ABSTRACT
        This paper reports on a small-scale introductory
study of Australian mothers' experiences of infant day care. Ten
employed, middle- and lower-socioeconomic status women with an infant
in center-based day care were interviewed. Brief narrative examples
from the mothers' accounts are presented. Discussion then
concentrates on a new approach to qualitative data analysis that
involves three stages: (1) Interview transcripts are used to develop
individual case studies; (2) Line-by-line analysis of the transcripts
is used to develop coding categories in the grounded theory approach
of Strauss; and (3) A detailed indexing system is developed for full
coding and analysis of the data by computer. The researchers have
completed the first two stages of analysis and are currently engaged
in the third stage using the software package NUDIST (Non-Numerical
Unstructured Data Indexing Searching and Theorising). The potential
of the preliminary results for use in focusing further research, and
the ways in which work with NUDIST is facilitating more complex
analyses than have previously been possible, are considered. It is
concluded that the type of qualitative research discussed will in
time provide essential complements to the insights gained from
quantitative approaches. Nine references are provided. (GLR)

Understanding mothers' experiences of infant daycare:
a new approach using computer-assisted analysis
of qualitative data.

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This paper reports on a small-scale introductory study of Australian mothers' experiences of infant daycare. Ten employed women with an infant in centre-based daycare were interviewed. The women were from both middle- and lower- socio-economic groups, and the sample included women employed full- and part-time. Most of the infants had commenced care before six months of age. I will present brief narrative examples from the mothers' accounts and describe a new approach to qualitative data using computer-assisted analysis.

The experience of infant daycare from the mothers' point of view has been a neglected research topic. Yet it is critical that we understand mothers' experiences for at least two reasons. Firstly, research indicates that parents' feelings impact on developmental outcomes for their children, and it therefore seems likely that how a mother feels about daycare mediates its impact on her child. Developmental outcomes for children in care are better understood within this wider, ecological analysis. Secondly, the subjective experience of motherhood is itself a legitimate area of study. Adults, no less than children, interpret and mediate their experiences, thereby constructing unique views of their world. These realities are of psychological significance, but are not well understood. Acceptance of subjective accounts as a legitimate field of inquiry (Attannuci, 1990; Birns and Hay, 1988) indicates that developmental psychology is moving into a new phase.

Ambivalence accompanies this new phase. Developmental psychologists have the same reverence for quantitative methods shown by the discipline as a whole. Handling so-called "soft data" usually involves "tidying it up" using rating scales or other devices to transform text into quantitative form, with resultant loss of just that complexity, diversity and process which is its unique strength.

In contrast, our aim is to explore and illuminate these aspects. Our approach involves three stages. In the first stage, interview transcripts are used to develop a case study for each woman and the content of the accounts thus explored in a preliminary way. In the second stage, we return again to the transcripts. Line-by-line analysis of them is used to develop so-called "coding categories" in the 'grounded theory' approach of Strauss (1987). In the third stage, a detailed indexing system is developed, for full coding and analysis of the data by computer, using the software package NUDIST, recently developed by Richards in our team (Richards, 1990; Richards and Richards, 1987; 1988; 1989; 1990). Using a radically new approach to qualitative data, NUDIST is designed for Non-Numerical Unstructured Data Indexing Searching and Theorising- from which aims it gets its name (NUDIST).

So far we have completed the first two stages of our analysis and are currently engaged in the third stage using NUDIST. The preliminary picture of new motherhood in the context of childcare that we have so far uncovered is rich in process, complexity and diversity. Today I will sketch several of the ways these results have potential to focus further research. I will consider just three aspects of the data so far collected:

a) decision-making about returning to paid employment and using childcare,

b) women's adaptation to childcare, and

c) mother's implicit theories of child development and their ideas about the likely impact of the childcare experience on child development.

In a final section, I will briefly describe the way our current work with NUDIST is facilitating more complex analyses than have hitherto been possible.

Decision making

In relation to decision-making:

     1. The accounts question assumptions that the decision to return to paid employment and use childcare is straightforward. Women experienced a complex process of shifting ideas and intentions.

Cindy was one of several mothers who experienced a change in intentions following the birth of her baby. She had "always" intended to return to paid work, and did so when her son was 2 months old, but his birth was accompanied by second-thoughts.

> "I always thought, ah well, I'll go back to work, I'll put the baby in a daycare centre and go back to work and I still felt the same when...I was first pregnant, then when I had him I decided I didn't want to go back to work until...he was a bit older". (Cindy, mother of 5-month-old Toby, in care for 10 weeks)

For other women, change worked the other way.

> "I suppose I thought I'd just stay home and you know be a mother to the kids and not go to work....I never would have thought I would have left Marika....I mean she was just my life". (Maureen, mother of 10-month-old Marika, in care for 2 weeks)

Disenchanted with full-time mothering, Maureen had returned to her job when her baby was 9 months old. Of all the women, she offered the clearest account of a rapid decision.

> "I just decided I'm sick of whingeing, I'm going back to work. I found daycare and went back to work the next week. So there wasn't really a big, 'Shall I do it, shan't I do it?'" (Maureen)

But to categorise this as a single event would be to ignore other parts of her account. Decision-making in the previous months had been difficult, confusing and fraught with mixed emotions:

> "I felt so stupid because all I could do was cry but I wanted to go back to work. I didn't feel I could talk to anyone of my friends and say 'I don't want to go back to work, I don't want to leave her' because they would have thought 'well don't, don't be an idiot then'... I just thought I was being really stupid...I just felt in such a mixed mind" (Maureen)

     2. The accounts also question simple categorisations of mothers' preferred roles based on the assumption that women can identify with certainty what is most important to them- paid employment or being at home with the baby. In contrast, we found mothers experiencing a complex dilemma of competing and incompatible mothering and career needs.

Margaret's description was particularly graphic:
> "...half of me wanted to stay home with Millie and the other half wanted to go back to work...there were times when I loved having Millie at home and just her and I together but there would be other times ...I wish I was back at work and just doing something else and not being here".".(Margaret, mother of ten-month-old Millie, in

care for 5 months)
She felt:

> "just torn in two" (Margaret)

3. The accounts demand attention to the processes by which women "choose" childcare.

Most accounts painted images of hasty search with minimal input from the women or their partners. Increasing financial pressures precipitated for some an unforeseen return to work. For others, a planned return was forced earlier than had been anticipated.

In these circumstances, women spoke of arranging childcare "at the last moment"- finding a centre, good or otherwise, was described as a matter of "luck" or "chance".

Without a pressing financial imperative, other women described a more considered, critical appraisal. Satisfaction with care was central. After looking at some centres, one mother:

> "...came home and cried... I just couldn't do it..I didn't sleep for about two nights and then I rang my employer and I said no I don't want the position". (Maureen)

She returned to her job only when a place became available at a high quality centre.

> "Because I wasn't going back to work because I had to feed her, it wasn't a matter of we need the money...I felt so guilty, I thought I have to have really good care for her...I'm happy with the care now... otherwise I couldn't have stuck it out for this long". (Maureen)

These responses offer clues to the dilemma and anxiety women may experience when forced by circumstance to accept centres not to their satisfaction.

Adaptation to childcare

Having reached a decision:

1. The accounts showed process and variety in the experience of the first months of using childcare.

At one extreme, a mother who had never intended to stay home fulltime felt people exaggerate the negative feelings about leaving a baby and said:

> "It doesn't worry me to leave her if I know she's in safe hands. I don't think, 'Oh my God I don't want to be torn away from my child', I'm not that maternal in that sense". (Maree, mother of one-year-old Jane, in care for 10 weeks)

Five months after commencing care, another had difficulty remembering how she had felt in the early weeks.

> "I can't have been dreadfully upset or I would have remembered it. I think I had a few tears on the way to work a couple of days but that's about all... it wasn't as bad as I thought". (Margaret)

Women who had recently commenced day care were more likely to report a process beginning with grief - a warning to studies relying on retrospective interviews.

"I cried a lot. I haven't cried since I can't remember how old...I cried a lot- in department stores, in the street, it's ridiculous places where I'd just burst into tears when I'd think about it. We are over that now thank goodness, its been so embarrassing" (Narelle, mother of 3-month-old Harris, in care for 2 weeks)

Another woman found herself preoccupied with thoughts about the baby:

"I thought about her a lot...if I saw a woman pushing a pram I'd think 'that should be me'. Or sometimes if I'd hear little voices I would turn around thinking it was for me". (Diane, mother of 14-month-old Prue, in care for 10 weeks)

Such is the nature of transition phases: old roles protrude into new contexts. Women indicated that they had support from other women who had been through the same experience. Other people, including some employers, colleagues, even partners, were indifferent to these feelings. Resolution of grief may be thereby impeded.

In our sample, time did not always heal sadness or concern. After 15 months one mother still found it difficult to leave her baby:

"I worry about him being away from me the whole time that he is away...so I'm glad he's happy and laughing when he walks in" (Joanna, mother of 18-month-old Jared, in care for 15 months)

2. The accounts suggested, however, processes of achieving a sense of arrival or routine, attained only by some women in our sample, and at varying times after commencing care.

After five months, Margaret summed it up by saying that:
"everything's falling into place". (Margaret)

A new phase had begun. Although the phrase "falling into place" occurs in no other transcript, several women expressed similar sentiments - "settling down", "in a routine", being "organised". These suggest a sense of arrival. We have recently begun to explore these processes of "routining". Timing and consequences of these transitions are likely to be significant for many aspects of the child care experience, and identification of contributing factors have important policy implications.

Implicit theories

In relation to implicit theories and ideas:

1. The accounts indicated the importance of exploring women's implicit theories or ideas about child development, the sources and significance of these. We found diversity in the ideas women had about childcare and its impact on children (see also Rolfe and Richards, under review).

Most supported the use of childcare:

"You know that he's not going to be a sooky mummy boy". (Tracey, mother of 16-month-old Daniel, in care for about 10 months)

"When she was at home it was just me and her and I think she used to get bored and I felt I had to be amusing her all the time... when she's been at

daycare... she's a different baby, she was just so happy..she's not clingy and she's more open". (Dianne)

"I've had her home with me on Monday and she was just really revolting...and Tuesday she was just fine at the daycare centre and I just think she wanted to go back there. There's more interesting things there. You know I see mummy all weekend that's enough". (Margaret)

Some theories were, however, about limits and constraints on the use of care.

"He really likes the excitement, the other children, the new toys, but I do find after a period of four hours he is really glad to see me. The longer I leave him, the stranger he acts at night..you can see he likes being away for say four hours but once it gets to six hours its getting a bit long for him..he's sort of really clingy for the rest of the night". (Joanna)

"I feel now that I don't see enough of her and it is a bit upsetting sometimes. Like one day I put her down on the floor and she just ignored me altogether and she's hot-footing it over and I think, 'Oh she's crawling to me as I leave but she by-passed me and she went to the woman that looks after her. Yeah, that way it can get you a bit sometimes". (Maree)

A co-ordinator of the centre her son attended said:

"It's hard because I know what child care's like. I've really got more of a negative view against it I think than what a lot of parents that don't know what goes on during the day... I think its good for kids because they're with other kids- they learn a lot quicker, more sociable, but...it doesn't matter where you go, you can't get the one to one attention that a mother can give. We give them love, like cuddles ...and feed them well and look after them, there's a lot of physical needs but there's something missing..that you just won't get anywhere. They just have to be in the home. Child care's good but I don't think that if I wasn't working in it that I could leave him". (Cindy)

Other mothers using the high quality centres had worried about such aspects but each had been reassured by their first-hand experience:

"after being up there and seeing the place I thought if I can get into this sort of place (it would) be good for me and her". (Dierdre, mother of 10-month-old Alicia, in care for 4 months)

2. Finally, the outcomes challenge exclusive reliance on 'objective' measures of care quality. Each woman developed a unique view about her centre, of its strengths and weaknesses.
One woman, for example, was dissatisfied and upset by aspects of the centre her child attended:

"You look at the floor, there's sand in the carpet and you vacuum it until your fingers are worn out but its still dirty. No, I couldn't put him down on the floor or anything...he wasn't getting any development or stimulation..he was getting sick and dirty". (Cindy)

In contrast, another woman using the same centre was very positive:

"The one I'm at now really care..they seem really nice". (Tracey)

"its always what you want". (Tracey)

Her account drew on comparisons with other centres:

"There's been some I've been to that have been really awful". (Tracey)

Discussion.

The importance of these sorts of preliminary data resides in their potential to redirect research questions. From a small group of accounts, we cannot identify causal relationships between aspects and outcomes of daycare. We set out to explore dimensions of the daycare experience not accessible to studies seeking simple causal relationships.

So far we have data suggesting that women's work-related preferences and intentions are not necessarily clearcut, that their plans about work and childcare are a fluid process. They appear to change in response to their own changing needs and those of their families. As a result it may not be possible to make preparations for childcare well in advance. The data also illustrate that women may experience complex patterns of emotional response although there appears to be a process of adaptation. Initial dilemmas, sadness, anxiety and guilt may in time become increasingly settled in processes we are about to explore both in the current data set and in a longitudinal study involving 200 women just underway.

In both of these, the third stage of data analysis using NUDIST is critical. Unlike programs limited to coding and retrieval of text, such as the Ethnograph, in a radically new approach NUDIST supports searching of words in the text or searching indexing of it. NUDIST creates separate document and index data bases, an architecture that allows:

1. the separate browsing of documents, or searching for words in them
2. handling off-line and well as on-line documents (photos, tapes etc)
3. development of index structures of unlimited size or complexity.

Also within NUDIST, we can conduct complex Boolean searches. We can retrieve, for example, all the text where women talk of "settling in" or "getting into a routine"; then combine this with all text coded as about transitions; then separate this according to the length of time the child has been in care and the age of the child; then search these text units for links between a sense of transition and the women's implicit theories of effects on the child. Such searches can continue indefinitely, building on previous explorations. The program has no limits on the number or complexity of indexing categories or the number of times rich data can be coded. (Richards and Richards, 1987; 1988; in press).

In conclusion, we are attempting a new approach to studying the impact of childcare on women. We believe that this type of qualitative research will in time provide essential complements to the insights gained from quantitative approaches (see Rolfe. Lloyd-Smith and Richards, 1991).

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