

Continuity of care in the early years?

Multiple and changeable child care arrangements in Australia

Continuity of care is seen as an important aspect of quality child care for children in the early years of life. Yet previous studies suggest that up to a third of Australian children in their first three years attend two or more care settings a week. A new study shows that use of multiple child care arrangements, and changes in care arrangements, are relatively common. What are the implications for the quality of care experienced by children?

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Continuity of care in the early years of life has been seen as an essential component of good quality child care. There has been a growing unease in the early childhood field, however, about the threat to continuity of care for young children posed by children's experience of many caregivers during their first three years. In particular, the phenomena of multiple child care arrangements (more than one regular care arrangement per week) and changeable child care (shifts over time in care arrangements) are seen as increasing problems.

There is a concern among early childhood professionals that good practice may not be enough to ensure quality care when children receive mixed or unstable caregiving arrangements. This concern was the impetus for the *Child Care Choices* study.

Multiple and changeable child care arrangements are certainly becoming more prevalent. A recent study in New South Wales (Goodfellow 1999) suggests that over 30 per cent of one-year-old children experience multiple child care arrangements. Similarly, a Victorian study showed that 57 per cent of two-year-olds attended two early childhood services a day, a "substantial" number in three services a day, with some participating in up to four services on several days of the week (Rodd 1996). In the United States, the Study of Early Child Care, conducted by the National Institute for Child and Human Development (NICHD) found that over the first year of life, almost all infants were in more than two care arrangements, with over a third (37 per cent) in three or more non-maternal child care arrangements.

This pattern tends to increase as children get older. In their longitudinal study of 145 children, Harrison and Ungerer (2000) recorded the number of changes of care that children experienced from birth to age six. Over this period a third of children had experienced highly changeable child care – an average of 12 different arrangements with a range of 9 to 15.

What is less clear from these studies are the reasons why parents use mixed child care arrangements, or change the care arrangements for their child. Goodfellow's (1999) research suggested that the high cost of care and lack of available care were major factors in parents' use of multiple arrangements. On the other hand, Ochiltree and Edgar (1995) reported that parents used varied settings because of changing family circumstances or wanting to maximise the quality of the child's care. Harrison and Ungerer (1997, 2002) found that many mothers preferred to leave their infants with someone they felt comfortable with and could trust – such as their husband, grandparents, close relative or friend. As a result of this preference, and perhaps the limited availability of these alternative carers, babies received care from a number of different adults. Thus, it is not clear from existing research how much control parents feel they have over their choice of child care arrangements.

Although previous studies have alerted us to the possible negative outcomes of multiple and changeable child care, to date no Australian research has set out to investigate this specific phenomenon.

It is helpful, however, to summarise the existing indications of risk that have been associated with



multiple and changeable care. Negative outcomes for children have been reported in some studies. In Goodfellow's (1999) study, 42 per cent of parents of children in multiple child care arrangements said that their children showed negative behaviour in child care. The children were reported as being confused or lost in the group, being tired or unhappy, and as having difficulty forming relationships. It should be noted, however, that this information was derived only from parents' reports, which may have involved some bias. Similarly, the American-based NICHD Early Child Care Research Network (1998), which used objective indicators of children's outcomes, reported that children who had experienced a number of different day care arrangements in the first two years exhibited more problem behaviours than children who had been in fewer day care arrangements.

Some research indicates that multiple child care arrangements may also be associated with problem outcomes for children. For example, studies have found that multiple and changeable child care is associated with lower intelligence scores (Whitebook, Howes and Phillips 1990), poorer social relationships (Howe and Stewart 1987), and more insecure attachment with mothers (Harrison and Ungerer 1997). Harrison and Ungerer (2000) also noted that when

there was a pattern of changeable care across the first six years of life, children were rated as having more behavioural problems in their first year of school.

Child Care Choices study

These questions about the impact of multiple and changeable child care on children's development are the subject of a three-year investigation conducted by a team of researchers from Macquarie University, the Australian Institute of Family Studies, and Charles Sturt University. The study is funded by the Australian Research Council and the New South Wales Department of Community Services under an ARC Linkage grant.

Data from the first year of the study allow us to report on the extent of multiple and changeable child care arrangements in the current sample of 363 parents from urban and rural New South Wales, the reasons parents have given for their choice of child care arrangements for their children, and their satisfaction with current care arrangements.

For the purpose of the study, multiple child care arrangements were defined as arrangements involving two or more concurrent non-maternal child care arrangements on a regular basis across seven days.

Location of sample

It was expected that the issues surrounding multiple and changeable care were likely to be context-specific. In particular, there were indications from existing studies (for example, Goodfellow 1999) that availability of care was more problematic for families living in regional and rural areas, compared to metropolitan areas. On the other hand, some regional centres offer a coordinated, multi-purpose approach to child care, compared to city services which tend to be single purpose.

It was unclear whether these differing conditions might be associated with different patterns of multiple or changeable child care arrangements. Thus, to shed light on these potential differences, an important aim of the research was to include a range of child care services, across urban and rural locations.

Description of sample

At the time of writing, 42 centres (22 urban, 20 rural) and seven family day care schemes (three urban, four

rural) have agreed to participate in the study. A total of 363 parents (167 urban, 196 rural) recruited through the centres and the schemes have completed a CATI telephone interview. The main parental carer of the study child participated in the telephone interview. Over 90 per cent of respondents were mothers of the children concerned.

Of the parents, the majority of mothers (78 per cent) and fathers (79 per cent) were Australian born. Of those who were born outside Australia, 13 per cent of mothers and 12 per cent of fathers were from English-speaking countries (Great Britain, Canada, America, New Zealand), 5 per cent of mothers and 4 per cent of fathers were from Asia, 1 per cent of mothers and 1 per cent of fathers were from South America, and 1 per cent of mothers and 3 per cent of fathers were from Europe. There was thus some under-representation of immigrants.

Mothers represented a varied group in terms of age (mean age 33.6 years) and education (35 per cent had completed secondary school to Year 9, 10 or 12; 25 per cent had a tertiary diploma or trade qualification; and 39 per cent had a university or post-graduate degree). Fathers tended to be several years older than mothers and had similar levels of education. This was thus, on average, a fairly highly educated sample.

The families came from a range of household income levels with about half of the sample earning gross annual household incomes of \$70,000 and over. Most of the parents were in paid work (78 per cent of mothers and 97 per cent of fathers). There was thus, on average, a fairly high socio-economic status among families.

Differences were noted between urban and rural parents on several demographic measures. Rural mothers were on average younger than urban mothers (mean age of 32.1 years for rural mothers and 35.4 years for urban mothers), were more likely to have been born in Australia (94.2 per cent rural mothers compared to 62.3 per cent of urban mothers), and were less well educated (23.2 per cent of rural mothers with university degrees compared to 54.9 per cent of urban mothers). Similar differences in characteristics were evident for fathers from rural and urban areas.

Mothers and fathers in rural areas worked a similar number of hours in paid work as their urban counterparts, with mothers working an average of 30.3 hours a week and fathers working an average of 47.0 hours per week. There were significant differences between urban and rural families in annual gross household income although there was an extremely wide variation in reported income in each location (mean income of \$61,622 for rural families, and \$101,710 for urban families). Family size ranged from one to five children. Forty per cent of the children were only children in the family and 53 per cent were first-borns. Rural families tended to be larger than urban families, with 28 per cent of rural families having three or more children compared to 7 per cent of urban families.

The focus of this study was on children aged three years and under. Of the 363 children (183 boys, 180 girls), 23 (6 per cent) were aged under less than 12 months old, 113 (31 per cent) were aged one to two years, and 209 (58 per cent) were aged two to three years. A further 18 children were aged three years or older. Information regarding these children are included in the total group analyses.

Table 1 Numbers and percentages of children experiencing single and multiple child care, by location (*n* = 363)

No of care settings	Urban		Rural		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1	93	55.7	107	54.6	200	55.1
2	56	33.5	67	34.2	123	33.9
3	15	9.0	19	9.7	34	9.4
4	2	1.2	3	1.5	5	1.4
5	1	0.6	0	0	1	0.3
Total	167		196		363	
Multiple care	74	44.3	89	45.4	163	44.9

Table 2 Total number of child care arrangements, by age of child (*n* = 295)

No of arrangements	Children aged 0-1		Children aged 1-2		Children aged 2-3	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1	17	73.9	63	56.8	87	54.4
2	4	17.4	40	36.0	53	32.5
3	2	8.7	6	5.4	18	11.3
4	0		1	0.9	3	1.9
5	0		1	0.9	0	
Total	23		111		161	
Total multiple care	6	26.1	48	43.2	73	45.3

Table 3 Type of care used by families in urban and rural settings (*n* = 362)

Type of care	Urban (<i>n</i> = 167)		Rural (<i>n</i> = 195)		Total (<i>n</i> = 362)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Long day care only	66	39.5	93	47.7	159	43.9
Family day care only	27	16.2	13	6.7	40	11.0
More than 1 formal care	7	4.2	11	5.6	18	5.0
Formal + father	27	16.2	23	11.8	50	13.8
Formal + informal	29	17.4	45	23.1	74	20.4
Formal + informal + father	11	6.6	10	5.1	21	5.8
Total	167	100	195	100	362	100

Note: Formal care refers to long day care and family day care. Informal care refers to care by non-parental family, friends and paid babysitters or nannies.

Procedures

Recruitment occurred through child care centres and family day care schemes. After gaining approval from management, research assistants approached parents as they collected their children and invited them to participate in the study. Interested parents completed a one-page "Expression of Interest" form, listing their child's weekly child care arrangements. Selection of participants was based on achieving similar numbers of children in each of the three age groups (0-1, 1-2 and 2-3 years), equally distributed across urban and rural settings.

Selected families were followed up with a CATI telephone interview about the family and the child care history of the child, including changes of care. Parents were asked about their satisfaction with current child care arrangements and their reasons for using multiple care settings or for changing care arrangements. (Extensive data on child and child care settings were also collected, but will be the subject of later publications.)

Results

The results from the telephone interview with parents are presented first for incidence of multiple child care arrangements. This is followed by an analysis of parents' reasons for using multiple child care arrangements and their satisfaction with current arrangements. The incidence of changeable care in the sample is presented next along with an analysis of parents' reasons for changing child care arrangements over the previous 12-month period.

Incidence of multiple child care arrangements

Results show that 45 per cent of the families were using two or more regular weekly child care arrangements for their children. The range was one to five settings but most multiple care use involved two settings (see Table 1). The proportion of children experiencing multiple child care arrangements was similar for urban (44 per cent) and rural children (45 per cent).

Multiple child care arrangements were common at all ages with some increase in use according to the age of the child. The current care arrangements of children in the sample shown in Table 2 indicate that, on

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average, 26.1 per cent of children were in multiple care arrangements when they were under 12 months old, with less than 10 per cent reported as being in three or more child care settings a week at this age.

Because these data were based on only 23 children, retrospective reports were examined about the care history of the one to two year-olds and the two to three year-olds in the sample during their first year. Similar results were found: 31 per cent of the 271 children had experienced multiple child care arrangements in their first year, with 7.7 per cent having experienced three or more settings.

For children currently in their second year, 43.2 per cent were in multiple care arrangements, with 7.2 per cent in three or more arrangements. The percentages of children in multiple care arrangements were very similar in the third year with 45.3 per cent in multiple care arrangements and 13.2 per cent in three or more care settings a week (see Table 2).

Parents reported that, in addition to the main long day care or family day care setting, most used the child's father, grandparents or relatives, friends, babysitters, or nannies as regular care providers.

Table 3 shows the different patterns of care arrangements used by families in urban and rural areas. No differences were found between care use in the two locations. In both locations, the largest percentages of children were in formal care only, reflecting the recruitment of the sample from long day care and family day care (approximately 55 per cent in both urban and rural areas).

Combinations of formal and informal care were more common than more than one form of formal care for the children under three years of age (20 per



Table 4 Means and standard deviations of parent ratings of reasons for making multiple child care arrangements (on a scale from 1= does not apply, to 5 = definitely applies) (n = 163)

Reason	Mean	(SD)
1. It is good for my child to experience a centre environment and a family environment	4.3	(1.2)
2. I like my child to be able to interact with different adults and children	4.2	(1.3)
3. The arrangements are convenient for me	4.2	(1.2)
4. I want my child to spend some time with his/her family members	4.1	(1.5)
5. I want my child to have a range of experiences so he/she will learn new things	3.9	(1.4)
6. I don't think it is good for my child to be in formal care only	3.5	(1.6)
7. I don't think it is good for my child to stay in one type of care all the time	3.2	(1.5)
8. My child will not get the stimulation he/she needs in one type of child care	2.7	(1.6)
9. It is hard to find child care available during the times I need it	2.6	(1.7)
10. My preferred child care arrangement is not consistently available	2.1	(1.6)
11. I cannot afford to use my preferred child care arrangement all the time	2.0	(1.5)
12. I can't access enough hours of care in my preferred child care arrangement	2.0	(1.6)
13. The family keeps moving and I am unable to keep my child in a stable routine	1.2	(0.7)



Many of the multiple child care arrangements are made through parental choice, commonly because parents believe that their decisions are in the best interests of their child.

cent used a combination of formal and informal care and only 5 per cent used more than one form of formal care such as two long day care centres or a long day care centre and family day care). Table 3 shows that combinations of care that involved regular weekly care by fathers were used in 38 urban families (23 per cent) and 33 rural families (17 per cent).

Grandparents played a major role in the informal care of young children aged under one year, although the use of different kinds

of informal care, in addition to grandparents, became more frequent as children became older.

Reasons for using multiple child care arrangements

Parents were given a number of possible reasons for using multiple care, and asked to rate the extent to which each of these applied to them on a scale of 1 (does not apply) to 5 (definitely applies).

Results showed that parents were more likely to agree with statements about benefits for the child than those about other reasons such as difficulty accessing appropriate or preferred child care (see Table 4). Statements relating to benefits for the child included: “to have a range of experiences and learn new things”; “to spend time with family members”; and “to be able to interact with different adults and children”. Parents using multiple child care arrangements also agreed that it was not good for their child to attend formal care only.

Convenience was a common reason for parents choosing multiple care; reasons such as affordability and lack of availability of preferred child care arrangements, were less salient for parents (see Table 4). Comparisons between the urban and rural samples, using t-tests, showed no difference on these items between the two groups.

Two factors emerged from a principal components analysis of parents’ responses to the 13 reasons. Factor 1, labelled “out of parents’ control”, included five reasons related to affordability and availability of child

care and constant moving of the family that made multiple child care arrangements necessary. Items 9-13 in Table 4 had high loadings on this factor, and when treated as a scale had an alpha reliability of .63.

Factor 2, labelled “parents’ choice”, included eight reasons based on what parents considered was good for their child. Parents consistently reported that the set of reasons reflecting their own choice applied more than “out of parents’ control” reasons. Items 1-8 in Table 4 had high loadings on this factor, and when treated as a scale had an alpha reliability of .79.

No differences were found on these two factors between parents of children from the three age groups, between parents with different levels of multiple child care arrangements (two care settings compared with three or more), between (five) different income levels, or between parents from different locations (rural and urban). Thus, while the sample had above average income, income did not appear to be a factor affecting use of multiple child care arrangements.

Satisfaction with care

Parents were asked to rate their levels of satisfaction with their overall weekly child care arrangements, using a scale of 1 (not at all satisfied) to 5 (very satisfied). Typically, parents were very satisfied with the care they were using (mean satisfaction: 4.4).

This was true for primary care settings (95 per cent very satisfied); additional care arrangements (second care setting – 96 per cent very satisfied); and third, fourth and fifth care settings (100 per cent very satisfied for each). There were no differences between rural and urban samples in reported satisfaction with care.

Incidence of changes in care

Approximately a quarter of the parents ($n = 93$, 26 per cent) said they had changed their child’s care arrangements during the past 12 months. Of these, most (87 per cent) reported one change only, with two or more changes reported as relatively rare.

Changes of carers within the same care setting had occurred for more than one third of children (38 per cent) with staff turnover in services given as the major reason (63 per cent of the 136 parents who reported this kind of change). An increase in the number of child care arrangements was reported as a change by 17 per cent of parents and a decrease in number of arrangements by only 8 per cent.

Reasons for changing care arrangements

Parents were given six possible reasons for making changes in care arrangements, and asked to rate on a 5-point scale the extent to which the reasons applied to them and the extent to which they felt they had control over several kinds of change in care arrangements.

Table 5 shows that the four most common reasons for changing care were to move to a more convenient location, because a previous arrangement was unavailable, problems with the service, and to obtain better quality care. Affordability of care was not a common reason for making a change.

Parents reported that most changes (changes in place and increases or decreases in the number of care arrangements, or hours of care) were definitely a result of their choice. The only change that parents reported

Table 5 Reasons for change of child care arrangements ($n = 93$)

Reason for change	Yes		No	
	<i>n</i>	(%)	<i>n</i>	(%)
1. The child care was more conveniently located	37	39.8	56	60.2
2. The previous child care arrangement became unavailable	37	39.8	56	60.2
3. The child care was better quality	26	28.0	67	72.0
4. The care setting wasn't suited to the child	18	19.4	75	80.6
5. The child care was more affordable	17	18.3	76	81.7
6. There were problems with the service (e.g., change of management, conflict)	17	18.3	76	81.7

as out of their control was a change in caregiver, usually a result of changes or staff turnover in a service.

Conclusions

This paper reports preliminary findings on 363 families from the longitudinal *Child Care Choices Study* that examines the effects of multiple and changeable child care arrangements on the development of young children.

This sample is somewhat advantaged (on average), but analyses suggested that socio-economic factors were not critical determinants of reasons for use of multiple and changeable child care. Nevertheless, sample characteristics mean we should not generalise these findings to the broader population. Since the key interest of the study is in child outcomes in relation to care experiences, the socio-economic issues are less critical than for a straightforward "prevalence" study.

Results from the first year of data collection indicate that use of multiple care arrangements is relatively common, with 45 per cent of respondents reporting weekly use of two or more care settings. Parents also reported a reasonably high rate of changes in child care arrangements over the previous 12 months, with 26 per cent reporting one or more changes in care for their child. The incidence of multiple and changeable child care arrangements was similar for urban and rural samples despite differences between the two locations in family characteristics, notably income.

The high level of satisfaction reported by parents with their child's care is consistent with the results of other studies on child care satisfaction in Australia (Greenblatt and Ochiltree 1993) and internationally (Pungello and Kurt-Costes 1999; Peyton, Jacobs, O'Brien and Roy 2001). It was notable that parents reported that the changes in care over the previous year were, with the exception of changes in carer, the result of their own choice and felt to be within their control.

The reasons parents gave for the particular mix of care arrangements they had for their child indicated that arrangements were usually made according to what parents felt was best for their child. These findings are contrary to the suggestion made in the Goodfellow (1999) report, that multiple care arrangements were largely the result of factors beyond the control of parents (such as the availability and accessibility of child care). These latter factors, however, were the main reasons given for changes in child care arrangements. According to these parents, children were most likely to change the place they went to child care because the new arrangement was more convenient for parents or because the previous arrangement became unavailable. Changes in carer were likely to be the result of staff turnover in children's services.

If continuity of care is seen to be an important part of quality care for children and an essential base for further learning and development, there may be a cause for concern in these findings. In the crucial first three years of life, nearly half of the children in *Child Care Choices Study* are having the experience on a weekly basis of two or more caregivers in addition to the care of the parent who is their main caregiver at home. A quarter of children have also

experienced at least one change in care over the previous year. The findings suggest that while many of the multiple child care arrangements are made through parental choice, commonly because parents believe that their decisions are in the best interests of their child, the changes made to care arrangements are due largely to factors outside parental control.

Whether or not these threats to continuity of care do make any difference to children's development is an issue still open to investigation. It is a key question for this study as it follows the children, their families and caregivers over the next two years.

References

- Goodfellow, J. (1999), "Multicare arrangement patchworks: The multiple use of formal and informal care in NSW", Report for New South Wales Department of Community Services, Office of Child Care, Sydney.
- Greenblatt, E. & Ochiltree, G. (1993), *Use and Choice of Child Care*, AIFS Early Childhood Study Paper, no. 4, Australian Institute of Family Studies, Melbourne.
- Harrison, L.J. & Ungerer, J.A. (2002), "Maternal employment predictors of infant-mother attachment security at 12 months postpartum", *Developmental Psychology*, vol. 38, no. 5, pp. 758-773.
- Harrison, L.J. & Ungerer, J.A. (2000), "Children and child care: A longitudinal study of the relationships between developmental outcomes and use of non-parental care from birth to six", Panel Data and Policy Conference, Canberra, May.
- Harrison, L.J. & Ungerer, J.A. (1997), "Child care predictors of infant-mother attachment security at age 12 months", *Early Child Development and Care*, vol. 137, pp. 31-46.
- Howes, C. (1990), "Can the age of entry into child care and the quality of child care predict adjustment in kindergarten?", *Developmental Psychology*, vol. 26, pp. 292-303.
- Howes, C. & Hamilton, C.E. (1993), "The changing experience of child care: Changes in teachers and in teacher-child relationships and children's social competence with peers", *Early Childhood Research Quarterly*, vol. 8, pp. 15-32.
- Howes, C. & Stewart, P. (1987), "Child's play with adults, peers, and toys: An examination of family and child care influences", *Developmental Psychology*, vol. 23, pp. 423-430.
- NICHD Early Child Care Research Network (2000), "The relation of child care to language and cognitive development", *Child Development*, vol. 71, pp. 960-980.
- NICHD Early Child Care Research Network (1998), "Early child care and self-control, compliance, and problem behaviour at twenty-four and thirty-six months", *Child Development*, vol. 69, pp. 1145-1170.
- NICHD Early Child Care Research Network (1996), "Characteristics of infant care: Factors contributing to positive caregiving", *Early Childhood Research Quarterly*, vol. 11, pp. 269-306.
- Ochiltree, G. & Edgar, D. (1995), *Today's Child Care, Tomorrow's Children*, AIFS Early Childhood Study Paper, no. 7, Australian Institute of Family Studies, Melbourne.
- Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.L., Howes, C., Kagan, S.L. & Yazejian, N. (2001), "The relation of preschool child care quality to children's cognitive and social developmental trajectories through second grade", *Child Development*, vol. 72, pp. 1534-1553.
- Peyton, Y., Jacobs, A., O'Brien, M. & Roy, C. (2001), "Reasons for choosing child care: Associations with family factors, quality and satisfaction", *Early Childhood Research Quarterly*, vol. 16, pp. 191-208.
- Pungello, E.P. & Kurt-Costes, B. (1999), "Why and how working women choose child care: A review with a focus on infancy", *Developmental Review*, vol. 19, pp. 31-96.
- Rodd, J. (1996), "A week in the life of a four-year old: A study of Victorian children's patterns of usage of early childhood services", *Australian Journal of Early Childhood*, vol. 21, pp. 37-42.
- Sparrow, S.S., Balla, D.A. & Cicchetti, D. (1984), "Vineland Adaptive Behaviour Scales Interview Edition Survey Form Manual", American Guidance Service, Circle Pines.
- Whitebook, M., Howes, C. & Phillips, D. (1990), "Who cares? Child care teachers and the quality of care in America: Final report of the National Child Care Staffing Study", Child Care Employee Project, Oakland, CA.

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