



Australian Association for  
Infant Mental Health Inc.

## Child care

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### Background paper

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Research examining the effects of day care on infants and children over the last thirty years or so appears to have occurred in several phases. Initially researchers focused on widespread concerns about the adverse effects of day care on children's development but as rates of maternal employment increased<sup>1</sup> and more children were placed into non-maternal day care, the focus shifted towards examining the variations in the effects of care depending on different factors such as the child's temperament, family characteristics and service characteristics. Recent research into the effects of care on child development has focused on the mediating role of quality of care which can either impede or enhance child adaptation, adjustment and development.

#### Facts and figures

Patterns of formal and informal care use by families with young children in Australia vary by age (Australian Bureau of Statistics, 2011). Under the age of two years, 22 per cent of children usually attended formal care, while 36 per cent usually attended informal care. The highest level of overall care attendance was among two- and three-year-olds, of whom 54 per cent usually attended formal care and 40 per cent informal care.

Of children in couple families in which both parents were employed, 63 per cent (1.1 million) usually attended child care. Where one parent in couple families was employed, 31 per cent of children (329,000) attended care and where neither parent was employed, 25 per cent (43,800) attended care. In one-parent families where the parent was employed, 82 per cent of children (275,000) usually attended child care, compared with 49 per cent (164,800) of those whose parent was not employed.

When considering all types of additional formal care needs, the most common reason parents currently required the care was for work related purposes (104,700 children). In the majority of cases (68% or 100,500 children) one or two additional days a week of care was required. For most parents the quality and reputation of the centre was the most important reason for choosing a particular centre (55.9% for couple families and 49.3% for one-parent families) followed by its location to their home (Australian Bureau of Statistics, 2006).

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<sup>1</sup> In the majority of research studies "childcare" is divided into 'non-maternal' and 'maternal' care. Any care a child receives that is not given by his or her mother is referred to as 'non-maternal care'. The difficulty with this is that from a methodological point of view, care given by a child's father is grouped in the same category (non-maternal) as care given by childcare centres or professional, paid care-givers. Clearly, it would be better to recognize the role of the father and classify care as either 'non-parental' or 'parental' care. To maintain consistency in this document, when referring to research that maintains the 'non-maternal'/'maternal' definitions of care the same terminology will be employed.

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## Child care for children aged birth to three years old

This paper will briefly discuss several major issues concerning the use of childcare for very young children (those aged birth to three years old) and will highlight AAIMHI's position on those issues. These are:

- Attachment and childcare
- Disrupted attachment and attachment-based day care
- The issue of quality in care
- Culturally and Linguistically Diverse (CaLD) issues
- The controversial nature of the research
- The lack of longitudinal Australian research studies.

## Attachment and child care

According to attachment theory infants create mental representations of people and relationships based on the early security of the parent-child relationship and these mental representations influence later functioning (Bowlby, 1973). These representations are thought to act like interpretive filters on social perception, expectations and memory and cause young children to approach new social partners in a biased way based on the security of their attachment (Bretherton & Munholland, 2008). This theory has been generally supported by an enormous amount of literature examining the association between early measures of attachment security and the quality of later relationships, behaviour regulation and personality (Raikes & Thompson, 2008). However, the interpretation of the findings have been debated in at least two major ways: are these outcomes attributable to the security of early relationships or rather to the continuity of parental practices that led to a secure or insecure attachment in the first place, and secondly, are relational influences more important early in life or later? Today, nearly all attachment researchers agree that outcomes are a function of both developmental history and current experience (for example Sroufe, Egeland, Carlson & Collins, 2005; Thompson, 2006).

Over the last three decades another aspect of child care research has been to examine the influence of early non-maternal child care on children's development with a particular emphasis on the child-mother attachment relationship (for example Ahnert, Pinquart & Lamb, 2006; Belsky, 1986;1988; Lamb & Ahnert, 2006). The debate has focused on specific characteristics of non-maternal care such as quantity and quality of care and their effects on the mother-child attachment relationship. Much of the literature examining this issue has used data from the NICHD<sup>2</sup> Study undertaken in the USA and while that database is rich and extensive and boasts a longitudinal prospective design caution must be taken before adopting its conclusions as a universal benchmark.

Trying to determine the impact of early attachment experiences on later development is complex and challenging from a research perspective because of the interplay between developmental change across time and openness to environmental influences (Aviezer & Sagi-Schwartz, 2008). Based on the literature one can be reasonably certain that there are few, if any, direct effects of day care on attachment security (Rutter, 2002) but what long-term negative effects changing patterns of care and hours spent in non-maternal have on a child under the age of one year is not clear.

Research examining children's attachment behaviour in day care settings has suggested that professional care-givers may be alternative attachment figures for children when their parents are temporarily unavailable (Howes, 1999, p.677: Howes and Spieker, 2008). Evidence suggests that when children enter into day care they direct attachment behaviours towards their care-givers (Barnas & Cummings, 1994; Cassibba, Van IJaendoorn & D'Odorico, 2000; Elicker, Fortner- Wood & Noppe, 1999; Howes & Hamilton, 1992; Howes & Smith, 1995) and that these relationships may be of a different quality to the attachment relationship they

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<sup>2</sup> The National Institute of Child Health and Human Development (NICHD), part of the National Institutes of Health (NIH) within the U.S. Department of Health and Human Services, began a study in 1991 to collect information about different non-maternal child care arrangements, and about children and families who use child care as well as those who do not. Over 1000 children at 10 locations throughout the US were studied throughout infancy and childhood. For further information see <http://www.nichd.nih.gov/research/supported/seccyd/overview.cfm> and various other publications listed in the reference list accompanying this document.

have with their own parents (Ahnert, Pinquart & Lamb, 2006). While the association between higher parental sensitivity and secure attachment has been demonstrated in many correlational as well as experimental studies, the number of studies examining the association between sensitivity and attachment within in day care settings is limited. The few studies that have examined this association in a day care setting indicate that higher care-giver sensitivity is also associated with increased attachment security (Ahert et al, 2006; Van IJzendoorn, Vereijken, Bakermans-Kranenburg & Riksen-Walraven, 2004).

In a day care setting, several studies have demonstrated that it is not the quality but rather the *frequency* of positive care-giving that was related to more secure attachment relationships (Elicker et al, 1999; Howes & Hamilton, 1992; Howe & Smith, 1995). This finding is important in the context of staff-child ratios and the amount of time a care-giver has available to dedicate to each child.

Other research has examined the association between the quality and frequency of care-giver sensitivity, the role of a child's temperament and their attachment relationships with their care-givers in a day care setting (De Schipper, Tavecchio & Van IJzendoorn, 2008). The findings again indicated that the frequency of positive care-giving and the child's attachment relationship with the professional care-giver was significant – higher frequencies of positive care-giving were associated with more security in the child-caregiver attachment relationship. Frequent positive interactions may therefore be particularly important if children are to gain confidence in the care-giver's ability to provide a safe haven and secure base. However, the researchers failed to find an association between children's temperament and their attachment security in a day care setting but it should be noted this was only one study and further research into this association is needed.

There is a growing body of research that suggests reflective functioning and the capacity of the parent/care-giver to reflect on relationships are important factors in the development of secure attachment and to the later mental health of the child (see Slade, 2005).

Sex differences in attachment security were found in day care settings (a finding that contrasts with research into child-parent attachment relationships) with girls showing more secure attachment to their care-givers than boys (De Schipper et al, 2008; Ahnert et al, 2006). Studies have also reported that boys up to three years of age tend to demonstrate more problem behaviour in a day care setting than girls (Crowther, Bond, & Rolf, 1981; De Schipper et al, 2004; Luk, Leung, Bacon-Shone, & Lieh-Mak, 1991) whereas usually at this age few differences in problem behaviours are found between boys and girls (Campbell, 1995; Keenan & Shaw, 1997; NICHD Early Child Care Research Network, 1997).

To summarise:

- Sensitive and responsive mothering moderates the effects of child care on attachment security.
- High quality care with a sensitive care-giver can moderate the effect of low maternal sensitivity on attachment security but no amount of time in child care can compensate for a mother's lack of sensitivity.
- Knowledge about children's attachment to non-maternal care-givers is limited but there is some evidence to suggest children may benefit from the availability of alternative attachment figures such as professional care-givers.

### **Disrupted attachment relationships and attachment-based child care**

According to Bowlby (2007), in order for a baby to develop and maintain a secondary attachment bond with a carer, it is necessary that the carer provides continuity of personalised care for several years and is willing to make an emotional commitment to the baby. He further goes on to state that regular swapping of carers can be a risk factor for babies and toddlers and if they do form attachments to professional carers that are regularly disrupted, the pain of repeated separation or loss can make the child reluctant to form a new secondary attachment bond to another carer. Bowlby (2007) provides a model for attachment-based day care and suggests it can play a crucial role in helping "balance work and family life without putting children's emotional development and mental health at risk" (p.316). However, the recommendations made in the attached-based day care model are not always practical. For example, Bowlby (2007) suggests that babies are not accepted into child care until they are 9 months old and that children less than 18 months old only attend child care on a part-time basis. For some parents these conditions are not possible. The difficulty lies in applying attachment concepts to complicated issues of policy and practice (see Barrett, 2006).

Some child care services in Australia tend not to encourage children to develop attachment bonds to any particular care-giver and try to rotate and encourage children to develop relationships with a variety of carers. The motive for this is to prevent children becoming unduly distressed when their primary carer is away or is no longer employed at the centre. Rutter (2002, p.960) suggests that “the problem has not been ignorance of attachment theory so much as a societal unwillingness to make the necessary investment in childcare”.

### **Issue of quality**

Most of the research examining the impact of child care on children’s development has found that high quality care is generally associated with more desirable outcomes for children compared to low quality care. Although some studies have failed to find evidence of their expected outcomes, significant associations in the opposite direction are almost never reported (i.e. that high quality care leads to undesirable outcomes for children).

Cross-national research has examined the association between quality of non-maternal care and attachment to the care-giver. Researchers in Israel (Sagi et al, 1995) examined infants living in a kibbutz who were cared for by non-related care-givers for 50 hours or more per week and the results were consistent with the NICHD data that showed quality of care-giving was the strongest predictor of attachment to the care-giver (Friedman & Boyle, 2008). This is consistent with a joint publication by four research teams from Australia, Israel, the Netherlands and the USA that suggested unequivocally that quality of non-maternal care is critical for children’s development (Love et al, 2003).

To summarize:

- Poor quality care (inside or outside the maternal home) carries risk to a child’s development.
- The majority of children who receive good quality group day care cope well.
- Children from disadvantaged backgrounds may benefit from non-maternal care if it is of superior quality to that provided by their own mother (Borge, Rutter, Cote & Tremblay, 2004; Cote, Borge, Rutter & Tremblay, 2008; Geoffrey et al, 2007).

### **Aboriginal and cultural issues**

Children from culturally and linguistically diverse backgrounds are particularly vulnerable in group based non-parental child care settings. Misunderstandings and miscommunications can have significant negative effects on a child’s experience in day care. Staff working with children from different backgrounds need to be especially sensitive to cultural differences and parents need to look for this when choosing child care. For example:

- In some cultures children are spoon fed until the age of five but in Australian day care centres they are encouraged to eat independently as soon as they are capable.
- In some cultures co-sleeping is normal and young children are physically carried for the majority of the day. Health and safety issues dictate that children in Australian child care services must sleep alone in cots in accordance with SIDS recommendations. Staff must practice safe handling so they are not always able to pick up and carry a child for long periods. This change in routine and physical comfort can be distressing for some children.
- Child care centres set up lunch tables with bowls, spoons and forks but in some cultures food is eaten with fingers.
- Young children get easily frustrated when they are unable to communicate their needs but this is exacerbated when the child does not understand or communicate in English. It makes toileting and sleeping routines particularly difficult.
- Even if the child’s basic eating, sleeping and toileting requirements are met they will need additional support and attention if they are to benefit from the full range of activities and developmental opportunities that are available in a day care setting. Social isolation may be a particular problem for these children.
- Children may demonstrate emotional and behavioural problems if they are unable to communicate and partake in activities.

- Recognition of the special place of Aboriginal people and children in our society should be supported in the child care service.

While there are resources such as *Inclusion Support Agencies (ISA)*, *Inclusion Support Facilitators (ISF)* and *Bilingual Inclusion Support workers in West Australia (BISWA)* available to child care centres a recent West Australian study reveals that the services are not always available when they are needed and that the administration required limits their accessibility (Targowska, 2009).

### Contradictory findings

There is a vast amount of research examining the impact of formal, non-maternal child care on the development of young children (those aged between zero and three years old) and often the research findings are contradictory. One of the major difficulties in trying to determine some sort of consensus amongst the literature concerns the context in which the research was conducted. This includes both methodological concerns (where definitions, assessment procedures and participant demographics differ) and the characteristics of the child care providers which vary significantly both within countries and internationally.

From an Australian perspective, caution is needed when applying the findings of research conducted in the United States given that Australian child care services operate within a highly regulated and government-subsided industry. This is not necessarily the case in other countries such as the United States where little government assistance is given to parents – thereby limiting their ability to choose high quality care for their children. Furthermore a large number of children in the United States experience extensive and/or low quality child care before school age (Belsky et al., 2007) a finding that is not consistent with Australian figures (see facts and figures provided above). To further complicate matters, children living in poverty in the United States are more likely to attend high quality centres (Magnuson et al, 2004) because they attend government-funded intervention programs such as *Head Start*. These children tend to benefit enormously from their child care attendance. Children from disadvantaged backgrounds and those considered ‘at-risk’ benefit particularly from high quality services but the same children are also particularly disadvantaged by low quality care.

Research suggests that children in poor quality care may be exposed to some developmental risk but care should be taken when applying this finding to an Australian context because relative to other countries the standard of care in Australia is of a much higher quality and it is therefore possible that low quality Australian child care may still be superior to care in other countries. All child care centres in Australia where parents are eligible to claim government subsidies for fees must address 35 principles defining quality service delivery (National Childcare Accreditation Council 2001) and these are assessed by federally trained moderators and validators to ensure national consistency.

It is also important to note at this stage that the definition of child care differs significantly in the literature: in some it refers to formal child care provided by a professional service provider and in others it refers to any non-maternal child care including that provided by the child’s father. The majority of research studies categorises care as either ‘maternal’ or ‘non-maternal’ and it is AAIMHI’s position that a conceptual shift is required to recognise the role of the father and that care should be considered as ‘parental’ or ‘non-parental’.

Furthermore, longitudinal Australian research examining early child care experience on infant and toddler’s attachment and development is lacking and a significant number of research studies in the United States examining the issue all draw on the same database (the NICHD Study of Early Child Care and Youth Development). In addition a significant issue from an Australian perspective centres on the difficulties faced by parents and children who either lack or have limited English.

Child care and education programs of *high quality and which involve parents* show long term positive educational and health outcomes for children e.g. Abecedarian, Chicago Child Parent Services and Perry Preschool Program.

## Difficulties with the research

There are four main factors that make it difficult to determine the impact of child care experiences on the long term development of children:

1. Our lives are complex and children are influenced by a number of different factors, people and environments. This makes it nearly impossible to isolate the effect of child care alone.
2. Longitudinal data is scarce making it difficult to investigate the long term effects of child care. In particular, longitudinal Australian research examining children aged between birth and three years old is virtually non-existent.
3. Studies investigating the impact of child care quality on children's development tend to use standard research measures but the definition of quality on which these measures are based differs depending on values and culture.
4. The contradictory nature of the research.

## Conclusions

- Child care experiences matter more for some children in some contexts.
- To examine the exact conditions under which attachment relationships are at risk from child care requires a detailed examination of children's actual experiences in different contexts of care, their attachment relationships and their well-being.
- The impact of child care and attachment to a non-maternal care-giver may be greater for children who live in sub optimal family environments and/or have difficult temperaments.
- Caution is required when examining the research as many of the findings are contradictory and the effect sizes are small and within normal range.
- There is a lack of Australian data examining the impact of child care on children aged zero to three years old.
- Sensitive mothers, by offering quality parenting, are more likely to buffer any impact of child care on children's outcomes.

## References

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**Table 1: Research papers considered for review**

Reference	Analysis under 4 years	Measures		
		Overnight care	Child outcomes	Attachment/ associated behaviours
Altenhofen S, Biringen Z, Mergler R (2008). Significant family dynamics related to postdivorce adjustment in parents and children. <i>Journal of Divorce and Remarriage</i> 49, 25-40.	✓	✓	x	x
Altenhofen S, Sutherland K, Biringen Z (2010). Families experiencing divorce: Age at onset of overnight stays, conflict, and emotional availability. <i>Journal of Divorce and Remarriage</i> 51, 141-156.	✓	✓	x	✓
Berger LM, Brown PR, Joung E, Meli MS, Wimer L (2008). The stability of child physical placements following divorce: Descriptive evidence from Wisconsin. <i>Journal of Marriage and Family</i> 70, 273-283.	x	✓	x	x
Brotzky M, Steinman S, Zimmelman S (1988). Joint custody through mediation: A longitudinal assessment. <i>Conciliation Courts Review</i> 26, 53-58.	✓	✓	✓	x
Kaspiew R, Gray M, Weston R, Moloney L, Hand K, Qu L (2009). <i>Evaluation of the 2006 family law reforms</i> . Australian Institute of Family Studies	✓	✓	✓	x
McCoby EE, Mnookin RH (1992). <i>Dividing the child: Social and legal dilemmas of custody</i> . Harvard University Press, London.	x	✓	x	x
Melli MS, Brown PR (2008). Exploring a new family form – the shared time family. <i>International Journal of Law, Policy and the Family</i> 22, 231-269.	x	✓	x	x
McIntosh J, Smyth B, Kelaher M, Wells Y, Long C (2010). <i>Post-separation parenting arrangements and developmental outcomes for infants and children</i> . Australian Government Attorney General's Department.	✓	✓	✓	✓
McKinnon R, Wallerstein JS (1987). Joint custody and the preschool child. <i>Conciliation Courts Review</i> 25, 39-47.	✓	x	✓	x
Pruett MK, Ebling R, Insabella G (2004). Critical aspects of parenting plans for young children. Interjecting data into the debate about overnights. <i>Family Court Review</i> 42, 39-59.	✓	✓	✓	x
Solomon J, George C (1999). The development of attachment in separated and divorced families. <i>Attachment and Human Development</i> 1, 2-33.	✓	✓	✓	✓
Tornello SL, Emery R, Rowen J, Potter D, Ocker B, Xu Y (2013). Overnight custody arrangements, attachment, and adjustment among very young children. <i>Journal of Marriage and Family</i> 75, 871-885.	✓	✓	✓	✓
Wallerstein JS, Kelly J (1975). The effects of parental divorce: Experiences of the preschool child. <i>Journal of the American Academy of Child Psychiatry</i> 14, 600-616.	✓	x	✓	x
Woodward L, Fergusson DM, Belsky J (2000). Timing of parents' separation and attachment to parents in adolescence: results of a prospective study from birth to age 16. <i>Journal of Marriage and the Family</i> 62, 162-174.	✓	x	✓	✓