cryer D. Current trends in European early child care and education. *The Annals of the American Academy of Political and Social Science* 1999;563:175-193.
7. Goelman H, Doherty G, Lero D, LeGrange A, Tougas J. *You bet I care: Caring and learning environments: Quality in child care centers across Canada*. Guelph, ON: Centre for Families, Work and Well-Being, University of Guelph; 2000.
8. Ahnert L, Lamb ME. Shared care: Establishing a balance between home and child care settings. *Child Development* 2003;74(4):1044-1049.
9. Barnett WS. *Preschool education and its lasting effects: Research and policy implications*. Tempe, AZ: Education Policy Research Unit. Education and Public Interest Center; 2008.
10. McKay H, Sinisterra L, McKay A, Gomez H, Lloreda P. Improving cognitive ability in chronically deprived children. *Science* 1978;200(4339):270-278.
11. Peisner-Feinberg ES, Burchinal MS, Clifford R, Culkin M, Howes C, Kagan SL, Yazejian N, Byler P, Rustici J, Zelazo J. *The children of cost, quality and outcomes go to school*. Chapel Hill, NC: University of North Carolina, Frank Porter Graham

Child Development Center; 1999.

12. Reynolds AJ. Educational success in high risk settings: Contributions of the Chicago Longitudinal Study. *Journal of School Psychology* 1999;37(4):345-354.
13. Campbell F, Pungello E, Miller-Johnson S, Burchinal M, Ramey C. The development of cognitive and academic abilities: Growth curves from an early childhood experiment. *Developmental Psychology* 2001;37(2):231-242.
14. Leseman PPM, Fahrenfort M, Hermanns JMA, Klaver AW. *De experimentenpovoedingsondersteuning: Leermomenten en toekomstperspectieven*. Den Haag, Neth: Ministerie van VWS; 1998.
15. Sammons P, Sylva K, Melhuish E, Siraj-Blatchford I, Taggart B, Elliot K. *Technical Paper 8a: Measuring the impact of pre-school on children's cognitive progress over the preschool period*. London, UK: Institute of Education, University of London; 2003.
16. Finn JD. Class-size reduction in grades K-3. In: Molnar A, ed. *School reform proposals: The research evidence*. Greenwich, Conn: Information Age Publishing; 2001:27-48.
17. Sammons P, Sylva K, Melhuish E, Siraj-Blatchford I, Taggart B, Elliot K. *Technical Paper 8b: Measuring the impact of pre-school on children's social/behavioural development over the preschool period*. London, UK: Institute of Education, University of London; 2003.
18. Datta-Gupta N, Simonsen M. Non-cognitive child outcomes and universal high quality child care. *Journal of Public Economics* 2010;94(1-2):30-43.
19. Bernal R. The effect of maternal employment and child care on children's cognitive development. *International Economic Review* 2008;49:1173-1209.
20. Herbst CM, Tekin E. *The impact of child care subsidies on child well-being: evidence from geographic variation in the distance to social service agencies*. Working Paper 16250. Cambridge, MA: National Bureau of Economic Research; 2010.
21. Burchinal P, Kainz K, Cai K, Tout K, Zaslow M, Martinez-Beck I, Ratgeb C. *Early care and education quality and child outcomes*. Research to policy brief No. 1. Washington, DC: Office of Planning, Research and Evaluation, Administration on Children and Families; 2009.
22. Felfe C, Lalive R. *How does early childcare affect child development? Learning from the children of German unification*. St. Gallen, Switzerland: University of St. Gallen; 2010.
23. Love J, Harrison L, Sagi-Schwartz A, van Ijzendoorn MH, Ross C, Ungerer JA, Raikes H, Brady-Smith C, Boller K, Brooks-Gunn J, Constantine J, Eliason Kisker E, Paulsell D, Chazan-Cohen R. Child care quality matters: How conclusions may vary with context. *Child Development* 2003;74(4):1021-1033.
24. Raine A, Mellinger K, Liu J, Venables P, Mednick S. Effects of environmental enrichment at ages 3-5 years on schizotypal personality and antisocial behavior at ages 17 and 23 years. *American Journal of Psychiatry* 2003;160(9):1627-1635.
25. Pianta RC, Barnett WS, Burchinal M, Thornburg, KR. The effects of preschool education: What we know, how public policy is or is not aligned with the evidence base, and what we need to know. *Psychological Science in the Public Interest* 2010;10:49-88.
26. Barnett WS. Why governments should invest in early education. *CESifo- DICE report* 2008;6(2):9-14.
27. Barnett WS, Masse LN. Early childhood program design and economic returns: Comparative benefit-cost analysis of the Abecedarian program and policy implications. *Economics of Education Review* 2007;26:113-125.

Early Childhood Education and Care Systems: Issue of Tradition and Governance

^aJohn Bennett, MEd, PhD

February 2011, Éd. rév.

Introduction

The series of policy analyses carried out by the OECD Education Directorate from 1998-2006 show that the organization of early childhood systems is extremely varied across the rich countries. Yet, distinctive patterns of governance emerge from this diversity.^{1,2} The following text will briefly describe two traditional approaches to system governance, namely, through integrated (one ministry or agency in charge) or split management. The adoption of one or other approach says much about how early childhood is understood in a country, and the relative value given by governments to policy-making, funding and regulation in this field.

An abridged history of early childhood institutions

For historical reasons, national policies for the “care” and “education” of young children have developed separately in most countries. To summarize a complex situation that took various forms across different countries, several European cities had established child care institutions for abandoned or endangered young children as early as the 15th century. In the 19th century, a further development took place: the nation states began to establish 'infant schools' for young children prior to their entry into school, e.g. Sweden from 1836, France in 1881. The purposes of the two institutions were quite different: child care institutions focused on child survival and social protection while infant schools were educational in purpose. Early education nurseries or preschools were founded to provide an early education opportunity for the children of the more affluent classes and/or to introduce the official national language and culture to children speaking a second language or a patois. With the emergence of the modern state and the extension of its responsibility for young children, care services were assigned to health or social ministries, and the 'infant' or junior schools to ministries of public instruction or education. This splitting of responsibility has remained the de facto governance situation in many of the OECD countries.

Unlike most other countries, the Nordic countries further developed their early childhood systems

in the immediate post-Second World War period. From the 1950s, a growing number of women began to access the labor market in these countries, with in consequence, a growing demand for child care services. As both infant schools and the original social care services were administered at local level, local administrations – for the sake of efficiency – combined these services, generally under the responsibility of social affairs. A new integrated sector emerged, administered at national level by the ministry of social affairs. A parallel development also took place in the same period in the Soviet zone of influence, with countries integrating children's services, generally under the ministry of education. More recently, other countries have followed suit. Influenced by a growing concern to give form to the notion of lifelong learning, Iceland (1976), New Zealand (1989), Spain (1990), Slovenia (1993), Sweden (1996), England and Scotland (1998), Norway (2005) and Netherlands (2007) have brought early services into the ambit of education, with more or less success depending on the country.

Consequences of split system governance

In split systems, responsibility for services is divided among several ministries. This fragmentation of responsibility seems to be based more on traditional divisions of government than on the actual needs of families and young children. In the U.S., for example, the U.S. General Accounting Office noted that in 1999, 69 federal programs provided or supported education and care for children. Nine different federal agencies and departments administered these programs, though most were operated by the U.S. Department of Health and Human Services and the U.S. Department of Education.³ In general, across the OECD countries, the separation of management has been translated into a two-tier organization of services: 'child care' for the younger children followed by 'pre-primary education' for three, four or five-year-olds. The result is often a fragmentation of services and a lack of coherence for children and families. Care and early education institutions differ greatly in their funding requirements, operational procedures, regulatory frameworks, staff-training and qualifications.

Child care services, in particular, suffer from this division of auspices. They tend to be less developed in terms of coverage, and in some countries, the child care field is a patchwork of private providers and individual family day carers. Affordability to parents is often an issue, and as a result, low-income groups may be excluded from access to centre-based services, unless government financed targeted services are available. Frequently, staff – almost exclusively female – have low educational qualifications and wages, and may not be given employment

contracts or insurance. In the area of private provision, a current trend is for smaller services to be bought up by larger commercial companies, some of which lobby for greater deregulation of the field. A further fragmentation of child care services can be seen under governments that see early care as a private responsibility for parents, and not as a public responsibility. This has often been the approach in the liberal market economies (of the countries reviewed by the OECD: Australia, Canada, Ireland, Korea, the Netherlands, the United Kingdom and the United States). These countries generally acknowledge governmental responsibility for pre-school education from the ages of 3-5 years (only at five years in some countries), in particular for children from disadvantaged or 'at-risk' backgrounds. By contrast, care arrangements for children under 3 are considered to be a parental responsibility, and (depending on income, and/or the need to stimulate the labor market participation of women) parents may or may not be assisted to purchase child care in the market place.

Integrated services

Countries that integrate their services under one ministry or agency generally achieve more coordinated and goal-oriented services of a higher quality. In the Nordic countries, for example, municipal authorities ensure delivery of integrated services either directly or through contracted providers, who must follow public regulations and quality requirements. Highly subsidized services are widely available to parents. Pedagogues, educated to tertiary level, staff the early childhood centers, and enjoy employment contracts and remuneration roughly equivalent to primary school teachers. Services in the Nordic countries have so far avoided the weaknesses of the public early education systems of the liberal economies which, because of their close connection with primary education, often practice very inappropriate child-staff ratios and are unavailable on a full-day, all-year basis. By contrast, the Nordic countries that have transferred responsibility for early childhood services to education ministries – as was the case with Norway (2005) and Sweden (1996) – continue to open all year round on a full-day basis and practice low child:staff ratios that favor both individual attention from pedagogues and the agency of the child.

Recent Research Results

A recent study, *Caring and Learning Together*⁴ examined five countries - Brazil, Jamaica, New Zealand, Slovenia, and Sweden - that have integrated their childcare and early education administrations. The study suggests that the consequences of integration within education have been generally very positive. Access and enrolments increased significantly for all children but

especially for the age group 1-3 years. The status, recruitment levels, training and employment conditions of staff improved significantly. In other respects such as curriculum development or pedagogical work, results were also very positive. For example, in New Zealand, the link with education inspired the creation of the Te Whariki curriculum and a specific learning evaluation instrument called Learning Stories.⁵ The New Zealand Report written for the study states: “If there had not been prior integration of services under Education, it is unlikely that New Zealand would have had a curriculum as innovative and as widely inclusive of early childhood education services as Te Whāriki...” Even more striking has been the transformation of the New Zealand early childhood workforce: higher qualifications for staff and improvements in pay supported by the creation in 1994 of a combined union for early childhood and primary school teachers. Since integration within education, “there has been continued growth in the number of students in, and graduates from, early childhood teacher education colleges.”⁶

Conclusions

The type of governance structure in place strongly influences the coverage and quality of early childhood services within a country. Split systems often mean a weakly regulated child care sector and a “junior school” approach to early education. In the child care sector, the quality of the learning environment is often poor because of weak state investment and low staff qualifications and work conditions. In parallel, in split systems, the early education sector may be directed toward academic goals and be characterized by high child:staff ratios and a neglect of the child's natural learning strategies. Even in countries in which strong efforts are being made to improve quality in both the child care and early education systems, for example, in Belgium Flanders, the legacy of the past is difficult to overcome. The integrated systems of the Nordic countries seem to offer a more balanced approach to care and education. These countries provide affordable and comprehensive networks for all families needing services, and their approach to child development and learning is respectful of the young child's age, strengths and needs.

Implications

ECCE services can be integrated successfully within a number of policy domains, as long as young children are an important focus of the ministry in charge. In situations of severe poverty, good reasons are present to continue a health/well being approach to children 0-3 years and their families, hoping that the huge opportunity for cognitive stimulation and language development in

this period will not be neglected. However, if the benefits sought from integration include: (1) universal entitlement, (2) affordable access, (3) a unified and well educated workforce, (4) enhancing learning for all ages, and (5) smoother transitions for young children, then integration of care services within the education sector would seem more likely to deliver such benefits

References

1. OECD. *Starting Strong: Early childhood education and care*. Paris, France: OECD; 2001.
2. OECD. *Starting Strong II: Early childhood education and care*. Paris, France: OECD; 2006.
3. US General Accounting Office. *Early education and care: overlap indicates need to assess crosscutting programs*. Washington, DC: US General Accounting Office; 2000. GAO/HEHS-00-78.
4. Kaga Y, Bennett J, Moss P. *Caring and learning together: A cross-national study on the integration of early childhood care and education within education*. Paris, France: UNESCO; 2010.
5. Carr M. *Assessing children's experiences in early childhood: Final Report to the Ministry of Education*. Wellington, Australia: Ministry of Education; 1998.
6. Kaga Y, Bennett J, Moss P. *Caring and learning together: A cross-national study on the integration of early childhood care and education within education*. Paris, France: UNESCO; 2010:82.

Note:

^a Dr. John Bennett was project leader of the OECD early childhood reviews of early childhood policy. He is also co-author of the two Starting Strong volumes (OECD, 2001, 2006). At present, he is a Visiting Fellow at the Thomas Coram Research Unit, Institute of Education, London, England.

Experiential Education: Making Care and Education More Effective Through Well-Being and Involvement

Ferre Laevers, PhD

Leuven University / Centre for Experiential Education, Belgium

February 2011

Introduction

The educational model Experiential Education (EXE) evolved during the 1970s and 1980s, from a series of observations of young children in early education settings in Flanders, Belgium. Since that time, EXE has grown to become one of the most influential models in the area of early childhood education in Flanders and has been disseminated across a range of world regions and countries, including Australia, Croatia, Ecuador, Finland, France, Germany, Ireland, Japan, the Netherlands, Portugal, South-Africa and the U.K. The approach has been further developed for child care, special education, secondary education, higher education and in service training.

Research on quality at the level of the learner

EXE theory suggests that the most economical way to assess the quality of any educational setting (from preschool to adult education) – in particular, from the perspective of the learner – is to focus on two process dimensions: the “emotional well-being” and the “level of involvement” of the learner. “Well-being” indicates that the basic needs of the child are satisfied and refers to the degree to which children feel at ease, act spontaneously, show vitality and self-confidence. “Involvement” is evident when children are concentrated and focused, interested and fascinated and when they are operating at the very limits of their capabilities.

Measuring well-being and involvement

For both well-being and involvement, a five-point scale – the Leuven Involvement Scale – has been developed to facilitate measurement and ensure inter-rater reliability.¹ The Leuven Scale includes a methodology and a range of applications, for example a screening procedure through which practitioners assign scores for both well-being and involvement based on their

observations over a period of a few weeks. This group screening is the starting point for a further analysis focusing on children with lower levels of well-being or involvement in order to understand why they do not feel good within the setting or do not engage in activities. This analysis forms the basis for interventions toward individual children and toward the general context and/or the teachers' approaches.

Research on quality at the level of context

Capitalizing on a myriad of experiences by teachers, a body of observations and expertise has been gathered and systematized in Ten Action Points, an inventory of initiatives that favor the well-being and involvement of children in the classroom environment.² The Ten Action Points are:

1. Rearrange the classroom in appealing corners or areas.
2. Check the content of the areas and make them more challenging.
3. Introduce new and unconventional materials and activities.
4. Identify children's interests and offer activities that meet these.
5. Support activities by stimulating inputs.
6. Widen the possibilities for free initiative and support them with sound agreements.
7. Improve the quality of the relations amongst children and between children and teacher(s).
8. Introduce activities that help children to explore the world of behavior, feelings and values.
9. Identify children with emotional problems and work out sustaining interventions.
10. Identify children with developmental needs and work out interventions that engender involvement.

Next to the Action Points, the way adults interact with children is regarded as a key to quality. The Adult Style Observation Schedule (ASOS) captures this aspect and is built around three dimensions: stimulation, sensitivity and giving autonomy.³ Stimulating interventions are open impulses that engender involvement, such as: suggesting activities to children, inviting children to communicate, asking thought-provoking questions and giving rich information. Sensitivity is evidenced in responses that witness empathic understanding of the child. Giving autonomy means: respecting the children's initiative, acknowledging their interests, giving them room for experimentation, letting them decide upon the way an activity is performed and letting them

participate in the setting of rules. Practice-oriented research provides evidence of a strong correlation between the above “active ingredients” and the achievement of well-being and involvement.^{4,5,6}

Research on quality at the level of outcomes

High levels of well-being and involvement lead in the end to high levels of child development.

There are four core outcomes sought in Experiential Education:

- Emotional health, a foundational feature that refers to social-emotional conditions captured by the Rogerian concept of the “fully functioning person” which connects with self-esteem, self confidence and resilience.
- Nurturing the learner’s exploratory drive is critical as it can lead to lifelong learning. The challenge for education is not only to keep this intrinsic source of motivation alive, but also to make it encompass all domains that are relevant to functioning in society. The aim is to encourage deep-level learning as opposed to superficial learning that does not affect the basic competencies and has little transfer to real life situations.⁷
- Valued competences and dispositions in a range of relevant domains, such as communication, the understanding of the physical world (including technology), social competence and self-organization (including entrepreneurship). Based on research and a wealth of case studies,^a EXE has developed observation scales to capture such competences in young children. They all fit into the new paradigm on outcomes as the approach is holistic in nature and views competences as life skills.
- Preserving the basic attitude of “linkedness” expresses a concern for the development of a positive orientation towards reality. A basic sense of “connectedness” can prevent destructive and anti-social behaviour (delinquency). In fact there are five parts to this basic attitude: linkedness with oneself; with other(s); with the material world, with society and with the entirety of the cosmos (transcendence).

Conclusion

In sum, Experiential Education sees well-being and involvement as a measure of deep learning and of the effectiveness of the learning environment. Because these indicators of quality learning can be easily accessed by practitioners, the process-oriented strategy has an empowering impact

on them and can help them to develop the huge potential of children. With proper support, children can become well-rounded adults who are self-confident and mentally healthy, curious and exploratory, expressive and communicative, imaginative and creative, well-organized and entrepreneurial, with developed intuitions about the social and physical world and with a feeling of belonging and connectedness to the universe and all its creatures.

The Experiential Education approach complements the broader system design approach outlined in Bennett's review on early childhood education and care systems in OECD countries.⁸ It focuses attention on the immediate context of education (the setting), the people involved and, not least, the children whose basic well-being and motivation must be a constant concern of teachers. Its nurturing of broad competences or life skills is entirely suitable to early childhood education and care, but is also relevant to later education where motivation, self-organization and social competence continue to remain essential goals.

References

1. Laevers F. *The Leuven Involvement Scale for Young Children. Manual and video*. Leuven, Belgium: Centre for Experiential Education; 1994. Experiential Education Series, No 1.
2. Laevers F, Moons J. *Enhancing well-being and involvement in children. An introduction in the ten action points* [videotape]. Leuven, Belgium: Centre for Experiential Education; 1997.
3. Laevers F, Bogaerts M, Moons J. *Experiential education at work. A setting with 5-year olds* [manual and videotape]. Leuven, Belgium: Centre for Experiential Education; 1997.
4. Laevers F. The curriculum as means to raise the quality of ECE. Implications for policy. *European Early Childhood Education Research Journal* 2005;13(1):17-30.
5. Laevers F. *Improving quality of care with well-being and involvement as the guides. A large scale study in Flemish Setting. Final report*. Leuven, Belgium: Kind & Gezin. CEGO Leuven University; 2009.
6. Laevers F, Declercq B, Thomas F. *Implementation of the process-oriented approach in early years settings in Milton Keynes. Final report*. Leuven, Belgium: CEGO Leuven University; 2010.
7. Laevers F. Deep level learning: an exemplary application on the area of physical knowledge. *European Early Childhood Research Journal* 1993;1(1):53-68.
8. Bennett J. Early childhood education and care systems in the OECD countries: the issue of tradition and governance. In: Tremblay RE, Barr RG, Peters RDeV, Boivin M, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2008:1-5. Available at: <http://www.child-encyclopedia.com/documents/BennettANGxp.pdf>. Accessed February 14, 2011.

Note:

^a One research study, based on more than 12,000 scored episodes showed that the level of well-being of young children in Flanders can be considered more or less satisfactory (mean score: 3.63), while their involvement in care settings should be a matter for concern (mean score: 3.23).⁵

Diversity in Early Childhood Services

Michel Vandebroek, PhD

Gent University, Belgium

March 2018, Éd. rév.

Introduction

Issues of diversity and equity have gained a solid footing in the hearts and minds of researchers and practitioners alike. There is a general consensus that children learn in context and that context includes diversity in ethnicity, culture, gender, family composition, ability etc. In parallel, the PISA (Program for International Student Assessment) results showed a marked social gap in educational achievement in most OECD countries, yet the gap differs substantially from one country to another.^{1,2} This gap seems to run along socio-economic and ethnic-cultural lines: children from ethnic minorities and children from poor families (and these are often – but not always – overlapping categories) generally perform less well at school.^{3,4,5,6,7} In short: education tends to (re)produce social inequality and, in turn, social inequality threatens social cohesion and the economic future of nations.

Challenges

Consensus about the fact of diversity does not imply, however, any consensus on how diversity is perceived or treated.⁸ In fact, the discourse on diversity has become so prevalent in education that it risks becoming meaningless. In a modest attempt to reconceptualize this issue, I will analyze the concept from three dominant paradigms, namely from economic, educational and social perspectives.

The economic perspective

The economic crisis of the late 1970s began a process of de-industrialisation and globalization, accompanied by a growing awareness that the intellectual capital of a nation may be crucial for its economic welfare. This evolution led to a growing focus on lifelong learning and on early childhood as a particularly fertile ground to make a “head start” in life. Many studies show the positive impact of early childhood education and care (ECEC) on children’s development, especially for children at risk of educational failure through social disadvantage.⁹ In the U.S. the

most renowned example is the NICHD-ECCRN study showing beneficial effects on different domains of cognitive and language development.¹⁰ In the United Kingdom, the extensive, longitudinal EPPE (effective provision of preschool education) study also showed that children, accumulating several risk factors, thrive well at school, when they have attended high quality ECEC.^{11,12}

In short, from an economic perspective, early childhood education is perceived as an important tool to overcome disadvantage. The return on investment is high, leading to better social and educational outcomes for at-risk children and later, better adjustment to the requirements of school, the workplace and society. However the problem with this perspective is twofold. First, the economic paradigm may help to identify quantitative needs in early childhood education, but does not help us to address qualitative questions, including the following major questions: What is early education for? What kind of early childhood education do we need? Second, it reduces the child to the status of a future adult, and therefore may disregard the well-being of the child here and now, as well as the parents' perspectives.

The educational approach to children from disadvantaged backgrounds

A fundamental principle here is that children from disadvantaged environments need services tailored to their backgrounds and specific needs. For many children, their enrolment in an early childhood service represents a first step into society. It presents them with a mirror reflecting how society looks at them and thus how they should look at themselves, since it is only in a context of sameness and difference that identity can be constructed. In this public mirror, every child is confronted with a critical existential question: Who am I? And is it OK to be who I am? A positive self-image is closely linked to well-being and the capacity to succeed in school.¹³ Because of this, a child-centred curriculum needs also to be a family-centered curriculum.

In this respect, an appropriate early childhood curriculum needs to balance between two pitfalls: denial and essentialism.^{14,15} Denial of diversity suggests that one treats "all children the same," implying that the educator addresses what she (or occasionally, "he") considers to be an "average" child. Most often this average child is constructed as a middle-class, white child, living in a traditional nuclear family.^{16,17} This may easily lead to what is sometimes labelled as "racism by omission," as suggested in the ongoing research study "Children of Immigrants in Early Childhood Settings in Five Countries: A Study of Parent and Staff Beliefs".^a The French part of this study shows, for instance, how an attempt to treat all children the same- considered in France as

“good practice” toward classroom diversity— often fails to provide the differentiated teaching that some children belonging to specific groups may need.¹⁸

The other (and opposite) pitfall is essentialism. This implies that a child is reduced to her family, ethnic or cultural background. It is common practice, for example, in some multicultural programs to assume that there is such a thing as “Muslim practices” or “African culture” denying not only the huge diversity within these cultures but also the agency with which parents and children shape their own multiple belongings or multiple identities.^{15,19} One cannot simply assume that a child from North African origins loves to eat tajine, refuses to have pork or that her parents wish the staff to address her in Arabic. A summary of guiding principles for a respectful curriculum is provided by the European Diversity in Early Childhood Education and Training (DECET) network.^a ECEC centres need, according to DECET, to be places where:

Every child, parent and staff member should feel that he/she belongs. This implies an active policy to take into account family cultures and preferences when constructing the curriculum.

- Every child, parent and staff member is empowered to develop the diverse aspects of his/her different identities. This implies that the curriculum fosters multiple identity building and multilingualism by building bridges between the home and the institutional environment as well as with the local community.
- Everyone can learn from each other across cultural and other boundaries
- Everyone can participate as active citizens. This implies that staff should develop an explicit anti-bias approach and take appropriate action to involve all parents.
- Staff, parents and children work together to challenge institutional forms of prejudice and discrimination. This includes a critical study of availability and access policies, as well as of structural discrimination, as explained below.

The social perspective

A third possible approach to diversity in early childhood education is more social in nature. In this perspective, early childhood education is seen as an integral part of the social welfare mechanisms that states have put into place to ensure social justice, equal opportunities and the redistribution of wealth. However, many scholars have demonstrated that children from ethnic minorities and children from lower-income families are to be found more often in lower-quality

care than those from middle-income and higher-income families.^{20,21} Their situation is further exacerbated as education is downplayed in child care services because of the splitting of the early system into social welfare programs and early education. In this regard, the EPPE study¹¹ has made it clear that only high quality ECEC makes a difference. For this reason, policy-makers and administrators must ensure that high quality services are available to all children. Average or even equal standards are not enough: children from poor ethnic backgrounds need the best equipped centers and the best personnel available, either free or at an affordable cost.

The effect of for-profit services

The access of low-income children to high quality services is even less likely to happen when early childhood services are largely private. The logic of for-profit services is to cater for more affluent districts and families. In addition, different studies show that market-oriented services tend to hire lower qualified staff to reduce costs.^{22,23,24} Extensive research in the Netherlands has shown that the quality of Dutch child care has dropped dramatically since its recent privatization. Whereas in 2001, 6% of child care groups had insufficient quality, this number increased to more than one third in 2005.²⁵

Conclusions

Diversity and equity are central concerns in early childhood education. However, different approaches to these issues are possible. A comprehensive view would aim to integrate economic, educational and social perspectives rather than favouring one paradigm only. A narrow focus on the economic returns from early childhood services may disregard parental and child perspectives and the wider purposes of education.²³ In turn, treating early childhood services as a purely welfare concern can lead to poor quality, with weakly qualified staff unable to meet the educational needs of young children. In similar fashion, a narrow educational perspective may lead to a “schoolification” of early childhood services that fails to take into account broader dimensions of access and curriculum that immigrant and ethnic minority children may need to succeed.²⁶ Focusing on simply extending existing educational services, for example, through market means, without asking questions about “whom do they serve,” is often counterproductive from a diversity and equity point of view. These critiques are not presented to dismiss economic, social or educational approaches per se, but rather to suggest that in diversity situations, public policy needs to be complemented by analyses from different perspectives.

Implications

Administrations need therefore to think beyond stereotypical notions that particular social categories or ethnic families do not value education enough or are so possessive of their children that they will not send them to early childhood services. Over the last decades, there have been extensive discussions on the issue. Whereas initially some scholars thought that culture may explain the weak enrolment of diverse groups, it is now clear that the reality is much more complex. Parents from all classes and ethnicities attach importance to good quality services, but parental choices for a specific type of service are greatly influenced by environmental constraints. Differences in preferences often reflect restricted child care options and in this respect, one needs to criticize the notion of “choice.” To put it simply: parents can only “choose” what is available to them and generally resign themselves to that (restricted) choice.²⁷ Wall and Jose²⁸ have shown, for instance, that quality care is hardly accessible for immigrant families in Finland, France, Italy and Portugal. Similarly, in the case of Belgium, quality child care is more readily available in affluent neighborhoods where enrolment criteria generally favor double-income, white, middle-class families.²⁷ In short, while early childhood care and education may be viewed theoretically as a central plank of inclusive policy, the reality is that these services serve, in too many countries, to widen the education gap.

References

1. OECD. *Starting strong II: Early childhood education and care*. Paris, France: OECD; 2006.
2. OECD. How do immigrant students fare in disadvantaged schools? *PISA in Focus* 2012;22:1-4.
3. Adams G, Rohacek M. More than a work support? Issues around integrating child development goals into the child care subsidy system. *Early Childhood Research Quarterly* 2002;17:418-440.
4. Barnes J, Belsky J, Broomfeld K, Frost M, Melhuish E. Disadvantaged but different: variation among deprived communities in relation to child and family well-being. *Journal of Child Psychology and Psychiatry* 2005;46(9):952-962.
5. Himmelweit S, Sigala M. Choice and the relation between identities and behaviour for mothers with pre-school children: some implications for policy from a UK study. *Journal of Social Policy* 2004;33(3):455-478.
6. Huston AC, Chang YE, Gennetian L. Family and individual predictors of child care use by low-income families in different policy contexts. *Early Childhood Research Quarterly* 2002;17:441-469.
7. Mistry R, Biesanz J, Taylor L, Burchinal M, Cox M. Family income and its relation to preschool children's adjustment for families in the NICHD study of early child care. *Developmental Psychology* 2004;40(5):727-745.
8. Vandenbroeck M. Supporting (super)diversity in early childhood settings. In L. Miller, C. Cameron, C. Dalli, and N. Barbour, Eds. *The Sage handbook of early childhood policy*. London: Sage. 2018; 403-417.
9. Vandenbroeck M, Lenaerts K, Beblavy M. Benefits of early childhood education and care and the conditions for obtaining them. Brussels: European Expert Network on Economics and Education. 2018.

10. Vandell D. 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;39:133-164.
11. Syva K, Melhuish E, Sammons P, Siraj-Blatchford I, Taggart B. *The effective provision of preschool education (EPPE) project: Final report*. Nottingham, UK: DfES Publications– The Institute of Education; 2004.
12. Sammons P, Sylva K, Melhuish E, Siraj-Blatchford L, Taggart B, Toth K... & Smees R. Influences on students' attainment and progress in key stage 3: Academic outcomes in English, maths and science in Year 9. Effective preschool, primary and secondary education project (EPPSE 3-14). London: DfE. 2012.
13. Slot P, Lerkkanen M-K, Leseman P. The relations between structural quality and process quality in European early childhood education and care provisions: Secondary analyses of large scale studies in five countries. Utrecht: Utrecht University - Care project. 2016.
14. Preissing C. *Berliner bildungsprogramm für die bildung, erziehung und betreuung von kindern in tageseinrichtungen bis zu ihrem schuleintritt*. Berlin, Germany: Senatsverwaltung für Bildung, Jugend und Sport; 2004.
15. Vandenbroeck M. *The View of the Yeti: Bringing up Children in the Spirit of Self-Awareness and Kindredship*. The Hague, Netherland: Bernard Van Leer Foundation; 2001.
16. Burman E. *Deconstructing developmental psychology*. London, UK: Routledge; 2004.
17. Canella G. *Deconstructing early childhood education: social justice and revolution*. New York, NY: Peter Lang; 1997.
18. Brougère G, Guénif-Souilamas N, Rayna S. Ecole maternelle (preschool) in France: a cross-cultural perspective. *European Early Childhood Education Research Journal* 2008;16(3):371-384.
19. Beck U. Democratisation of the family. *Childhood* 1997;4(2):151-168.
20. Phillips D, Adams G. Child care and our youngest children. *Future of Children* 2001;11(1):35-51.
21. Vandenbroeck M, Lazzari A. Accessibility of early childhood education and care: A state of affairs. *European Early Childhood Education Research Journal*. 2014;22(3),327-335.
22. Van Lancker W, Ghysels J. Explaining patterns of inequality in childcare services use across 31 developed economies: A welfare state perspective. *International Journal of Comparative Sociology*. 2016;1(28) DOI: 10.1177/0020715216674252.
23. Moss P. *Markets and democratic experimentalism. Two models for early childhood education and care*. Gütersloh, Germany: Bertelsmann Stiftung; 2008.
24. Osgood J. Time to get down to business? The responses of early years practitioners to entrepreneurial approaches of professionalism. *Journal of Early Childhood Research* 2004;2(1):5-24.
25. Vermeer HJ, van Ijzendoorn MH, de Kruif R, Fukkink RG, Tavecchio L, Riksen-Walraven J, van Zeijl J. *Kwaliteit van de Nederlandse kinderdagverblijven: trends in de kwaliteit in de jaren 1995-2005*. Amsterdam, Netherland: Nederlands Consortium Kinderopvang Onderzoek; 2005.
26. Van Laere K, Vandenbroeck M. Early learning in preschool: Meaningful and inclusive for all? Exploring perspectives of migrant parents and staff. *European Early Childhood Education Research Journal*. 2017;25(2),243-257.
27. Vandenbroeck M, de Visscher S, van Nuffel K, Ferla J. Mothers' search for infant child care: the dynamic relationship between availability and desirability in a continental European welfare state. *Early Childhood Research Quarterly* 2008;23(2):245-258.
28. Wall K, Jose JS. Managing work and care: a difficult challenge for immigrant families. *Social Policy and Administration* 2004;38(6):591-621.

Note:

^aSee also the Diversity in Early Childhood Education and Training website. Available at: <http://www.decet.org/>. Accessed May 30,

2017.

Democracy as First Practice in Early Childhood Education and Care

Peter Moss, Emeritus Professor of Early Childhood Provision

UCL Institute of Education, University College London, United Kingdom

September 2021, Éd. rév.

Introduction

There is a long tradition of viewing democracy and education as inseparably interconnected: democracy as a basic value and practice in education; and education as a means to strengthen and sustain democracy. Democracy was a central theme for major educational thinkers of the last century, such as John Dewey, Celestin Freinet, Janusz Korczak, Paolo Freire and Loris Malaguzzi. Today it still has proponents (see, for example,^{1,2,3,4}) and a number of countries make a specific commitment to democracy in curricula or other education policy documents (see, for example,^{5,6}). However, the discourse of democratic education is marginalised by two other discourses, that of quality and that of markets, both of which have thriven under neoliberalism.⁷ The discourse of quality is strongly managerial and understands education as a technology for delivering predetermined outcomes. It is concerned to bring children, teachers and institutions into conformity with expert-derived norms. While the discourse of markets understands education as a commodity for sale to parent-consumers, valuing self-interest, calculation and individual choice. As Carr and Hartnett observe, in their book *Education and the Struggle for Democracy*:

Any vision of education that takes democracy seriously cannot but be at odds with educational reforms which espouse the language and values of market forces and treat education as a commodity to be purchased and consumed... (I)n a democracy, individuals do not only express personal preferences; they also make public and collective choices related to the common good of their society.⁸

What is democracy?

Democracy is a multi-dimensional concept, with different forms and practices linked to each dimension. It can be procedural, which is about formal rules of government that include practices such as: election of representatives to governing bodies operating at different levels (e.g., national parliaments, local councils, school governors), the rules determining the working of these

bodies, and the various conditions associated with such democratic forms of government (e.g., an independent media, the rule of law). There is also participatory democracy, involving people directly in matters that affect their everyday lives. In this sense, democracy can also be understood as a mode of being in the world, as a form of living together. This is Dewey's idea of democracy as being more than a form of government, but rather "primarily a mode of associated living"⁹ embedded in the culture and social relationships of everyday life and "a way of life controlled by a working faith in the possibilities of human nature...[and] faith in the capacity of human beings for intelligent judgment and action if proper conditions are furnished."¹⁰ This implies maximizing opportunities for sharing, exchanging, decision-making and negotiating perspectives and opinions. It also implies that democracy is a way of relating to the self and others, an ethical, political and educational relationship that can and should pervade all aspects of everyday life.

Democracy in the early childhood field

A vision of education that takes democracy seriously is not confined to later stages of education. It can, as the Swedish preschool curriculum states, be the basis of early childhood services.¹¹ As George argues:

*Democracy and day nursery are two terms that are not immediately associated with each other. But where and when does democracy start?... The basis for a democratic everyday culture can indeed already be formed in the day nursery.*¹²

Democracy in early childhood education and care (ECEC) can operate at several levels: not just the institutional that is, in the nursery or preschool, but also at national and more local levels. Each level has responsibility for certain choices, using "choice" to mean the democratic process of collective decision-making for the common good (to reclaim it from the neo-liberal usage of "choice" as decision-making by individual consumers.)^{13,14} Democracy can be fostered and practiced at one level alone, but for greatest effect, all three should be engaged: each level should complement the operation of democracy at other levels. A democratic system also involves each level leaving space for democratic practice at other levels, with strong decentralisation from national to more local levels.¹³

At national level

The task at national level is to provide a national framework of entitlements, expectations and

values that express democratically agreed national entitlements, goals and values, including democracy as a fundamental value; to ensure the material conditions to make these a reality; and to enable other levels to implement them in a democratic way. To take some examples: a democratic framework might include an entitlement to services for children as citizens, together with a funding system that enables all children to exercise their entitlement; a clear statement that early childhood services are a public good and responsibility, not a private commodity; a framework curriculum that defines broad values and goals, including democracy as a fundamental value, but allows local interpretation; a fully integrated early childhood policy, the responsibility of one government department; and a well educated, well paid and diverse workforce for all young children.

At local levels

What does democratic practice in ECEC mean at more local levels of government? It may mean developing a “local cultural project of childhood.”¹⁵ This term captures the idea of political commitment, citizen participation and collective decision-making to enable a community to take responsibility for its children and their education (understood in the broad sense), responsibility not just for providing services but for answering critical pedagogical questions: What is our image of the child, the educator and the early childhood centre? What do we understand by knowledge and learning? What are our fundamental educational values? Several Italian communes (including, but not only, Reggio Emilia) have undertaken such collective, democratic ventures and, no doubt, there are examples in other countries. It also means actively supporting the implementation of democracy in local early childhood services.

At the level of the early childhood centre

Bringing democratic politics into the nursery – or the crèche, preschool, kindergarten, nursery school or any of the other terms we use to describe ECEC services – means citizens, both children and adults, engaging in at least five types of activity:

1. Decision-making about the purposes, the practices and the environment of the nursery, addressing Dewey’s principle that “all those who are affected by social institutions must have a share in producing and managing them.”¹⁶ This is closest to the idea of democracy as a principle of government, in which either elected representatives or all members of the group have some involvement in decision-making in specified areas. Examples might be

nurseries run as cooperatives by a staff or parent group,¹⁷ or elected boards of parents, staff and other citizens involved in pedagogical, budgetary and staffing issues.¹⁸ But apart from formal governing bodies, children and adults should also be involved in decision making about everyday or major matters (see Clark¹⁹ for an example of children's and adults' participation in the design of early childhood environments).

2. Understandings of learning. Democratic practice goes beyond seeing learning solely as reproducing pre-determined content and skills, but views children as “active constructors of their own learning and producers of original points of view concerning the world.”^{20,21} Pedagogies of “invention” or “listening,” open to unpredicted outcomes and new thought and valuing wonder and surprise, are necessarily inscribed with democratic values and practices.
3. The evaluation of early childhood work through participatory methods. Dahlberg, Moss and Pence²² contrast “quality” as a technical language of evaluation with the more democratic language of “meaning making.” The “language of quality” involves a supposedly objective observer applying externally determined norms to an institution in order to make a decontextualized assessment of conformity to these norms. By contrast, the “language of meaning making” speaks of evaluation as a formative, democratic process of interpretation, involving all stakeholders (including children), and making practice visible and thus subject to reflection, dialogue and change. Such an approach is embodied in the practice of pedagogical documentation, with its potential not only for evaluation, but also for participatory research, professional development, planning and democratic practice.^{22,23}
4. Contesting dominant discourses, what Foucault terms “regimes of truth,” which seek to shape our subjectivities and practices through their universal truth claims and their relationship with authority and power. These regimes of truth are backed by privileged groups – often the State and its expert gate-keepers – who claim a privileged position of objectivity and knowledge. Contesting these powerful discourses means striving to make core assumptions and values visible and “welcoming and affirming ‘thinking-otherwise’”.²⁴
5. It is through contesting dominant discourses that the fifth democratic political activity can emerge: opening up for change by developing a critical approach to what exists and envisioning utopias and turning them into utopian action. Giroux speaks of “critical democracy,” through which people can “produce the conditions of their own agency through dialogue, community participation, resistance and political struggle.”²⁵

Conditions for democracy

For a democratic early childhood education and care to evolve and be sustained requires attention to creating enabling conditions, for example adopting an understanding that early childhood services offer an ideal space for democratic practice. This space, so understood, offers opportunities for all citizens to participate – be they children or parents, practitioners or politicians, or indeed any other local citizen.

This idea of participation, therefore, defines the early childhood centre as a social and political place and thus as an educational place in the fullest sense. However, this is not a given, so to speak, it is not a natural, intrinsic part of being a school. It is a philosophical choice, a choice based on values.²⁶

This choice is of a particular image of the early childhood service: not as a business selling commodities on the market, not as a factory applying technologies to children to produce predetermined outcomes, but as a public forum in civic society, a place of encounter for citizens of all ages.

Other understandings are also important, for example the image of the child, parent and worker. From a democratic perspective, the child is understood as a competent citizen, an expert in her own life, having opinions that are worth listening to and having the right and competence to participate in collective decision-making. Parents are seen as competent citizens “because they have and develop their own experience, points of view, interpretation and ideas...which are the fruits of their experience as parents and citizens.”²⁶ Workers assume what Oberhuemer²⁷ has termed “democratic professionalism,” understanding their role as practitioners of democracy. While recognizing that they bring an important perspective and a relevant local knowledge to the democratic forum, they are also aware that they do not have *the* truth nor privileged access to knowledge.

Implementing democracy also needs to be supported by what has been called a ‘competent system’, which is a system of “reciprocal relationships between individuals, teams, institutions and the wider socio-political context...[that provides] support for individuals to realise their capability to develop responsible and responsive practices that respond to the needs of children and families in ever-changing societal contexts”.²⁸ An example of a potentially important component in such a system is the role of the *pedagogista* in northern Italy, an experienced

educator working with a small number of schools to help develop understanding of learning processes and pedagogical work through, for example, pedagogical documentation.^{29,30} Another example is to be found in Portugal, where a strong commitment to democracy in education at national and individual setting levels is complemented by MEM, the *Movimento da Escola Moderna* (Portuguese Modern School Movement). MEM is a pedagogical movement that “constructs contemporary responses to a school education intrinsically orientated by democratic values of direct participation, through structures of educational cooperation”.³¹ Born out of the struggle for freedom from dictatorship, inspired by Freinet’s democratic and cooperative pedagogy and today recognised by national government, the organisation supports teachers from all levels of education through national, regional and local activities that connect teachers’ pedagogical practice with opportunities for professional development through dialogue and reflection and that promote democracy.

These examples point to one other key condition: the nurturing of democratic practice in early childhood institutions needs certain material conditions. Examples include: adequate and stable public funding; a well-qualified workforce educated to be democratic professionals; and appropriate pedagogical tools, such as pedagogical documentation.^{22,23}

Conclusions

Democratic practice in ECEC means the adoption and enactment of democracy as a fundamental value. Its success is likely to be associated with certain other values being shared among the community of the early childhood institution, for example:

- A commitment to cooperation and solidarity, dialogue and listening;
- Respect for diversity, which relates to the ethics of an encounter, a relational ethics described by Dahlberg and Moss³² in their discussion of ethics in early childhood education;
- Recognition of multiple perspectives and diverse paradigms,³³ acknowledging that there is more than one answer to most questions and that there are many ways of viewing and understanding the world;
- Welcoming curiosity, uncertainty and subjectivity – and the responsibility that they require of us;
- Developing a capacity for critical thinking, which in the words of Nikolas Rose is “a matter of introducing a critical attitude towards those things that are given to our present experience

as if they were timeless, natural, unquestionable: to stand against the maxims of one's time, against the spirit of one's age, against the current of received wisdom...[it is a matter] of interrupting the fluency of the narratives that encode that experience and making them stutter."³⁴

The importance of such values for fostering democratic practice is captured in these words by the three pedagogistas from Reggio Emilia already quoted, on the subject of participation in their municipal schools:

*Participation is based on the idea that reality is not objective, that culture is a constantly evolving product of society, that individual knowledge is only partial; and that in order to construct a project, everyone's point of view is relevant in dialogue with those of others, within a framework of shared values. The idea of participation is founded on these concepts: and in our opinion, so, too, is democracy itself.*²⁶

Implications

An important implication of this discussion is the need to examine the values framework of ECEC systems, and to do so in a democratic way – as part of a democratic politics of early childhood education that recognises, in the words of Loris Malaguzzi, “[pedagogy is] always a political discourse whether we know it or not...it clearly means working with political choices”.³⁵ It is insufficient to be content with identifying “what works”; it is also necessary to examine constantly the purposes of education; not only focus on the literacy and science skills necessary for the development of our economies, but also the fundamental values and attitudes that our children will need to sustain open, democratic and sustainable societies and to help address the converging crises – environmental, political, social and economic - of our times. This means starting from political practice, asking political questions (such as what is your image of the child, the parent, the early childhood institution? What are the fundamental values of education?) and making political choices, before moving on to technical questions: in other words putting ends before means.

References

1. Fielding M, Moss P. *Radical education and the common school: A democratic alternative*. London, UK: Routledge; 2010.
2. Giroux HA. *Schooling for democracy: Critical pedagogy in the modern age*. London, UK: Routledge; 1989.
3. Biesta G. *Learning democracy in school and society: Education, lifelong learning, and the politics of citizenship*. Springer; 2011.

4. Apple M. *The struggle for democracy in education*. Abingdon, Oxon: Routledge; 2018.
5. Einarsdottir J, Puroola A.-M, Johansson E M, Broström S, Emilson A. Democracy, caring and competence: values perspectives in ECEC curricula in the Nordic countries. *International Journal of Early Years Education* 2015;23(1):97-114. doi:10.1080/09669760.2014.970521
6. Sousa D, Oxley, L. Democracy and early childhood: diverse representations of democratic education in post-dictatorship Portugal. *Educational Review* 2021;73(1):17-33. doi:10.1080/00131911.2018.1556609
7. Roberts-Holmes G, Moss P. *Neoliberalism and early childhood education: Markets, Imaginaries and Governance*. Abingdon, UK: Routledge; 2021.
8. Carr W, Hartnett A. *Education and the struggle for democracy*. Buckingham, UK: Open University Press; 1996.
9. Dewey J. Democracy and Education. In: Boysdston JA, ed. *John Dewey : The Middle Works, 1899–1924, Vol 9: 1916*. Carbondale and Edwardsville, IL: Southern Illinois University Press; 1985.
10. Dewey J. *Creative Democracy – the Task before us*. In: *John Dewey and the Promise of America*. Columbus: American Educational Press, 1939. Progressive Education Association Booklet Number 14, Proceedings of the 1939 National John Dewey Conference of the Progressive Education Association.
11. Skolverket. *Curriculum for the Preschool (Lpfö 18)*. Stockholm, Sweden: Skolverket; 2018. Available at <https://www.skolverket.se/download/18.6bfaca41169863e6a65d897/1553968298535/pdf4049.pdf> 2019. Accessed September 15, 2021.
12. George S. *Too young for respect? Realising respect for young children in their everyday environments*. The Hague, the Netherland: Bernard van Leer Foundation; 2009.
13. Power Inquiry. *The report of power: an independent inquiry into Britain's democracy*. London, UK: The Power Inquiry; 2006.
14. Bentley T. *Everyday democracy: Why we get the politicians we deserve*. London, UK: Demos; 2005.
15. Fortunati A. *The education of young children as a community project: The experience of San Miniato*. Azzano San Paolo, Italy: Edizioni Junior; 2006.
16. Dewey J. Democracy and educational administration. *School and Society* 1937;45:457-468.
17. Broadhead P, Meleady C, Delgado MA. *Children, families and communities: Creating and sustaining integrated services*. Maidenhead, UK: Open University Press; 2008.
18. Hansen NC. Developing parent power. *Children in Europe* 2002;3:14-16.
19. Clark A. *Transforming children's spaces: Children's and adults' participation in designing learning environments*. London, UK: Routledge; 2010.
20. Taylor C. *Philosophical arguments*. Cambridge MA: Harvard University Press; 1995:1-19.
21. Biesta G, Osberg D. Beyond re/presentation: A case for updating the epistemology of schooling. *Interchange* 2007;38(1):15-29.
22. Dahlberg G, Moss P, Pence A. *Beyond quality in early childhood education and care: Languages of evaluation. 3rd edition*. Abingdon, UK: Routledge; 2013.
23. Rinaldi C. *In dialogue with Reggio Emilia: Listening, researching and learning*. Abingdon, UK: Routledge; 2006.
24. Taguchi HL. Deconstructing and transgressing the theory-practice dichotomy in early childhood education. *Educational Philosophy and Theory* 2007;39(3):275-290.
25. Giroux H. Youth, higher education, and the crisis of public time: educated hope and the possibility of a democratic future. *Social Identities* 2003;9(2):141-163.
26. Cagliari P, Barozzi A, Giudici C. Thoughts, theories and experiences: for an educational project with participation. *Children*

in Europe 2004;6:28-30.

27. Oberhuemer P. Conceptualising the early childhood pedagogue: policy approaches and issues of professionalism. *European Early Childhood Education Research Journal* 2005;13(1):5-16.
28. Urban M, Vandenbroeck M, Lazzari A., Van Lare K, Peeters J. *Competence Requirements in Early Childhood Education and Care: Final report*. London, UK and Ghent, Belgium: University of East London and University of Ghent; 2011.
<https://files.eric.ed.gov/fulltext/ED534599.pdf>. Accessed September 15, 2021.
29. Galardini A. Pedagogistas in Italy. *Children in Europe* 2008;15:18.
30. Moss P. *Transformative change and real utopias in early childhood education: A story of democracy, experimentation and potentiality*. Abingdon, UK: Routledge; 2014.
31. Sousa D. Towards a democratic ECEC system. In: Cameron C, Moss P, eds. *Transforming Early Childhood in England: Towards a democratic education system*. London, UK: UCL Press.
<https://discovery.ucl.ac.uk/id/eprint/10105144/1/Transforming-Early-Education-in-England.pdf>. Accessed September 15, 2021.
32. Dahlberg G, Moss P. *Ethics and politics in early childhood education*. London, UK: Routledge; 2005.
33. Moss P. *Alternative narratives in early childhood: An introduction for students and practitioners*. London, UK: Routledge; 2019.
34. Rose N. *Powers of freedom: Reframing political thought*. Cambridge, UK: Cambridge University Press; 1999.
35. Cagliari P, Castegnetti M, Giudici C, Rinaldi C, Vecchi V, Moss P, eds. *Loris Malaguzzi and the Schools of Reggio Emilia: A selection of his writings and speeches 1945-1993*. Abingdon, UK: Routledge; 2016.

Early Day Care and Infant-Mother Attachment Security

Jay Belsky, PhD

Robert M. And Natalie Reid Dorn Endowed Chair Professor, Human Development & Family Studies, University of California, Davis, USA

May 2020, Éd. rév.

Introduction

Whether and how non-maternal child-care experience affects children's development have been of long-standing interest to parents, policymakers and developmental scholars. Ever since Bowlby¹ promulgated attachment theory, thinking derived from it has led some to expect day care, especially when initiated in the earliest years of life, to undermine the security of infant-parent attachment relationships. To some, this was because day care involved the infant's separation from mother (or other principle caregiver), as separation from the attachment figure was inherently stressful. Separation could also undermine the mother's own capacity to provide sensitive care, the primary determinant of security, thereby fostering insecurity indirectly (i.e., separation-insensitivity-insecurity). A final reason for anticipating a link between day care and attachment security was because security reflected general emotional well-being, so adverse effects of day care in infancy would manifest themselves as insecure attachment.

Background

Early research on the link between day care and attachment, often carried out on children 3-5 years of age, provided no compelling evidence to support the claim that day care undermined security.² But by the mid-1980s, studies carried out on much younger children began to chronicle links between day care and insecurity as measured in the Strange Situation Procedure (SSP) (e.g., Barglow, Vaughn & Molitor³). This led Belsky^{4,5,6} to conclude that infant day care, especially that initiated on a full- or near full-time basis beginning in the first year of life,⁷ was a "risk factor" in the development of insecure attachment in infancy (and of aggression and disobedience in 3-8 year olds).

This conclusion did not go unchallenged. One criticism was that the apparent influence of early and extensive day care on insecurity was the result of other explanatory factors (e.g., family

income) not adequately accounted for in existing research.⁸ Another was that (unmeasured) poor quality care and not timing and quantity of care was the influential factor.⁹ And a third was that independent behavior displayed by day care children not particularly stressed by the SSP– due to their familiarity with separation– was misconstrued as avoidant behavior, leading to erroneous assessments of children as insecure-avoidant.¹⁰

Research Questions

All agreed, however, that more research was needed to illuminate the conditions under which early day care did and did not undermine– or enhance– attachment security. Considered especially important was (a) taking into account confounding child, parent and family background factors that could be responsible for any putative child care effects; (a) distinguishing and disentangling potential effects of distinctive features of the child-care experience, particularly quality, quantity and type of care (e.g., center-based vs. home-based); and (b) determining whether day care was associated with less separation distress in the SSP or independent behavior was mischaracterized as avoidant behavior.

Recent Research

The NICHD Study of Early Child Care and Youth Development (SECCYD), launched in 1991 in the US, sought to address these issues and many others.¹¹ It followed more than 1300 children from birth through the primary-school years¹² and into adolescence,¹³ while administering SSP assessments at 15 and 36 months.

After taking into account a host of potentially confounding background factors, results proved strikingly consistent with the risk-factor conclusion¹⁴– even though the opposite is implied by many writers.^{15,16} Typically emphasized is that no single feature of the day care experience *in and of itself*– quantity, type or quality of care – predicted attachment security, *seeming* to suggest no effect of day care on attachment security. Yet what the findings actually revealed was a “dual-risk” phenomenon.¹⁷ Although the strongest predictor of insecurity at 15 months of age was, as expected, insensitive mothering (observed at ages 6 and 15 months), this effect was *amplified* if any one of three distinct child-care conditions characterized the child’s experience across the first 15 months of life: (a) averaging more than 10 hours per week in any type of care, irrespective of quality; (b) enrolment in more than a single child-care arrangement; and (c) exposure to low quality care. The first two amplifying conditions applied to most children being studied. But only

the first, quantity of care, also contributed to the prediction of attachment insecurity at 36 months,¹⁸ again in interaction with insensitive mothering. Just as important was evidence that infants with extensive day care experience (a) were not less stressed in the SSP than other infants (see also¹⁹) and that (b) putatively independent behaviour was not misconstrued as avoidant behaviour.¹⁴

Notably and more recently, Hazen and associates re-examined the issue of quantity of care using NICHD SECCYD data, this time focusing on disorganized attachment in particular.²⁰ Results revealed that after the age of 6 months as care hours increased from 40 to 60 hours per week, risk of disorganized attachment increased; and after 60 hours per week it increased exponentially. These results emerged with statistical controls for quality of care, family income and infant temperament. Importantly, similar results emerged in a separate and smaller study carried out in Austin, TX (n = 125).

Two other reasonably large-sample studies yield results that are at odds with those of the US study. In one investigation of more than 700 Israeli infants, Sagi and associates²¹ found that “center-care, in and of itself, adversely increased the likelihood of infants developing insecure attachment to their mothers as compared with infants who were either in maternal care, individual nonparental care with a relative, individual nonparental care with a paid caregiver, or family day-care.” Additional results suggested it was “the poor quality of center-care and the high infant-caregiver ratio that accounted for this increased level of attachment insecurity among center-care infants” (see also¹⁶). In a second study of 145 first-born Australian infants, Harrison and Unger²² focused on maternal employment more than features of day care. Return to employment before five months postpartum— and thus earlier use of child care— predicted decreased rates of insecurity at 12 months of age relative to returning to work later in the first year or not at all. The Australian mothers were more likely than their American and Israeli counterparts to be employed part-time rather than full-time.

Perhaps the most recent work addressing what seems to have become a less pressing question in developmental science—effects of day care on attachment—is that of Carcamo, Vermeer, van der Veer and van IJzendoorn which was carried out in Chile. This research involved a small sample of 95 poor Mapuche children younger than 12 months of age, 36 of whom entered day care on a full-time basis following first measurement at age 6 months. A second measurement at age 15 months afforded assessment of change in attachment, using The Attachment During Stress Scale; this observational measure had been found to correlate reasonably well with Strange Situation

classifications.²³ Evidence revealed, consistent with expectations, that being in day care was associated with increased attachment security over time.

Research Gaps

It remains unclear why results from different locales produce variable findings. It could well involve the broader, national child care systems in which day care is embedded. More cross-national research seems called for.

Characteristics of children themselves, perhaps especially their genetic make up, also merits further consideration. After all, ever more evidence indicates that children vary substantially in their susceptibility to environmental influences,^{24,25,26} including day care²⁷ with some proving more developmentally malleable than others.

Conclusions

After decades of debate and study, findings from the largest studies of day care and attachment compellingly discredit any claim that “no relation exists between day care and attachment.” Also disconfirmed are assertions that the SSP is methodologically unsuited for evaluating effects of day care or that, at least in the US, adverse effects of day care are simply a function of poor quality care. Nevertheless, the fact that results of three large-scale studies carried out in different locales vary substantially should make it clear that there are probably no inevitable effects of day care on attachment. Effects appear contingent on the societal context in which day care is experienced.

Implications

The fact that detected effects of day care on attachment security vary substantially by national context means that it is precarious to draw strong inferences from attachment theory as to what the effect of day care will be. Ultimately, day care is a multi-dimensional phenomenon, so questions such as “is day care good for infants (or young children)?” are too simplistic. Quality, type, timing and quantity of care must be distinguished and effects of these features of the child care may vary as a function of the larger familial, community, societal and cultural context in which child care occurs. Not to be forgotten in any evaluation of the effects of day care are humanitarian considerations: What, not only, do mothers, fathers, policymakers and society more generally want, but what do children want?

References

1. Bowlby J. *Attachment and Loss*. New York, NY: Basic Books; 1969. Attachment. Vol 1.
2. Belsky J, Steinberg L. The effects of day care: A critical review. *Child Development* 1978;49(4):929-949.
3. Barglow P, Vaughn B, Molitor N. Effects of maternal absence due to employment on the quality of infant-mother attachment in a low risk sample. *Child Development* 1987;58(4):945-954.
4. Belsky J. Infant day care: A cause for concern? *Zero to Three* 1986;6(4):1-7.
5. Belsky J. The "effects" of infant day care reconsidered. *Early Childhood Research Quarterly* 1988;3(3):235-272.
6. Belsky J. Emanuel Miller Lecture: Developmental risks (still) associated with early child care. *Journal of Child Psychology and Psychiatry* 2001;42(7):845-859.
7. Belsky J, Rovine M. Nonmaternal care in the first year of life and the security of infant-parent attachment. *Child Development* 1988;59(1):157-167.
8. Scarr S, Phillips D, McCartney K. Facts, fantasies, and the future of child care in the United States. *Psychological Science* 1990;1(1):26-35.
9. Phillips D, McCartney K, Scarr S, Howes C. Selective review of infant day care research: A cause for concern. *Zero to Three* 1987;7:18-21.
10. Clarke-Stewart KA. Infant day care: Maligned or malignant? *American Psychologist* 1989;44(2):266-273.
11. NICHD Early Child Care Research Network, ed. *Child Care and Child Development: Results of the NICHD Study of Early Child Care and Youth Development*. New York, NY: Guilford Press; 2005.
12. Belsky J, Vandell D, Burchinal M, Clarke-Stewart KA, McCartney K, Owen MT and The NICHD Early Child Care Research Network. Are There Long-term Effects of Early Child Care? *Child Development* 2007;78(2):681-701.
13. Vandell DL, Belsky J, Burchinal M, Steinberg L, Vandergrift N, the NICHD Early Child Care Research Network. Do Effects of Early Child Care Extend to Age 15 Years? *Child Development*. In press.
14. NICHD Early Child Care Research Network The effects of infant child care on infant-mother attachment security: Results of the NICHD Study of Early Child Care. *Child Development* 1997;68(5):860-879.
15. Allhusen VD, Clarke-Stewart KA, Miner JL. Childcare in the United States: Characteristics and consequences. In: Melhuish E, Petrogiannis K, eds. *Early Childhood Care and Education: International Perspectives*. London, UK: Routledge; 2008:7-26.
16. Love M, Harrison L, Sagi-Schwartz A, van Ijzendoorn MH, Ross C, Ungerer JA, Raikes H, Brady-Smith C, Boller K, Brooks-Gun JC, Jill K, Ellen E, Paulsell D, Chazen-Cohen R. Child Care Quality Matters: How Conclusions May Vary with Context. *Child Development* 2003;74(4):1021-1033 [JL1] .
17. NICHD Early Child Care Research Network The effects of infant child care on infant-mother attachment security: Results of the NICHD Study of Early Child Care. *Child Development* 1997;68(5):876.
18. 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.
19. Belsky J, Braungart J. Are insecure-avoidant infants with extensive day-care experience less stressed by and more independent in the strange situation? *Child Development* 1991;62(3):567-571.
20. Hazen NL, Allen SD, Christopher CH, Umenmura T, Jacobvitz DB. Very extensive nonmaternal care predicts mother-infant attachment disorganization: Convergent evidence from two samples. *Development and Psychopathology* 2015;27(3):649-661.
21. Sagi A, Koren-Karie N, Gini M, Ziv Y, Joels T. (2002). Shedding further light on the effects of various types and quality of early child care on infant-mother attachment relationship: The Haifa Study of Early Child Care. *Child Development*

2002;73(4):1166.

22. Harrison LJ, Ungerer JA. Maternal employment and infant-mother attachment security at 12 months postpartum. *Developmental Psychology* 2002;38(5):758-773.
23. Cárcamo RA, Van IJzendoorn MH, Vermeer HJ, Van Der Veer R. The validity of the Massie-Campbell Attachment During Stress Scale (ADS). *Journal of Child and Family Studies* 2014;23(5):767-775. doi:10.1007/s10826-013-9728-z
24. Belsky J, Bakermans-Kranenburg M, van IJzendoorn M. For Better and for worse: Differential susceptibility to environmental influences. *Current Directions in Psychological Science* 2007;16(6):305-309.
25. Belsky J, Pluess M. Beyond risk, resilience and dysregulation: Phenotypic plasticity and human development. *Development and Psychopathology* 2013;25(4 Pt 2):1243-1261.
26. Belsky J, Van IJzendoorn MH. Genetic differential susceptibility to the effects of parenting. *Current Opinion in Psychology* 2017;15:125-130.
27. Pluess M, Belsky J. Differential susceptibility to rearing experience: the case of childcare. *Journal of Child Psychology and Psychiatry* 2009;50(4):396-404.

Origins of Attachment Security in Day Care and at Home: Comments on Belsky

Ross A. Thompson, PhD

University of California, Davis, USA

February 2021, Éd. rév.

Introduction

Child care experience affords developmental opportunities as well as risks for young children. An expanding research literature indicates that child care is associated with stronger cognitive, language and math skills when children are in school, especially if the quality of child care is high. The same research also indicates, however, that child care experience may be a risk factor for problematic social behaviour with adults and peers. Equally important, these studies have highlighted the influences that can moderate these outcomes, including the quality of care, setting, age of onset and duration of care, the child's relationships with care providers, and even the child care histories of peers.^{1,2,3,4} Beginning with a straightforward question- "what are the effects of child care experience on children's development?"- researchers have moved to more complex questions concerning the contexts of care and other influences on these developmental outcomes. As Belsky's⁵ analysis shows, the same is true concerning the effects of early child care experience on infant-mother attachment security.

Research and Conclusions

What is the most important influence in determining whether infants and young children develop secure attachments to their mothers? Whether children are in child care or not, the research consistently shows that the sensitivity of maternal care is most important.⁶ In the child care literature, this is a significant confirmation of a core hypothesis of attachment theory. Regardless of whether infants and young children are in care of high or low quality, or have begun care from an early age, have experienced many or few transitions in care arrangements, or are out of the home for extended hours, the security of infant-mother attachment is primarily guided by the sensitivity of maternal care.

When mothers are sensitively responsive, their children are more likely to develop secure attachments. When mothers are insensitive, children are more likely to become insecure, and this

is when (as Belsky notes⁵) stress from child care arrangements can shift the odds further in the direction of insecurity. When the mother-infant relationship is compromised, children are more likely to become insecure if child care arrangements are poor quality, of long duration, or involve multiple transitions between settings. But these child care processes are not very influential in the context of sensitive maternal care.

Maternal sensitivity and the quality of child care experience are not independent, of course. Mothers are less likely to be sensitive caregivers when they are stressed, and economic and social stressors for the family are often associated with poor quality child care involving turnover in child care providers and long hours out of home. Indeed, the NICHD Study of Early Child Care and Youth Development (SECCYD)⁷ found that poorer child care quality and longer child care hours were associated with lower maternal sensitivity. Other results from the NICHD SECCYD⁸ suggest, furthermore, that high quality child care can buffer the effects of maternal insensitivity. Young children in high quality care settings experience support that they may not find elsewhere, and this might be developmentally most important when infants and young children experience maternal insensitivity and family stress. Unfortunately, in light of the generally poor quality of care in the U.S. and the strong association between the quality of care and its cost, it is difficult for families who need the best care for their children to find it at a manageable price.⁹ This is where broader public policy that enhances investments in early childhood development can enable such families to find the quality of care they seek at a cost they can afford.

In general, the effects of child care on children's attachment security are not strong.¹⁰ Compared especially with the effects of maternal care, child care experience does not account for considerable variance in infant-mother attachment. This does not mean that child care is an unimportant influence, especially when its developmental effects are considered in population terms. Rather, it suggests that the influence of child care should be considered not only in a direct, main-effects model, but also in terms of its moderated (sometimes mediated) effects and how child care experience may itself moderate other developmental influences. As noted earlier, for example, the association between child care and child-parent attachment may be affected by the sensitivity of maternal care, the quality of child care, the presence of other stressors in family life, and other influences. In addition, as Belsky notes, this association may be further influenced by broader sociocultural values concerning out-of-home care for very young children, the participation of women in the workforce, the normativity of dual-career families, and the extent to which early child care is perceived as custodial or development-enhancing. In addition, there is

evidence in the findings of the NICHD SECCYD¹¹ that child care had a moderating effect on the association between maternal sensitivity and the security of attachment: children in lower-quality child care were more strongly affected by the quality of maternal responsiveness than were children in higher-quality care settings. This is consistent with the view that high quality child care can buffer the effects of maternal insensitivity on the security of attachment. These more complex developmental portrayals deserve more consideration in research on the effects of child care experience on child-parent attachment.¹²

Contributing further complexity to the understanding of the effects of child care experience is that young children also develop attachments to their child care providers, with the security of these attachments based on the care provider's sensitivity, and the security of these relationships predicting some of the same developmental outcomes associated with child-mother attachment.¹³ This is important because there is increasing evidence that child care settings are stressful for children, especially younger children,¹⁴ a concern that has historically been voiced by pioneers of the growth of child care for infants and toddlers in the United States and Europe.¹⁵ In this context, secure relationships with care providers in the setting, as well as with the mother, may help to buffer stress and contribute to the positive outcomes that are also associated with child care experience.¹⁶

Finally, it is important to recognize that the security of infant-mother attachment is a multi-determined developmental outcome. One of the reasons that child care experience explains so little variance in the security of attachment is not only that maternal sensitivity is the preeminent determinant but also that, independently of maternal sensitivity, other influences are also important. One study with families in poverty¹⁷ reported, for example, that the effects of economic stresses (such as joblessness or poor education) on the security of attachment were mediated by maternal sensitivity, consistent with the view that family stress heightens insensitive caregiving which, in turn, undermines attachment security. However, emotional stresses (such as domestic violence or substance abuse problems in the family) were another kind of stressful experience directly associated with attachment independently of maternal sensitivity. Controlling for differences in maternal sensitivity, a family climate with high levels of emotional stress was associated with the child's insecurity. Understanding the effects of child care must be considered in the context of the multiple, overlapping, sometimes cascading developmental influences contributing to the development of attachment relationships.

Implications for Development and Policy

In light of these considerations, it is apparent that child care experience is associated with the security of attachment, but its association is most often indirect and small. The influence of child care must be understood in the context of many other developmental influences, family processes, and broader cultural values concerning out of home care. As Belsky⁵ concludes, there are probably no inevitable effects of day care on attachment.

But when child care experience is viewed within the broader context of the influences that lead to secure or insecure infant-mother attachment, there are nevertheless important implications for policy. If high quality child care can potentially buffer the effects on infants and young children of insensitive caregiving and family stresses, then efforts to improve the quality of care normatively available to children, especially from difficult family settings, seem warranted. This is especially so in light of the well-established conclusion from this research literature that high quality child care also strengthens cognitive, language, and math skills in young children. The availability of affordable high quality child care is also the best, and most obvious, answer to the question with which Belsky⁵ closes: what would children want? Fortunately, with widespread recognition of the importance of early childhood development for later school achievement (fostered by advances in developmental neuroscience and studies of the long-term benefits of high quality early child care), public discourse concerning child care quality is increasingly regarding child care as an important developmental influence warranting public investment.

With respect to developmental research, findings from many large-scale research studies of child care influences are highlighting the complex, multidimensional influences that guide socioemotional and cognitive development in the early years. Understanding child care experience as a network of developmental influences that can buffer or exacerbate other influences in a young child's life is a useful orienting approach to the next generation of research in this field.

References

1. NICHD Early Child Care Research Network. *Child care and child development: Results of the NICHD Study of early child care and youth development*. New York, NY: Guilford Press; 2005.
2. Vandell DL, Belsky J, Burchinal M, Steinberg L, Vandergrift N, the NICHD Early Child Care Research Network. Do effects of early child care extend to age 15 years? *Child Development* 2010;81(3):737-756.
3. Love M, Harrison L, Sagi-Schwartz A, van IJzendoorn MH, Ross C, Ungerer JA, Raikes H, Brady-Smith C, Boller K, Brooks-Gunn JC, Constantine J, Kisker EE, Paulsell D, Chazen-Cohen R. Child care quality matters: How conclusions may vary with context. *Child Development* 2003;74(4):1021-1033.
4. Dmitrieva J, Steinberg L, Belsky J. Child-Care History, Classroom composition, and children's functioning in kindergarten. *Psychological Science* 2007;18(12):1032-1039.

5. Belsky J. Early day care and infant-mother attachment security. In: Tremblay RE, Barr RG, Peters RDeV, Boivin M, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2009:1-6. Available at: <http://www.child-encyclopedia.com/documents/BelskyANGxp-Attachment.pdf>. Accessed July 29, 2010.
6. Fearon RMP, Belsky J. Precursors of attachment security. In: Cassidy J, Shaver, PR, eds. *Handbook of Attachment: Theory, research, and clinical applications*. 3rd Ed. New York, NY: Guilford Press; 2016:291-313.
7. NICHD Early Child Care Research Network. Child care and mother-child interaction in the first 3 years of life. *Developmental Psychology* 1999;35(6):1399-1413.
8. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security: Results of the NICHD Study of Early Child Care. *Child Development* 1997;68(5):860-879.
9. Hayes CD, Palmer JL, Zaslow MJ, eds. *Who cares for America's children? Child care policy for the 1990s*. Washington, DC: National Academy Press, 1990.
10. Friedman SL, Boyle DE. Attachment in US children experiencing nonmaternal care in the early 1990s. *Attachment & Human Development* 2008;10(3):225-261.
11. NICHD Early Child Care Research Network. The effects of infant child care on infant-mother attachment security: Results of the NICHD Study of Early Child Care. *Child Development* 1997;68(5):860-879.
12. Thompson RA. Measure twice, cut once: Attachment theory and the NICHD Study of Early Child Care and Youth Development. *Attachment & Human Development* 2008;10(3):287-297.
13. Ahnert L. Attachment to child care providers. In: Thompson RA, Simpson JA, Berlin LJ, eds. *Attachment: The fundamental questions*. New York: Guilford. In press.
14. Vermeer HJ, van IJzendoorn MH. Children's elevated cortisol levels at daycare: A review and meta-analysis. *Early Childhood Research Quarterly* 2006;21(3):390-401.
15. Singer E Wong S. Emotional security and daycare for babies and toddlers in social-political contexts: Reflections of early years pioneers since the 1970s [published online May 29, 2019]. *Early Child Development and Care*. doi:10.1080/03004430.2019.1622539
16. Badanes LS, Dmitreva J, Watamura SE. Understanding cortisol reactivity across the day at child care: The potential buffering role of secure attachments to caregivers. *Early Childhood Research Quarterly* 2012;27(1):156-165.
17. Raikes HA, Thompson RA. Links between risk and attachment security: Models of influence. *Applied Developmental Psychology* 2005;26(4):440-445.