Vulnerable Parent, Vulnerable Child: Parenting of a Subsequent Child following the Loss of an Infant to Sudden Infant Death Syndrome.

A thesis presented in partial fulfilment of the
requirements for the degree of
Doctor of Philosophy in
Human Development

at Massey University,
Palmerston North,
New Zealand.

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2003

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Abstract

The aim of the present study was to investigate evidence of replacement child and vulnerable child pathology in the caregiving relationship between caregivers who had lost a previous infant to SIDS, and their subsequent children, who were now 2-3 years of age. To assess the possible traumatic disruption to the parent-child caregiving system arising from unresolved parental grieving, 20 mothers of 2-3-year-old subsequent children participated in an attachment-based clinical interview, the Working Model of the Child Interview (WMCI). Verbatim transcripts of the interviews were examined for content themes showing mothers' replacement feelings toward the subsequent child. The interview was then rated on a formal scoring system for the WMCI and the parents' representations of the child were classified into one of three categories: balanced, disengaged, or distorted. In addition, a modified version of the Reaction to Diagnosis Classification System (RTDSC) was used to classify the interview transcripts as Resolved or Unresolved with respect to the trauma to the caregiving system arising from the loss.

To look for specific evidence of the Vulnerable Child Syndrome, the 20 mothers and a control group of 100 non-bereaved mothers of children of a similar age also completed three questionnaires: (a) the Vulnerable Child Scale (VCS) to assess parental perceptions of the child's vulnerability, (b) the Parent Protection Scale (PPS) to assess parental protective behaviours, and (c) the Achenbach Child Behaviour Checklist for ages 2-3 years (CBCL/2-3) to assess behaviour and personality problems in the child.

Results of the questionnaires showed that in comparison to the control group, mothers of subsequent children perceived their children as significantly more vulnerable and reported higher levels of protective behaviours. Subsequent children, in turn, experienced significantly higher levels of sleep problems and destructive externalising behaviours. Interview data showed that 70% of mothers were Unresolved with respect to the loss regardless of the time since the death, but the children were not regarded as replacements for the dead siblings. Only 25% of interviews were categorised as balanced and the majority were characterised by ongoing fears for the child's safety, and a significant level of emotional distancing from the child.

Acknowledgements

I wish to express my gratitude to the many people who have contributed substantially to this thesis. First and foremost, my very special thanks go to the mothers who participated in the study and shared a very personal part of their lives with me. Their deeply moving stories told of the anguish they felt at the sudden death of a precious baby to SIDS, in some cases many years before, and of the joys and anxieties experienced as they ventured into parenthood anew and nurtured a subsequent child through infancy and toddlerhood.

I would also like to thank my supervisors, Professor Gary Hermansson and Professor Joy Cullen for their assistance and unfailing encouragement and support, and to gratefully acknowledge the input of Professor Julie Boddy and Associate Professor Cheryl Benn in the formative stages of the research.

Special thanks too, to Sue Watson, who co-coded the interview transcripts for this study, generously sharing her insights based on her training as a certified coder for the Attachment Attachment Interview.

Last, but not least, I am grateful for the tremendous care and support throughout from my family and friends.

Barbara Maclean

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Introduction

The sudden and unexpected death of an apparently healthy infant to Sudden Infant Death Syndrome (SIDS) is a particularly traumatic loss for parents, and as such has been shown to have far-reaching consequences for family relationships and subsequent child-bearing. Markusen, Owen, Fulton, and Bendiksen (1977-78) summarised several features of SIDS deaths that make coping with their aftermath particularly difficult for surviving family members. These included (a) the suddenness of the loss, with no opportunity for anticipatory grieving, (b) the absence of a definitive cause, typically associated with an immense sense of guilt felt by caregivers for their failure to prevent the death, (c) the fact that parents of SIDS victims are often young themselves, facing what is likely to be their first major crisis, (d) severance of the parent-infant bond at a critical point in the attachment process, (e) the need for siblings to cope with their own often irrational grief, (f) confusion of the SIDS death with non-accidental injury, leading to public doubt and malicious gossip, and (g) an ensuing official enquiry involving numerous agencies associated with the legal system and police.

From the late 1960s when the syndrome was becoming officially recognised as a legitimate cause of death, research into SIDS has had two major components: investigation into a medical enigma, looking at epidemiological characteristics such as incidence, risk factors, prevention and pathological findings, and, more recently, as a human problem with ramifications for the family, relatives and community (Hunter, 1988). Although the shorter-term reactions of parents to the loss have been well documented, there has been relatively little research into the longer-term course of parental bereavement and, specifically, how the aftermath of the SIDS death affects the parent-child relationship and later development of subsequently-born children. One might assume that the birth of a healthy subsequent child would bring closure to the loss experience for the family. However, subsequent siblings of SIDS victims are known to be at slightly increased medical risk of also dying of SIDS in the first year of life and so fear of losing the subsequent child as well remains particularly salient for parents.

Moreover, childbearing after an infant death is a controversial issue. Some believe it to be a means towards adjusting to the death and aiding the grieving process (e.g., S.

Lewis, 1983; Powell, 1995; Twomey, 1995; Videka-Shearman, 1982). Others have expressed concern that if conception occurred before the mother has mourned the lost child adequately, this could be detrimental to the resolution of the parents' intense grief, and could lead to relationship and parenting difficulties with the subsequent child (e.g., Bourne & E. Lewis, 1984a, 1984b; E. Lewis, 1979). A subsequent child was thus said to be at risk of both the "Replacement Child Syndrome", where the grieving process was interrupted and the next baby regarded as a replacement for the dead child (Cain & Cain, 1964; Poznanski, 1972), and the "Vulnerable Child Syndrome", where the child was perceived as vulnerable and overprotected, and exhibited separation and behavioural difficulties (Green & Solnit, 1964).

The aim of the present study was thus to investigate whether replacement or vulnerable child pathology resulted in a traumatic disruption to the parental caregiving relationship with a subsequent child who was supposedly past the risk period for SIDS. To this end, twenty mothers who had lost a previous infant to SIDS, and were currently primary caregivers of a 2-3-year-old subsequent child were recruited as participants. They participated in an attachment-based clinical interview to assess resolution of mourning, replacement feelings, and caregiving representations of their subsequent child. In addition, these 20 mothers and 100 non-bereaved mothers of children of a similar age completed standardised questionnaires to assess the caregiver's perceptions of the child's vulnerability, overprotective parenting behaviours, and parental reports of problematic behaviours in the child.

The complex nature of the topic lent itself well to the eclectic, multidisciplinary approach that characterises the study of human development. Following Sameroff (1995) a transactional model of development was adopted to allow examination of phenomena at various levels of analysis. Attachment theory was used as the primary framework for the study but it was recognised that the unique family contexts and the special nature of SIDS deaths (given their suddenness and unknown aetiology) would affect both the loss experience and parenting of the subsequent child.

Within the developmental literature there has long been debate around the relative contribution of environmental influences and biological underpinnings to development. Bronfenbrenner (1979, 1995), for example, presents an ecological-contextual model (more recently named a bio-ecological model) at the heart of which is the notion that various levels of the environment influence, and in turn are influenced, by the developing person. At the most proximal level of influence known as the microsystem, roles, activities and bi-directional relationships in the immediate settings such as the family provide dynamic contexts for development. Optimal development of the person is fostered by the mesosystem, a network of strong supportive interconnections between the various microsystem settings. The exosystem consists of social systems that do not necessarily contain the developing person but indirectly influence the microsystem, whilst at the outermost level of influence labelled the macrosystem, the broader ideology determines, for example, cultural values such as the relative importance of children in society and how they should be treated. A temporal dimension is incorporated into the model with the inclusion of the chronosystem, emphasising change across time, either arising within the person or as a result of change in the ecological context in which development occurs.

Attachment theory, in turn, is an eclectic mix of cognitive, dynamic, and ethological theory, more in keeping with an organismic than contextualist worldview (Miller, 1993). The quality of the goal-directed caregiving relationship between the primary caregiver and a young child is said to be strongly predictive of the child's later development and to be compromised by the caregiver's own unresolved loss and trauma (Bowlby, 1969, 1977, 1980). Integral to the understanding of crucial and protective factors in social and emotional development in the first three years of life, is the tenet that the interactive behaviours of parents and young children are influenced by both the caregiver's and child's internal representations of the relationship (Zeanah & Boris, 2000).

It could be argued that there is some tension between the ecological approach, with its emphasis on contextual factors and ideographic aspects of change, and an attachment model which places more emphasis on biological contributors to development and the identification of normative versus non-normative patterns of behaviour. However, in the later revision of his model, Bronfenbrenner (1995) stressed that the importance of the levels of environmental influence should not overshadow the fact that biologically-influenced characteristics interact with the environment to shape development. Likewise, within Bowlby's attachment theory, the impact of real-life events on the caregiving relationship and subsequent development of the child is given much emphasis and indeed is one of the key points of departure from the psychoanalytic tradition. Furthermore, the interactive nature of the various levels of influence is implicit in the attachment perspective. As Zeanah, Larrieu, Heller, and Valliere (2000) described it, the caregiving relationship (which changes across time) both moderates biological risk factors such as prematurity, and is the medium by which effects of environmental risk factors (such as non-availability of social support, social disadvantage, maternal mental illness, or unresolved parental grief and its effects) are experienced by the young child.

In a transactional model of development the child is seen as a product of a continuous dynamic interaction between the child and social experience within the family context (Sameroff, 1995). That is, there is a dynamic transactional relationship between nature and nurture in which both are constantly being changed by experience with the other. Of particular importance is that the child actively affects the environment and by his or her earlier behaviour, may strongly determine current experiences. Discussing the particular applicability of the transactional model for situations in which clinical intervention may be warranted, Sameroff and Fiese (2000) pointed out that nature and nurture may need to be artificially separated to target the appropriate level of the developmental system: either the level of the child him/herself, the caregiving environment, or the more distal influences such as neighbourhood characteristics or socio-economic status. As will be seen, in the present study, the primary level of analysis was the caregiver's perceptions and subjective experiences of the subsequent child in the context of a previous loss of a child in the family to SIDS.

The layout of the thesis is as follows:

Literature Review

The literature review is spread over the first three chapters and explores both medical and psychological issues that affect the loss experience and parenting of a subsequent child after a SIDS death in the family.

Chapter 1 presents an overview of the phenomenon of SIDS as a medical enigma, illustrating the traumatic nature of the loss and the tenuous state of knowledge about the aetiology and prevention of the deaths. From there the discussion branches off to the relatively recent acceptance of the validity of parental grief following the death of an infant or foetus by any means, and introduces several influential models of grief and loss that have informed this emergent field of grief research: the psychoanalytic perspective, Lindemann's (1944) grief syndrome, and attachment theory.

Chapter 2 addresses the literature dealing specifically with the grieving reactions of families who have lost a child to SIDS. As will be shown, the emergence of centres dedicated to helping SIDS families was accompanied by a proliferation of publications by mental health clinicians in the field, typically portraying the SIDS death as a crisis requiring intervention to prevent long-term sequelae. Next, several major international research studies into SIDS are outlined and recurrent themes arising from both the clinical and empirical literature are explored in some detail. These include: the special nature of SIDS deaths as opposed to other types of losses, typical reactions to the loss, the ensuing loss of the mothering role, persisting feelings of guilt associated with the death, and the effects of the death on the family system, including the parental couple and older surviving children. The chapter finishes by looking at the longer-term course of bereavement and issues to do with measurement of resolution of grief.

Chapter 3 reviews the literature concerned with the birth and parenting of a subsequent child. Descriptions are given of the Replacement and Vulnerable Child Syndromes and the somewhat uncoordinated attempts made thus far to identify and measure them in a variety of different contexts and age groups. The question as to whether a subsequent pregnancy adversely affects the course of parental mourning following the death of an infant is addressed and the inconclusive nature of the evidence is shown. Reports of maternal anxiety and overprotective tendencies following both perinatal and SIDS losses are presented, showing that these feelings are pervasive and not necessarily restricted to the mode of death of the previous infant. The chapter concludes with a summary of several key points that emerged in the literature review.

Methodology

Chapter 4 is concerned with the study methods. The objective of the study is outlined and demographic details of participants and processes for gaining informed consent are described. From there, the various instruments used in the data collection are detailed and a brief summary is given of the statistical analyses conducted.

Results and Discussion

Chapter 5 presents and discusses the findings of the study. Questionnaire data are presented first, examining the various aspects of the Vulnerable Child Syndrome as measured by the three instruments used for this purpose, and comparing the SIDS and control groups on the various scales. Next, the interview data are examined, showing the numbers of resolved and unresolved cases identified amongst the 20 participants, and extracts from the interviews to illustrate how these allocations were made. Replacement themes in the interview transcripts are identified and discussed as to whether these warrant concerns about the Replacement Child Syndrome. Finally, parental representations of the child are reported and again illustrated with extracts from the interview transcripts.

Conclusion

Chapter 6 concludes the study, reviewing the main findings and considering their implications for the care and support of families who experience the traumatic loss of an infant. Limitations of the present study are described and suggestions made for future research.

CHAPTER ONE

Literature Review
Part 1

Sudden Infant Death Syndrome: A Medical Enigma

Definition

Sudden Infant Death Syndrome (SIDS) is a diminishing but still major cause of post-neonatal deaths worldwide. SIDS has been reported clinically since Biblical times and the typical post-mortem findings were documented by a Scottish police surgeon named Templeman as early as 1892, but it was as recently as 1969 that it became officially recognised as a distinct disease entity (Bergman, 1986). This acknowledgment was brought about largely as a result of intensive lobbying by small committed groups of bereaved parents, many of whom had been subjected unjustly to accusations of fatal child abuse (filicide) (Bergman, 1986; Corr, Fuller, Barnickol, & Corr, 1991; Guntheroth, 1995; Weinstein, 1978). Bergman (1986) published a graphic historical account of American parents' intensive political campaign to influence scientific opinion and governmental policy-making in this regard, and the parallel experiences of their British counterparts have been documented by Golding, Limerick, and Macfarlane (1985), and Knight (1983).

At the first international conference on the causes of sudden infant death in 1963 there was little agreement as to the nomenclature, nature or incidence of the phenomenon. The following six years saw a proliferation of research in the field, culminating in a second landmark conference in 1969 at Eastsound, Washington, near Seattle, where the label "Sudden Infant Death Syndrome" was accepted and the now widely-cited definition of SIDS proposed. SIDS was defined as, "The sudden death of any infant or young child, which is unexpected by history, and in which a thorough post-mortem examination fails to demonstrate an adequate cause of death" (Beckwith, 1970, p. 14). Adoption of the label SIDS was a departure from the lay terms "crib death" in the United States and "cot death" in Britain traditionally used to describe all sudden, unexpected infant deaths, including those for which an identifiable cause was later found at post-mortem (Gibson, 1992; Guntheroth, 1995; Limerick, 1992; Tyrrell, 1985).

Careful death scene investigations are now strongly recommended in addition to the autopsy to minimise mistakes in ascertaining the cause and manner of death (Valdes-Dapena, 1991). Guntheroth (1995) pointed out that adoption of this policy led to a reduction in the number of reported SIDS cases and at the same time made accurate international comparisons of the incidence more difficult to make because of non-compliance with the requirement by some countries. More importantly, death scene investigations provided additional evidence to respond to claims that the number of cases of filicide misattributed to SIDS might be higher than previously acknowledged. Earlier estimates of fatal child abuse ranged from 2% to 10% (Hunt, 1995) but footage from covert video recordings in British hospitals (Southall, Plunkett, Banks, Falkov, & Samuels, 1997) and reports of an inordinately high incidence of SIDS in families known to UK Child Protection agencies (Newlands & Emery, 1991) indicated that the 10% estimate might be the more realistic.

Age of the infant at time of death is one of the key factors used to distinguish SIDS deaths from other infant and foetal losses. Miscarriage is defined as the loss of a foetus before 20 weeks' gestation; stillbirth is the delivery of a baby with no signs of life after a gestational period of 20 weeks or more, and with a birthweight of at least 400 grams; and a neonatal death is that of a live-born infant within 28 days of birth (Boyle, 1997). The general category of perinatal deaths includes miscarriages, stillbirths, and neonatal deaths that occur in the early neonatal period; i.e., in the first seven days of life (Ministry of Health, 2002). In contrast, the incidence of SIDS deaths is low in the first few weeks of life, peaks sharply at two to four months, drops rapidly until six months, then slowly declines, with very few deaths occurring after the first year of age (Guntheroth, 1995; Hillman, 1991; Peterson, 1988). Valdes-Dapena (1988) observed that whilst most SIDS deaths occur in the post-neonatal period, sudden, inexplicable neonatal deaths would also be more accurately classified as SIDS, but often are omitted from the SIDS statistics because of attempts to keep delivery-related perinatal mortality records separate from those of other infant deaths. Intriguingly, age at death of SIDS victims who were born prematurely appears to be timed from the actual date of birth rather than from the due delivery date; a factor difficult to account for by those who propose that the deaths might occur at a critical stage of development (Hillman, 1991).

In 1971, SIDS became recognised as a legally registrable natural cause of death in the United Kingdom resulting in fewer criminal charges against parents (Hunter, 1988; Limerick, 1992; Murphy, 1990). Similar legislation was introduced in the United States in 1973 and the ensuing Sudden Infant Death Syndrome Act of 1974 approved state funding for SIDS counselling and information services for families, encouraging the establishment of local and national support networks (Bergman, 1986; Valdes-Dapena, 1980; Weinstein, 1978, 1979). Comparable laws and programmes were quickly set up in other countries. In the New Zealand setting, the New Zealand Cot Death Society was founded in Auckland in 1973. More than 20 regional cot death societies then sprang up around the country, initially affiliated with a national organization known as the Cot Death Division of the Children's Health Research Foundation (Parker, 1986; Webb, 1986). Under the leadership of Dr Shirley Tonkin the national organization evolved over the years to become the New Zealand Cot Death Association: A Division of the National Child Health Research Foundation. With the decrease in the reported cases of SIDS in the last decade, several of the regional groups have now become defunct and offshoots of the main organisation established with a widened membership basis, competing for an increasingly limited pool of members and financial resources. Sudden Infant Death Support (SIDS) New Zealand Incorporated, for example, was set up in the 1990s to include families who had lost babies or older children suddenly and/or unexpectedly from SIDS or other causes, and included a support network especially for bereaved fathers.

Epidemiology

The incidence of SIDS is expressed as a proportion of live births that eventuate in SIDS in a calendar year (Peterson, 1988). The exact numbers of SIDS deaths world-wide cannot be ascertained at present for various reasons. Firstly, some countries do not have available the necessary reliable infant autopsies and comprehensive systems for census-taking and recording of causes of death. Secondly, relatively little attention is paid to SIDS in some third world and developing nations where there are high rates of infant deaths from other causes such as diarrhoea, starvation, or infectious diseases (Valdes-Dapena, 1991). Thirdly, a diagnosis of SIDS is one made by exclusion, and as such is problematic for the World Health Organization classification system for which identifiable conditions and diseases must be selected and recorded as the cause of death (Guntheroth, 1995; Limerick, 1992; Peterson, 1988). Consequently, in cases where post-mortem findings of another incidental condition are reported along with a diagnosis of SIDS, the other condition tends to be recorded even if it was not considered to be the primary cause of death. In New Zealand, cases of SIDS with other identified conditions have been flagged on the register with a cot death "Y" indicator. This strategy resulted in the attribution of a higher proportion of at least post-neonatal deaths to SIDS (Ministry of Health, 1996) and is an illustration of how transfer from other diagnostic categories affects the reported incidence of the syndrome.

Whilst there are difficulties in establishing the exact number of cases, epidemiological studies generally have shown that fatalities from SIDS occur everywhere in the world, at a rate of 0.5-3.0 deaths per 1000 live births (Guntheroth, 1995; Hillman, 1991; Peterson, 1988). SIDS deaths are found in all sectors of society but not equally so. The incidence is significantly related to socio-economic class and ethnic group, occurring more often in the non-white, poor and less educated, and cultural factors also appear to play a role. In the United States, for example, black and Eskimo infants (but not Hispanics) are two to three times more likely to die of SIDS than those of white parents (Peterson, 1988;Valdes-Dapena, 1988, 1991). In New Zealand, the efforts of agencies such as the government-funded national Maori SIDS Prevention Programme established in 1994 (Tipene-Leach, Abel, Everard, & Haretuku, 2000) have met with limited success, for the SIDS rate for Maori infants remains more than three times higher than for the non-Maori population (Ministry of Health, 1998, 2002; S. Tonkin, 1995). In contrast, the incidence for non-Maori Pacific Islanders (who tend to share a situation of economic and social disadvantage in New Zealand's predominantly white society) parallels the much lower rates for European and Asian infants. Mitchell et al. (1993) investigated this discrepancy and found that cultural practices and a higher prevalence of known risk factors in Maori infants explained the differences, rather than any ethnic or genetic predisposition.

The overall incidence of SIDS has fallen dramatically in New Zealand in the last decade or so. In 1988, the rate was one of the highest in the world at 4.4 per 1000 live births. Since then the incidence has dropped by 70%, to 2.1 per 1000 in 1994, and 1.2 per 1000 in 1998, the year for which the most recent figures are available (Ministry of Health, 1996, 1998, 2002). The reduction over this period was attributed largely to the success of the National Cot Death Prevention Campaign in encouraging the cessation of the practice of laying infants in the prone position to sleep (Public Health Commission, 1995). Data from the Ministry of Health (2002) showed that in 1998, 43% of post-neonatal deaths and 21% of all infant deaths in New Zealand were attributed to SIDS. Of the 67 infants who died of SIDS that year, 39 were Maori (2.4 per 1000 live births), 4 were non-Maori Pacific Islander (0.7 per 1000 live births) and 24 were of European or Asian origin (also 0.7 per 1000 live births).

Risk Factors and Prevention

Many SIDS deaths occur in the absence of any known risk factors, but a variety of obstetric, maternal and infant characteristics are associated with an increased incidence of the syndrome. These include many of the markers of lower socio-economic status often associated with non-white racial groups in western society, such as low levels of maternal education, little or no prenatal or general health care, nutritional inadequacy, poor housing, high parity, extramarital and adolescent pregnancies (especially if there are multiple, closely-spaced pregnancies), maternal smoking or other substance abuse, low birthweight of the infant from either prematurity or intrauterine growth retardation, and previous medical need for admission to a neonatal intensive care unit (Gaines & Kandall, 1992; Guntheroth, 1995; Hillman, 1991; Mitchell et al., 1989; Peterson, 1988).

A seasonal pattern in the incidence has also been observed, with the highest number of fatalities in winter and the lowest number in summer (Peterson, 1988), and Hillman (1991) noted that for no known reason about 60% of SIDS victims are male. Surviving infants of a twin pair where one twin has died of SIDS were traditionally thought to be at considerable risk, even of dying on the same day (Guntheroth, 1995; Hunt, 1995; Smialek, 1986; Tyrrell, 1985). However, when Malloy and Freeman (1999) analysed the data for 1056 American twin pairs in which one or more of the infants died, they found that when birthweight was controlled for, twins were no more at risk of dying than singleton babies. Furthermore, the occurrence of both twins dying of SIDS was shown to be very uncommon indeed; a rate ratio of 4.0 per 100,000 twin pregnancies, reducing to 0.58 per 100,000 twin pregnancies for the likelihood of them both dying on the same day.

In the renowned New Zealand Cot Death Study (NZCDS), researchers analysed epidemiological data collected from 500 SIDS cases and 1800 controls in a three-year prospective case controlled study conducted between 1987-1990 (e.g., Mitchell et al., 1989; Mitchell et al., 1991). Their findings confirmed the known risk factors for SIDS and identified four major ones that were modifiable: prone sleeping position of the infant, bed-sharing between adults and infants, maternal smoking, and formula rather than breast feeding. Subsequent public health programmes to alter these parenting practices were launched and, as mentioned above, change in the practice of laying infants in the prone position to sleep has been credited with the substantial decrease in the incidence of SIDS in this country (Public Health Commission, 1995).

A dissenting opinion is that of New Zealand industrial chemist, Dr Jim Sprott, who contends that toxic gases emitted by cot mattresses are the main cause of SIDS, so that the prone sleeping position merely makes infants more susceptible to breathing in the fumes (Sprott, 1996). His campaign to promote the practice of wrapping cot mattresses in plastic covering as a prophylactic measure was denounced by the NZCDS team as having no basis in fact (Mitchell, 1998; Mitchell, Fitzpatrick, & Waters, 1998). Unfortunately, the public appeared to lose sympathy for the cause as a result of the widely publicised debate surrounding these conflicting views, and the outcome was a drastic reduction in donations for ongoing SIDS research.

Pathological Findings

SIDS deaths typically, but not necessarily, occur when the infant is asleep or unattended, often at night and it appears the baby dies quietly, without agonal outcry or apparent distress (Peterson, 1988). As *livor mortis* sets in, blood ceases to flow and settles to dependent parts of the body, giving the appearance of purple bruising which may be mistaken for traumatic injuries. Oedematous fluid fills the lungs then emanates from the nose and mouth as bloodstained froth, and the loss of muscle tone leads to pressure indentations of the face and nose where the infant's face has been pressed against the bed (Arnold & Gemma, 1991; Smialek, 1978). Not surprisingly, these features add to the horror of the loss experience and have often given cause for authorities to suspect that abuse has occurred. However, both the ensuing mandatory autopsy and police investigation to rule out child abuse or infanticide typically reveal no definitive cause of death (May & Breme, 1982-83; Schwartz, 1988).

According to Bergman (1986, p. 12) SIDS is rightfully known as "the disease of theories". Strictly speaking, SIDS is not a disease as such and the use of the term "syndrome" infers recognisable patterns or a constellation of events that possibly have different causal mechanisms (Valdes-Dapena, 1991). The downside of regarding SIDS as a single entity is that factors significant only to a subgroup of cases may be overlooked and hinder attempts to identify individual infants at high risk. On the other hand the concept of a syndrome provides a focus for systematic research of the clinical and epidemiological findings and is useful for counselling bereaved families looking for explanations for the death (Limerick, 1992).

To date, none of the various theories of causation have resulted in any definitive answers. The fashionable suggestions of the 1960s, for example, were that sudden infant deaths were attributable to non-arousal following asphyxia due to an evolutionary dive reflex; endocrine or metabolic disorders; neurological defects; overwhelming infections; or allergic reactions to cows' milk (Bergman, 1986). In the early 1970s attention became focused on the terminal mechanisms of death by detailed autopsy examination of SIDS victims. Interpretation of the findings was complicated by the scarcity of infants who died from other causes to be used as suitable controls, making it difficult to establish whether any abnormalities detected at post-mortem were unique to SIDS victims (Guntheroth, 1995).

Beckwith (1970b, 1975, 1988) reported that a consistent autopsy finding in SIDS victims was the presence of small petechial haemorrhages on the surfaces of the heart and lungs, thought to be evidence of fatal anoxia due to airway obstruction, most likely within the airway from spasm of the larynx or pharynx. However, the possibility of accidental or deliberate suffocation brought about by external pressure could not be ruled out completely hence the importance of the official death scene investigation in deciding the final diagnosis. One significant outcome of Beckwith's work was the view that apnoea (cessation of breathing for 20 seconds or more) due to airway obstruction was the "final common pathway" for SIDS (Bergman, 1986, p. 13).

Guntheroth put forward the suggestion in the early 1960s that there were non-fatal forms of SIDS, proposing that successfully resuscitated infants who had suffered apnoea with associated bradycardia (slowing of the heart rate) and cyanosis (blue discolouration due to inadequate oxygenation) had passed through a reversible form of the syndrome (Guntheroth, 1995). Camps (1965) tentatively named this phenomenon "near-miss" cot death. This line of thinking led to the belief that near-misses were closely related to SIDS, and therefore SIDS could be prevented. The search was then stepped up for infants who could be identified as at-risk of SIDS. Among those targeted were premature infants, those who displayed physiological markers thought to be signs of vulnerability, and infants born to families who had previously lost a child to SIDS (based on the assumption that there was a significantly increased recurrence rate of SIDS in families).

Preventative strategies began to be implemented, such as cardio-respiratory or apnoea monitoring of infants at home (Steinschneider, 1972, 1983) and close surveillance of infants' milestones and weight gains to detect those who developed more slowly than expected (Emery, Waite, Carpenter, Limerick, & Blake, 1985). In practice, home monitoring was found to be problematic, particularly if the equipment used had no inbuilt recording facilities to document physiological evidence of apnoea, bradycardia or hypoxia needed to verify notoriously unreliable parental reports of life threatening episodes. Monitors of this very basic type also tended to have high false alarm rates, causing unwarranted parental anxiety and in some instances, a correspondingly low rate of compliance with instructions for their continuous use (Beard, 1991; Guntheroth & Spiers, 1997; Hunt, 1995; Steinschneider & Santos, 1991; Stewart, Fleming, & Howell, 1993).

However, in the 1980s-90s there was a swing away from the opinion that near-miss incidents were closely related to SIDS. Apnoeic episodes in infants became known as apparent life-threatening events (ALTE) in acknowledgement that the link between apnoea and SIDS had been found to be much more tenuous than had been believed (Hunt, 1995; Limerick, 1992). In this vein, the American Academy of Pediatrics (1987) released a report raising doubts about the efficacy of home apnoea monitors to prevent SIDS deaths, citing evidence to show that in fact only a very small number of infants who died of SIDS have had a previous cyanotic apnoeic episode. Furthermore, estimates of the risk of recurrence of SIDS in families, thought in the 1980s to be anywhere from a three to ten-fold greater incidence in subsequent siblings, decreased with newer evidence in the 1990s that multiple SIDS deaths within families were sometimes due to filicide or to epidemiological risk factors, rather than natural biological causes (Beal, 1992; Hillman, 1991). Accepting that on average there is a five-fold increase in risk, Hunt (1995) calculated that in countries such as the United States, subsequent children have only about a 0.65% risk of also dying of SIDS and Beal (1992) concluded that the best advice that could be given to families was that the risk of another death from SIDS is very low indeed (<1%).

One current view is that there is no common pathway in SIDS, that it is not a single entity and because of the lack of conclusive evidence about the phenomenon, it cannot be said to be preventable (Bergman, 1986; Hillman, 1991; Limerick, 1992). Ranney (1991, p. 57) illustrates this perspective in the management of SIDS prevention:

> ... although SIDS can be diagnosed unequivocally by autopsy, and proper investigation, the underlying cause or causes of this elusive, silent killer still remain to be discovered. Logic reminds us then, that if the cause of SIDS is unknown, the event of a SIDS death must be both unpredictable and unpreventable. Add to this the personal accounts of both bereaved parents and emergency medical professionals whose collaborative efforts at resuscitation prove unsuccessful. The result: SIDS is not subject to interruption; it is not reversible despite timely and appropriate intervention. The first symptom is death.

Guntheroth (1995) was more cautious about these claims, suggesting that this interpretation and rejection of the evidence linking SIDS to near-miss events tended to be biased. He believed that it adopted a patronisingly dismissive attitude to parents' reports of apnoea in their infants and downplayed the significance of medical markers in order to assuage the guilt experienced by bereaved parents by reassuring them that the loss of their child to SIDS could not have been predicted or prevented, and was thus beyond their control.

Current Trends

Epidemiological studies continue to provide valuable sources of data for comparison of SIDS victims with controls. Results from controlled studies have demonstrated, for example, that SIDS victims are no more likely to have had recent colds or viral infections than control infants, and that there are no proven causal links between immunisations and SIDS (Guntheroth, 1995; Hillman, 1991). Mitchell, Stewart, and Clements (1995) reviewed the NZCDS data and went as far as to conclude that in New Zealand, where there had been widespread public concern about the safety of vaccinations, immunisation of infants did not increase the chance of SIDS and indeed may even lower the risk.

Other ongoing research seeks to identify potential susceptibility by investigation of maturational and physiological aspects of infants' development (Limerick, 1992). One promising line of enquiry is the "triple-risk" hypothesis which proposes that SIDS occurs during a critical developmental phase in infants who have an underlying vulnerability in homeostatic control (instability of body temperature, heart rate, respiration, upper airway reflexes and chemoreception, and an impaired ability to return to normal after stress has occurred), following exposure to an exogenous stressor such as the prone sleeping position (Hunt, 1995; National Institute of Child Health and Human Development (NICHD), 2002).

Summarising the status of SIDS research, Guntheroth (1995, p. 344) stated that given the "incredible reduction" in SIDS rates following epidemiological studies of prone sleeping positions, funding for investigation of autopsy findings and cardio-respiratory symptoms should be limited, and that apnoea monitoring (still promoted by SIDS support groups and used extensively for subsequent children in New Zealand despite their supposedly very low risk status) should be used only for the clinical management of prolonged apnoea, certainly not as a research tool. He argued that the key area now needing further investigation was "the psychology of bereavement" in SIDS families, unbiased by the assumption that SIDS cannot be prevented, nor by preconceived notions about the course of bereavement. This comment is particularly relevant because, as will be described, at about the time that SIDS deaths were beginning to receive official recognition, a new appreciation of parental grieving responses to foetal and infant deaths was also appearing in the literature, framed within the prevailing stage-like models of grief and loss of the time.

Loss of an Infant

Legitimisation of Maternal Grief

Most contemporary authors in the field of parental bereavement agree that in modern western society, the death of a child is a non-normative and traumatic event, one that is the source of intense and enduring distress for parents. Schmidt (1987) noted that the lack of a single English term such as "widow" or "orphan" to describe bereaved parents reflects the expectation that children should outlive their parents. Parenthood symbolises the ideals of society and provides parents with a caregiving role that has social value, responsibilities and associated status (Klass, 1988). When a child dies, the parent's internal assumptive structures, the belief systems by which one makes sense of the world, are shattered (Janoff-Bulman, 1989). Romanoff (1993) pointed out that a child's untimely death thus represents failure of parenting, threatens the parent's self-omnipotence, and emphasises the fragility of life and vulnerability of all relationships.

The loss of a child has even been likened to amputation of a body part, for a child is experienced as a part of the parent's self (Klass, 1988). Long before an infant is born, the parent begins to confer feelings, concerns, hopes, beliefs, needs and meanings onto the child-to-be, projecting on to the child the parent's best and worst images of the self. These representations may originate in the past (the child becomes the embodiment of past generations, carrying the genetic characteristics of one's forebears), the present (he or she may symbolise the idealised part of the parent's self and be the source and object of love, pleasure and delight, or be perceived as a tie and a burden), and the future (affording the parent the opportunity to start over, or helping assure the parent's immortality) (Rando, 1991; Raphael, 1983).

Rando (1991) observed that whilst in many respects the age of the deceased child is irrelevant, there has been a curious social tendency to deny the importance of parental loss in cases of miscarriage, perinatal losses and infant deaths. This, she suggests, might be because others outside the immediate family might not have had the chance to develop a bond with the child or see him or her as an individual with an identity as a real person within the family. Indeed, prior to 1970 there was very little recognition in the literature that the loss of a foetus or baby had any great impact on the parents and such events were generally treated by health professionals as being of little consequence.

In a critical review of adaptation following perinatal loss, Zeanah (1989) described how the prevailing paternalistic medical view was that because attachment bonds between the parent and infant would not have had time to develop, any grief reaction following perinatal loss would be minimal and parents would get over it very quickly. Expressions of parental distress were not acknowledged, and they were typically advised to put this unfortunate occurrence behind them and to conceive again soon. He noted that this approach had its origins in the psychoanalytic theoretical position of Helene Deutsch (1945) who believed that a "baby" of pregnancy could not be the object of maternal love or grief as it was merely a fantasy product of the mother's psychic life.

Marked changes in attitudes to events surrounding childbirth and the loss of an infant followed the release of the findings of a pioneering investigation of maternal grief conducted by Kennell, Slyter, and Klaus (1970). In this study the authors explored the concept of "bonding" between mother and infant, affirming that strong affectional bonds formed between mothers and infants antenatally, long before tactile contact was possible. Their data, obtained from a custom-designed questionnaire and semi-structured interviews with twenty mothers who had lost a newborn infant, revealed that acute grieving reactions were present in all mothers in their study, even in those who had never touched or held their dead infants. The findings demonstrated that grieving symptoms following perinatal deaths were similar to those that had been documented in survivors of other types of losses.

Subsequent investigations of infant deaths have generally confirmed that maternal grief in particular is very intense, especially in the early bereavement period. Qualitative studies have also been undertaken of the longer-term impact of perinatal loss on mothers whose grief had been disenfranchised by the belief that such losses were practically a non-event. L. Tonkin (1998), for instance, published the stories of 18 New Zealand women who had experienced stillbirths over 15 years previously and were still suffering the detrimental effects of the "conspiracy of silence" that had denied them the opportunity to grieve for their babies. For these women, later less significant losses triggered an acute grieving reaction that others found difficult to comprehend.

Following the realisation that the process of attachment starts antenatally, changes were made to previous hospital protocols that had attempted to protect parents by downplaying the loss and minimising their involvement with the dead infant. The revised policy adopted more of a hospice-type approach and parents were urged to confront and openly acknowledge the loss of both the baby and their unfulfilled hopes for the future. Without taking into account parents' idiosyncratic attachment and grieving styles, staff encouraged parents (sometimes insistently so) to view, touch or hold the dead infant, and to take steps to establish tangible reminders of their baby's life, such as naming the child, holding a memorial service, and retaining keepsakes such as photographs, locks of hair and other mementos that may serve as linking objects between the parent and the dead infant (Klass, 1993; Zeanah, 1989).

However, Leon (1992) cautioned that this practice was implemented without any understanding of its influence on the course of the mourning process, and with a zeal that could see it become just as institutionalised, prescriptive, and lacking in empathy as the one it replaced. Zeanah (1989) pointed out that any systematic investigation of the practice would not be ethically feasible given the enthusiasm with which it was instigated, and the impossibility of randomly assigning parents of dying or dead infants to contact and control groups. Recent evidence indicates that their concern is warranted. Nicol, Tompkins, Campbell, and Syme (1986) agreed that seeing and holding the dead baby helps to confirm the reality of the infant's death for the parents. Yet, in their study of perinatal losses, the small number of mothers who had seen but not held the baby showed pathological grieving patterns, scoring very highly on health deterioration measures up to three years after the loss. Similarly, Hughes, Turton, Hopper, and Evans (2002) found that women who had held their dead babies were more depressed than those who only saw them, whereas women who did not see the dead baby were least likely to be depressed. Mothers who saw but did not hold their dead baby had greater anxiety, showed more symptoms of post-traumatic stress, and their one-year-old subsequent infants were more likely to show disorganised attachment behaviour.

Socio-historical Context

Based on her decades of experience working as a medic cum anthropological researcher in rural Brazil, Scheper-Hughes (1992) has called into question the generalisability of this relatively new interpretation of maternal responses to early infant death. She described it as a contemporary western theory of maternal sentiment in which an attempt is made to create "a universal maternal script" without due consideration of the specific historical context in which a "matrix of images, meanings, sentiments, and practices are socially and culturally produced" (p. 341). Her book vividly portrays the pragmatics of motherhood in the Brazilian situation where poverty, starvation, violence and a high expectation of infant and child death are the norm. The Brazilian discourse associated with younger infant deaths reportedly has a strong religious tone and focuses, not on the narcissistic loss to the mother and father, but on the fulfilment of God's will, and the "fortunate" circumstance that it was a replaceable baby who died rather than one of the parents themselves.

Scheper–Hughes (1992) described a culturally-sanctioned Brazilian tradition in which infants whose survival was doubtful were deemed to be winged angels destined to be with God. As such they were treated as temporary visitors who either passively lacked any will to live or were born actually wanting to die. In a process that appears to be an excellent example of what Lindemann (1944) had called anticipatory grieving (though she did not recognise it as such), attachment bonds with the child were deliberately withheld, and minimal care provided. Mortal consequences still often occurred, even if the severity of the child's condition had been overestimated and care re-instituted, because the maternal bond to the child may have by then been irrevocably affected, resulting in emotional deprivation and physical neglect. If the child survived to the more viable age of about nine to twelve months, he/she was seen to acquire an identity as a person, and, as such, to secure a place within the family and to be worthy of a proper name. In the less likely event of death of the child after this age, the loss would be regarded as legitimate basis for a more intense grieving reaction.

Whilst she insists that she often witnessed maternal indifference, not emotional distress, following the death of an infant, Scheper-Hughes (1992) draws on the work of feminist writer Sara Ruddick (1989) to describe how Brazilian women, who are held to be totally responsible for their infants, are themselves paradoxically under the control of others, especially men. She cites examples of how expressions of emotion after the loss of an infant in the Brazilian context are quickly stifled with "ritualised words of consolation" (p. 441) by husbands and other attendants offering platitudes that might well have been heard in western settings in the pre-1970s era. Reinforcing the notion that the infant had not yet attained full status as a member of the family, mothers would be told, for instance, not to cry, to be strong, to endure, that the death was meant to be, the baby would have suffered or caused suffering if he/she had remained on this earth, and that more children would soon be forthcoming. It seems then that Scheper-Hughes is both arguing that the current model of bonding, attachment and maternal grief is merely a recent, western construction yet is also providing supporting evidence for the view that such a universal process does exist but that cultural and situational influences prohibit its full expression.

Smart (1992) investigated another context where repeated losses were the norm, and where it appeared that repression of emotion was a necessary and expected adaptive response to potentially overwhelming events. Reviewing the history of parental bereavement in Anglo American history she explored the commonly held belief that in the days when infant deaths were more prevalent in western society, parents were reconciled to the fact that many infants would die and would thus not grieve deeply for the loss. It became evident that before the mid-eighteenth century, women seldom kept diaries and so descriptions of maternal grief were rare.

Nevertheless, the few accounts chronicled of maternal grief after loss of an infant or young child indicated that although such deaths were commonplace, their frequency did not trivialise the loss. Indeed, it again appeared that mothers' grief was profound but its expression was constrained by the male-dominated societies in which they lived. This finding is in keeping with the view that grief (the experience of deep sorrow and pain as a reaction to significant loss) is a universal human response to loss, but mourning (the interplay of biological and behavioural reactions that affects the ways in which the sorrow is expressed in a range of expressive or restrictive norms) is culturally and situationally prescribed (Bowlby, 1980; Parkes, 1972, 1986; M. Stroebe & W. Stroebe, 1991).

Influential Models of Grief and Loss

Inevitably, the new understandings of foetal and infant losses reflected the dominant models of grief and loss of the era. The post World War II period through to the 1970s and beyond was the time when attachment theory was emerging, introducing an ethological perspective to the prevailing psychoanalytic understandings of the formation and loss of significant relationships, and to Lindemann's (1944) empirical study of grieving reactions that had led to the principles of preventative psychiatry underpinning crisis theory and community-based mental health programmes.

The Psychoanalytic Perspective

Sigmund Freud's (1917) classic psychoanalytic work *Mourning and Melancholia* is perhaps the best known source of much of the twentieth century western thinking about grieving reactions, whether to the loss of a loved person, or of some valued ideal or abstraction. Freud described mourning as a normal, stage-like and time-limited reaction to a significant loss. He portrayed grief as suffering likened to an open wound, and the work of mourning as a gradual healing process. In a state of profound mourning, the bereaved person was said to experience pain and feelings of acute loss associated with yearning for the loved one. Initially, the reaction was one of denial as the intolerable reality of the loss was rejected. There was often a temporary hypercathexis to the dead person as the mourner resisted withdrawal of their attachment to the loved one, evidenced by an intense preoccupation with the lost person, and a loss of interest in anything that was not connected with the deceased. Provided this reaction was time-limited, it was not seen as problematic. However, Freud stated the person should be able to move on from that point, to review their memories and expectations of the deceased, to accept the reality that the lost person no longer exists, and to withdraw the libido from its attachment to the lost object. Successful mourning thus culminated in the severing of the attachment to the deceased (the process of decathexis), freeing the ego to invest mental energy in new relationships (cathexis).

Pathological forms of mourning tended to go unrecognised and sometimes presented instead as psychiatric disturbances such as melancholia, or as self-torment and blame when ambivalence resulting from unregulated intrapsychic conflicts came to the fore in a relationship leading the mourner to believe that he or she had desired the loss of the loved one. Building on the notion that resolution and integration of unconscious losses and traumas were crucial phase-specific tasks of infancy and childhood, Helene Deutsch (1937) drew attention to the phenomenon of "absent grief" as another variant of pathological mourning, arguing that in the event the ego was to unable to undertake the function of mourning, defence mechanisms would be activated, expressed in anxiety resulting from infantile regression, or in extreme cases, a lack of affect altogether. In the same vein, Melanie Klein later proposed that pathological grief reactions arose from fantasies generated from internal conflict between early aggressive and libidinal drives. Her contention was that in the infantile depressive position, the child experienced both persecution from the "bad object" and pining for the loved or "good object" that was a source of reassurance against anxiety. The loss of a loved person in adulthood then triggered a comparable mourning process accompanied by unconscious fantasies of having lost the internalised "good object" as well, threatening disruption of the mourner's inner world (Klein, 1940).

It is well known that later in life Freud himself suffered two devastating losses, the death of his own 27-year-old daughter Sophie and then of her four-year-old son. The unbearable pain and deep depression he suffered led him to conclude that he would never again be the person he once was. He was unable to cut the ties with those he had loved and lost and became indifferent to his own prospective death of cancer. As he wrote in a letter to a friend who had lost a son (from E. L. Freud, 1961, p. 386):

> We find a place for what we lose. Although we know that after such a loss the acute state of mourning will subside, we also know we shall remain inconsolable and will never find a substitute. No matter what may fill the gap, even if it be filled completely, it nevertheless remains something else. And actually this is how it should be. It is the only way of perpetuating that love which we do not want to relinquish.

Although Freud's personal experiences caused him to reconsider his position that normal mourning consisted of gradual withdrawal of the libido invested in the lost object and the cutting of attachment bonds, this new understanding was, unfortunately, never elaborated into his formal writings on the topic.

Lindemann's (1944) "Grief Syndrome"

Another classic work, by Erich Lindemann (1944), an American psychiatrist at Harvard University, acknowledged the psychoanalytic contribution to the understanding of delayed or morbid reactions to bereavement but signalled a shift to a more practical and empirical approach to the study of the grieving process. Lindemann drew on four main groups of research subjects: survivors of a tragic fire in the Cocoanut (sic) Grove nightclub in Boston in 1942; relatives of patients who died in hospital; psychoneurotic patients who had lost a family member during the course of treatment; and relatives of members of the armed forces. In keeping with his medical orientation, he described acute grief as a definite syndrome with psychological and somatic symptomatology that may appear immediately after a crisis, or be delayed, exaggerated or apparently absent. Duration of a stage-like grief reaction was expected to be one to two years, depending on the success with which a person completed the "grief work", which included emancipation from the bondage to the deceased, readjustment to the environment in which the deceased is missing, and formation of new relationships.

The "acute grief syndrome" described by Lindemann (1944) included several main patterns:

1. Sensations of somatic distress occurring in waves lasting from 20-60 minutes at a time; a feeling of tightness in the throat; choking and shortness of breath; sighing; an empty feeling in the abdomen; lack of muscle power; and intense subjective distress described as tension or mental pain. The bereaved person soon learns that the symptoms can be triggered by visits and references to the lost person by people offering sympathy, and to avoid this distress, may withdraw from social contacts.
2. There is a sense of unreality, of feeling distanced from other people, and an intense preoccupation with the image of the deceased. The dead person may become an imaginary companion, and the mourner may feel that he/she is going insane.
3. Another preoccupation is with feelings of guilt, exemplified by self-accusations of negligence and exaggeration of minor omissions.
4. Hostile reactions to attempts by others to initiate contact can lead to isolation. There is a loss of warmth in relationships with other people, with a tendency to respond with irritability and anger, and a wish not to be bothered by others at a time when they are making a special effort to offer friendly support.

5. Loss of usual patterns of conduct. Activity is not slowed, and there may be a rush of speech, especially about the deceased. There is a restlessness, difficulty in sitting still, and a continual searching for something to do but at the same time, an inability to initiate and maintain organised patterns of activity. The bereaved clings to the normal patterns of living but the activities require a great deal of effort. So much of the usual activity was done in some meaningful relationship to the deceased and has now lost its significance. Initiating social interaction is difficult and there may be a dependency on anyone who will stimulate them to activity and serve as the initiating agent.
6. A sixth pattern, thought to be indicative of bordering on the pathological, is when there appears to be displacement of the deceased's image into the survivor. The survivor takes on the mannerisms and traits of the deceased, perhaps even reporting symptoms shown in the final illness of the bereaved.

Distorted reactions to loss.

Distorted pictures of particular aspects of the grief syndrome were said to sometimes occur in place of the typical syndrome, but with appropriate interventions these could be translated into a "normal" grief reaction. Left untreated, severe reactions included agitated depression with tension, insomnia, feelings of worthlessness, bitter self-accusation, an obvious desire for punishment, and suicidal tendencies. The most common problematic reaction encountered was an initial absence of grief followed by a delayed reaction to the loss many years later. Like the participants in L. Tonkin's (1998) study of women who had failed to mourn their stillborn infants, a much later loss was found to precipitate renewal of the suppressed grief reaction.

The intensity of the relationship with the deceased also seems to have been a significant factor, and a strongly ambivalent relationship with the deceased sometimes led to the conspicuous display of hostile feelings. Interestingly, Lindemann (1944) observed particularly severe ambivalent reactions in mothers who had lost young children. This response is consistent with the neo-Freudian psychiatric and psychoanalytic perspectives of theories of maternity (Benedek, 1959, 1973; Deutsch, 1945) in which problems and conflicts related to the female sexual identity and rejection of the infant are viewed as unconscious emotional dynamics that are present in varying degrees in every woman who faces pregnancy and motherhood.

Anticipatory grief.

Lindemann (1944) was the first of many authors to document the phenomenon of “anticipatory grief”. He observed that even the threat of death or separation could trigger a bereavement-type response, characterised by “depression, heightened preoccupation with the departed, a review of all the forms of death which might befall him, and anticipation of the modes of readjustment which might be necessitated by it” (pp. 147-148). Importantly, as was described in expected infant deaths in the Brazilian context, the protective effects of anticipatory grief were likely to become problematic in circumstances where the anticipated loss did not eventuate but emotional investment in the person expected to die had begun to be withdrawn as part of the emancipatory process. The ongoing attachment relationship with the person who then did not die often became troubled, with defensive strategies common, such as distancing, and attempts to end the relationship by divorce or other means. This same dynamic is identifiable in the Vulnerable Child Syndrome, discussed below, when the anticipated demise of a child does not eventuate (Green & Solnit, 1964).

Clinical applications.

Lindemann’s detailed descriptions of the remarkably uniform symptoms experienced by bereaved persons have since been used by Engel (1960) to support his thesis that the consistent course of “uncomplicated grief” (p. 18) can be explained by a model of grief as a “disease”. Other clinicians in the field of grief counselling (e.g., Lieck & Davidsen-Nielsen, 1991; Parkes, 1972, 1986; Worden, 1982, 1991) have also found the predictability of grieving responses and the associated tasks of mourning to be useful in their therapeutic work with bereaved persons.

Bugen (1977) built on Lindemann’s findings in the development of an alternative model of grieving responses used in clinical settings, one of the very few that did not deem the progression through stages to be central in understanding the mourning process. He viewed the context of the death and the nature of the relationship with the deceased as the key determinants of the symptoms and course of mourning. These variables were shown on a 2x2 matrix to predict the duration and intensity of the reaction to the loss by the centrality of the relationship with the deceased, and the perceived preventability of the death. The loss of a central relationship by means of a preventable death resulted in an intense and prolonged reaction, but in an intense but shorter reaction if the death was perceived as unpreventable. Milder reactions were predicted if the death was of someone with whom there was only a peripheral relationship, but again these tended to be more prolonged if the death was preventable.

Bereavement and post-traumatic stress.

The fact that so many of Lindemann's subjects had suffered the loss of a loved one in traumatic circumstances raises the question of whether bereavement reactions differ from the intrusive and avoidance symptoms of post-traumatic stress disorder (PTSD). The Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-IV, 1994) characterises PTSD as intrusive, repetitive re-living of the trauma in thoughts, images or actions, including nightmares about the event and dissociative flashback episodes; intense distress at exposure to events associated with the trauma and on anniversaries of the event, avoidance and numbing of responsiveness symptoms, often with a sense of a foreshortened future; and persistent symptoms of hyperarousal. DSM-IV classifications differentiate post-traumatic stress reactions from uncomplicated bereavement reactions that take a predictable course and rarely lead to adverse long-term effects. Middleton, Raphael, Martinek, and Misso (1997) pointed out that a bereaved person is likely to experience both these overlapping types of reactions after a traumatic loss, although one or the other may predominate. They observed that several studies have reported higher levels of unresolved grief after sudden, unexpected, violent, or untimely deaths, and in such circumstances the effects of trauma may need to be worked through first before the survivor can grieve.

Crisis theory and preventative psychiatry.

One of the important contributions of Lindemann's research was the development of the fundamentals of "crisis theory" as a conceptual framework for preventative psychiatry (Caplan, 1964, p. 10). Lindemann's findings that trauma and unresolved grief leave the person vulnerable to a wide range of physical, emotional and mental disorders was influential in the establishment of community mental health programmes, such as those set up by the SIDS networks in the 1970s and beyond, aimed at prevention of psychopathological sequelae from unhealthy coping with bereavement. Programmes were designed to lower the incidence of new cases of mental disorder in the affected population over a specified time period by counteracting harmful circumstances before they had a chance to produce illness. Crisis theory thus extended the application of Lindemann's findings to a wide range of situations where potentially overwhelming stresses are experienced. Emphasis was placed on "coping" and the implementation of short-term mental health interventions, rather than on the psychoanalytic aspects of the grieving processes (Caplan, 1964; Horacek, 1991; May & Breme, 1982-83).

Elaborating on this point, Rubin (1981) later noted that the shift of emphasis away from the bereaved person's attachment and detachment *vis-à-vis* the deceased (the psychoanalytic model) heralded the beginnings of the "personality-change model" of loss underpinning crisis theory. From this perspective, personality patterns within the survivor were expected to change in response to the major crisis of loss rather than as a direct manifestation of a changing relationship with the deceased. A predictable bereavement reaction was anticipated, consisting of an initial period of disorganisation triggered by the crisis; followed by a time of reorganisation when the person is returning to a more normal pattern of behaviour; and, finally, a stable change in personality to either the pre-loss pattern or to a new pattern, often resulting in an alteration in one's sense of self. The attachment model of loss and grief, described below, appears to incorporate the key aspects of both these approaches.

Attachment Theory

British psychiatrist John Bowlby developed the basic tenets of what has became known as attachment theory in the post World War II years. Drawing on an eclectic mix of psychoanalytic, cognitive, cybernetic and ethological theories, he proposed that attachment behaviours and relationships had an important evolutionary function for human survival across the lifespan (Bretherton, 1995). As reflected in the definition below, any threat to the integrity of attachment bonds is met with strong resistance:

> What for convenience I am terming attachment theory is a way of conceptualising the propensity of human beings to make strong affectional bonds to particular others and of explaining the many forms of emotional distress and personality disturbance, including anxiety, anger, depression and emotional detachment, to which unwilling separation and loss give rise (Bowlby, 1977, p. 202).

Within the attachment model the term "mourning" was used to describe all the psychological processes, both conscious and unconscious, that were set in motion by a significant loss, irrespective of their outcome (Bowlby, 1980, pp. 16-17). Grieving was defined as the condition of the person experiencing the variety of painful affects and distress that are evident in the bereavement period, during which mourning is largely unresolved (Bowlby, 1980; Zeanah, 1989), whereas rituals denoting public expression of mourning within a particular cultural setting were labelled "mourning customs" (Bowlby, 1980, p. 16).

Goal-directed systems.

The parent-child relationship is said to be characterised by two dyadic behavioural and representational processes: an attachment system that utilises child behaviours to maintain proximity to the parent in times of threat, and a complementary caregiving system in the adult, both of which serve the biological function of protecting the child from danger (Pianta, Marvin, Britner, & Borowitz, 1996; Zeanah et al., 1997). Bowlby (1969) described how human infants demonstrate innate, species-specific behaviours to elicit care and keep caregiving adults within close proximity. Attending adults, in turn, are predisposed to respond to infants' displays of attachment behaviours, such as crying, sucking, smiling, clinging, calling and following. Within this goal-directed system, attachment behaviours are activated by the need for closeness, care and protection and are terminated by the appropriate caregiving response.

The affectional bond from parent to infant is initially a representational one, typically developing in the prenatal period, well before the parent has seen or touched the child. Later studies have shown that maternal feelings of attachment to the foetus strengthen in the second trimester when quickening is experienced, and then even more so as the time of birth approaches (Leon, 1992; Zeanah, 1989). In contrast, infants at first direct their care-eliciting strategies indiscriminately toward any available caregiver. By the middle of the first year of life, their attachment behaviours become focussed upon a preferred attachment figure, but with lesser attachments forming as well to a hierarchy of other significant people with whom they have regular contact. A strong emotional commitment by the parent to the offspring (usually referred to as bonding) is therefore evident well before a reciprocal attachment response develops in the infant.

Influenced by the thinking of co-researcher Mary Ainsworth, who had earlier studied security theory with William Blatz at the University of Toronto, Bowlby (1977) noted that when the situation is non-threatening and the attachment figure is perceived as available, the child will cease to show attachment behaviours and will happily explore the environment, using the caregiver as a secure base to return to for comfort if the need should arise, especially if feeling tired, unwell or frightened. Once the phase of intense, clear-cut attachment to specific persons is reached, any thwarting of the child's attempts to maintain proximity to the principal caregiver results in separation anxiety and considerable distress, particularly in unfamiliar situations or situations of threat. Unwilling separation activates escape and attachment behaviours but the (usually temporary) unavailability of the attachment figure means these behaviours cannot be immediately terminated. When the attachment system is functioning optimally, reunion with the attachment figure after a brief parting quickly allays separation distress.

Moreover, this pattern is not confined to infancy alone. During the preschool period developmental advances in the child's cognitive, linguistic, representational, social-cognitive, and emotional capabilities allow the relationship between parent and child to become more interpersonally connected, while the child's increased autonomy results in a decreased need for proximity (Cicchetti & Toth, 1995). An attachment figure later in life could be a romantic partner, spouse, parent, or even a child. Bowlby (1977) described how throughout life, human beings will use their family of origin (or substitute relationships created for themselves) as a foundation from which to operate, moving away for increasing time-periods and distances, yet maintaining contact and sooner or later returning to the security of that base. The implication was that one's ability to form trusting relationships and affectional bonds with others throughout the lifespan was directly influenced by the representational internal working models of attachment built as a result of experiences with primary caregivers in early life. These internal working models were in turn carried forward unconsciously into attachment relationships with one's own children, creating an intergenerational effect, a phenomenon vividly portrayed by Selma Fraiberg's use of the metaphor "ghosts in the nursery" in her classic case descriptions of impaired mother-infant relationships (Fraiberg, Adelson, & Shapiro, 1975).

Eagle (1995) noted that in both attachment theory and contemporary psychoanalytic theory there is a basic assumption that "in order to experience oneself as a separate and individuated person who is comfortable exploring the world, one must have experienced adequate early caring and have been able to have internalized these early experiences". One of the critical factors in development affected by this process is the way one manages the interplay between "relatedness versus autonomy" (p. 125). He pointed out that whilst the attachment literature describes this dynamic balance of closeness and distance over time in terms of "attachment and exploration", psychoanalytic theorists have also referred to similar concepts; for example, Mahler's "symbiosis and separation-individuation", Fairbairn's "primary identification and separation"; and Winnicott's linking of the "introjection of an ego-supportive environment to the capacity to be alone". Erikson (1968), of course, portrays this same dynamic in the sequencing of his developmental crises of "trust versus mistrust" in infancy, and "autonomy versus shame and doubt" in toddlerhood.

In a similar vein, Solomon and George (1996) described a flexible pattern of care that emerges in the caregiving system relative to the developmental age of the child and the competing goals of the caregiver within the cultural context they live. In middle-class western contexts, the mother's care and protection of the infant is regulated primarily by her prompt and appropriate response to infant cues in the first year of the infant's life, but in the second year, this changes subtly in keeping with the child's increasing individuation, capabilities and desire for autonomy, to become more focussed on socialization and discipline in toddlers and preschoolers. Solomon and George (1996) argued that the caregiving system is linked developmentally and behaviourally to attachment, but is still distinct from it. They described the transition to parenthood as a time in which the parent undergoes a reorganisation of the self from one who is attached, to a mature representation of oneself as caregiver. Once this transformation has been achieved, situations of danger and threat to the child should activate the caregiving system. However, a mother's evolutionarily adaptive goals are clearly not confined to caring for and nurturing this one child. Instead, she must balance her caregiving role with other responsibilities and divide her resources to meet her competing needs to function, for instance, as spouse, breadwinner, and mother to other children. Interests of mothers and children are thus said to overlap but to not always be compatible.

Mourning responses to prolonged separation.

Whilst based at the Children's Department at the Tavistock Clinic in London, Bowlby studied first-hand the responses of hospitalised and institutionalised children who were separated from their parents for a more extended period of time. With the assistance of James Robertson who collected field data on hospitalised children, Bowlby demonstrated that young children, particularly those between the ages of 12 months and three years, exhibit a specific stage-like mourning reaction to prolonged separation (Bowlby, 1961).

In the initial phase, that of denial and protest, acute separation anxiety and distress is evoked by separation from the caregiver. The young child reproachfully *protests* the separation, crying and constantly searching in a desperate attempt to recover the lost attachment figure. During this first phase, which may last several days, and in the following phase of *despair*, feelings are ambivalent, with mood and action swinging between angry demands for the return of the person and despair expressed in subdued pining. Alternating hope and despair continue for some time but eventually the child seems to become emotionally *detached* from the parent. Following reunion with the attachment figure, the infant is typically unresponsive at first, and then shows a storm of ambivalent feelings with rage, clinging and anxiety and unwillingness to let the person out of sight. This behaviour is usually short-lived and is an expression of the child's simultaneous needs to seek comfort and to show anger at the separation. Much later reunions (after six months or more) may lead to longer-lasting disruption of attachment patterns, with the child showing a coldness and absence of attachment behaviours, as if to punish the parent for abandoning him/her.

Publications arising from the work by Bowlby and Robertson on infant mourning attracted the attention of Colin Murray Parkes who had independently been examining the similarities between grief and mourning in humans and other animals (Parkes, 1986). Parkes joined Bowlby at the Tavistock Institute in 1962 and conducted a prospective study of adult grief reactions, interviewing bereaved widows in the London area at various time intervals after the loss of their husbands. As an outcome of Parkes' subsequent collaborative work with Bowlby, an influential joint paper was published in which the phases of the long-term separation response in young children identified by

Robertson and Bowlby were elaborated into four analogous phases of mourning in adult life (Bowlby & Parkes, 1970). These were (a) *numbing*, lasting from a few hours to a week and sometimes interrupted by outbursts of intense distress and/or anger, (b) *yearning and searching* for the lost person, lasting some months or even years, (c) *disorganisation and despair*, and finally, (d) a greater or lesser degree of *reorganisation.*

At around the same time, Elisabeth Kübler-Ross in Chicago was gathering data for her stage-like model of dying, popularised by her book *On Death and Dying* (Kübler-Ross, 1969). The parallel phases of denial, anger, bargaining, depression, and acceptance she found to be experienced by terminally ill cancer patients and their families, built upon Lindemann's (1944) concept of anticipatory grief, and reportedly owed much to the thinking of Bowlby, Parkes and Robertson (Bretherton, 1995). In turn, Dame Cicely Saunders, founder of the modern hospice movement in the UK, with which Parkes himself was closely involved, adopted the tenets of attachment theory incorporated in the Bowlby-Parkes and Kübler-Ross models in her pastoral work with both the dying and bereaved (Parkes, 1986).

Like Bowlby, Parkes (1972) discussed the grieving process as an inescapable outcome of the vulnerability that arises from the universal human predilection to form and maintain attachment bonds to significant others across the lifespan. In an often cited passage he wrote, "The pain of grief is just as much a part of life as the joy of love; it is, perhaps, the price we pay for love, the cost of commitment" (Parkes, 1972, p. 20). He added that the most characteristic features of grief were not the non-specific symptoms such as reactive depression or anxiety, but the pangs of grief experienced as waves of acute psychological pain, and the pining and yearning for the lost person associated with severe separation anxiety. Parkes' descriptions of the symptoms experienced by the mourners closely resembled those detailed by Lindemann (1944), but were explained in ethological terms as evidence of the innate response to attempt to recover the lost person, in combination with a flight/fight type alarm reaction to a perceived situation of threat. Preoccupation with the lost person, hallucinations and the apparently aimless restlessness observed in the newly-bereaved widows, for example, were seen as expressions of the natural compulsion to search for the lost person who, unfortunately, could never be recovered.

The endpoint of mourning.

Unlike for the hospitalised children who were eventually reunited with their parents, the separation reaction experienced by the bereaved would never be alleviated by the physical return and comfort of the deceased person. Instead, the final phase of reorganisation for widowed adults was a time for facing reality and for making meaning of the loss experience. The process involved a realistic appraisal and painful acceptance of the irreversibility of the death and of the associated secondary losses, such as roles, status and income. Bowlby (1980) stressed that this was not just a release of affect but an important cognitive process in which internal representational models become realigned to fit with the changes that have occurred in the life of the bereaved. Before any plans for the future can be made, the relationship must be redefined, resulting in a changed representation of oneself, and one's situation (for example, no longer married but widowed).

Bretherton (1995) drew attention to the fact that the attachment model thus portrayed grief as a process toward attaining a new identity, rather than a static state. This important aspect of the theory was also emphasised by William Worden (1982, 1991) in one of the most well known applications of the attachment model of grief for mental health practitioners dealing with the bereaved. Worden set out four "tasks of mourning" that the bereaved must accomplish to achieve resolution of the loss. The first task is to accept the reality of the loss, overcoming disbelief and denial of the situation, and accepting that the death is irreversible. Secondly, the person must work through the pain of the loss, without defensively minimising the magnitude of the event or blocking painful thoughts. Thirdly, he or she must learn to adjust to an environment in which the deceased is missing. In keeping with Bugen's (1977) model, completion of this task was affected by the context of the loss, and the significance of the deceased person and of the roles they played in the life of the survivor. Finally, the bereaved person must emotionally relocate the deceased and move on with life. With the help of the counsellor, the task becomes to not so much give up the relationship with the deceased but to find an appropriate "place" for the person in the survivor's emotional life, one that does not downplay the significance of the relationship with the deceased but allows the bereaved to carry on living effectively in the world.

Worden (1991) wrote that in the earlier 1982 edition of his book he had labelled the final task of mourning as "withdrawing emotional energy from the deceased and reinvesting it in another relationship" (p. 16). He revised this earlier statement when he found that it had been too easily misinterpreted to mean that one could literally pull out an emotional plug from one person and mechanically reattach it to someone else; a message he had never intended to convey. Careful to note that it is impossible to set a definitive date for when mourning should be completed, Worden stated that one of the benchmarks of a completed grieving reaction is the ability to think or talk about the deceased without acute mental and physical distress. He accepted that there would always be sadness associated with the loss but with the passage of time the pangs of grief would become less acute and are felt less frequently. The endpoint of the process was not a return to one's pre-grief state but the achievement of a sense of new identity and direction in life.

Also pointing to the redefined sense of identity as an outcome of loss, Weiss (1993) set out three key processes that appear to be involved in movement to recovery following a severe loss: cognitive acceptance (reaching closure by having developed a subjectively satisfactory account of the causes of the loss event), emotional acceptance (achieved following the neutralization of memories and associations), and identity change (achieved when individuals are able to view the connection to the attachment figure as part of a past rather than present self, and are able to make commitments to new relationships). He noted that in loss situations such as the death of a child, recovery could be impeded by a continuing sense of responsibility to the deceased. Feelings of protectiveness and commitment to the child's well-being had become so well-engrained that progress toward a return to normal functioning would appear to be disloyalty, especially in cultural situations in which persistent grieving is expected. As he put it: "The pledge to never desert, never to forget can become a pledge never to recover" (Weiss, 1993, p. 281).

The "Continuing Bonds" debate.

In his discussion of reorganisation as the final phase of the mourning process, Bowlby rejected Freud's one-time belief that decathexis was the endpoint of mourning, noting that Freud himself had later suspected that this was never completely attained. Bowlby stated quite unequivocally that findings from studies of widowed adults gave no support to Freud's earlier claim that the psychical task of mourning was solely to detach the survivor's memories and hopes from the dead (Bowlby, 1980, p. 100). Citing examples from Parkes' work of the mourning of widows, he described the benign and comforting experience of an ongoing relationship with the deceased, concluding that in the majority of instances where a continuing sense of the presence of the deceased is experienced there is no unfavourable outcome. Exceptions would be when the continuing bond was experienced as a frightening or disorganising ghost-like phenomenon, or when it substantially disrupted one's long-term ability to function in life.

Given Bowlby's clear position on this matter it is difficult to credit the challenge to the attachment model of grief in an influential book entitled *Continuing Bonds: New Understandings of Grief*, edited by Klass, Silverman, and Nickman (1996). Contributors to the volume claimed that Bowlby and Parkes subscribed to the Freudian notion that the purpose of the work of mourning was to sever the attachment with the deceased and so did not accept that "continuing bonds" with the lost person are a normal part of the grieving process. In a detailed review of the book, Fraley and Shaver (1999) concluded that it was unwise to celebrate *all* continuing bonds, regardless of their nature, but that overall, the case for "continuing bonds" was actually compatible with, not antagonistic to the principles of attachment theory. They pointed out that the editors of the volume disregarded Bowlby's description of reorganisation toward a new identity in adult life as the final phase of mourning in adults, and had wrongly claimed that "detachment" was the end stage of the Bowlby-Parkes model. Furthermore, they noted that the "continuing bonds" proponents failed to appreciate that Bowlby had used the term detachment, not in the context of bereavement, but in reference to the defensive response of a young child when *reunited* with an attachment figure after a period of separation.

Two influential studies of parental grief exemplified the shift in thinking toward a greater appreciation of the continuing relationship of the bereaved person with the deceased. Firstly, Peppers and Knapp (1980a, 1980b) conducted a retrospective study of 65 women who had experienced a perinatal loss an average of eight years earlier. They found that for most participants the sadness and pain became muted over time but that the loss was never fully resolved. Mothers reported that they had soon resumed a fairly normal existence but experienced an indefinable something that still remained, reminding them that their lives would never again be the same. They described an unresponsive ache or emotional dullness was always there in the background, tucked away, but re-emerging in response to certain triggers such as anniversaries and special occasions, accompanied by a mild form of sadness, tears, or anxiety. The authors called this "shadow grief" and defined it as the sense of loss that parents retain throughout their lifetime, tending to recede or intensify as a function of the immediate events in the parents' lives. They acknowledged that this post-mourning response is seen after types of losses as well, but suggested that for mothers who have lost a very young infant, it served a particular purpose, that of keeping the memory of the child alive, for if the mother did not continue to remember it was likely that nobody else would, and the brief existence of the child could be forgotten forever.

Secondly, in a longitudinal study over a period of nine years, Martinson, Davies, and McClowry (1991) followed up parents of children who had died of cancer and found that by two years post-loss, 83% of parents reported they had returned to their normal functioning and levels of depression had stabilised. However, the relational aspects of the mourning process persisted and parents continued to change over the years as the loss was integrated into their lives. Three main patterns of parental grieving were identified in the ways the parents coped with the "empty space" created in the family by the child's death. The first pattern, "getting over it" was shown by parents who adopted a matter-of-fact approach to the loss and stated that the death no longer had any effect on their current life. They were no longer experiencing feelings of intense grief, and their memories of the loss were fading. A second pattern was to "fill the emptiness" with replacement activities, roles and relationships that would take their minds off the loss. Some chose altruistic involvement with other bereaved parents as their coping strategy, continuing to define their identity primarily as a "bereaved parent" until they felt the empty space was more or less "filled" for them. A third pattern was seen in parents who consciously maintained the empty space reserved for the dead child alone as long as 7-9 years after the loss. "Keeping the connection" with their inner representation of the dead child was the focal point of their lives and was associated with a persisting sense of loss and vivid recollections of the deceased child that they vowed not to forget.

Pathological Mourning.

The work of Parkes and Bowlby, both British psychiatrists, continued the medical analogy of grief as a wound that must heal, and in some respects as like an illness that can be beset by complications. However, like Worden (1982, 1991), both acknowledged the idiosyncratic nature of the grieving experience, commenting that the course of mourning may take considerably longer than the one to two year time period suggested by Lindemann (1944), and that clinicians often have unrealistic expectations regarding the speed and completeness with which mourning is accomplished after a major bereavement (Parkes, 1986).

The attachment model was useful in describing, rather than prescribing, normative reactions to loss, and Bowlby, like Freud, Deutsch and Lindemann before him, identified recognisable patterns of pathological mourning ranging from chronic mourning to an apparent absence of grief, or even euphoria (Bowlby, 1980). Antecedents of these variants of mourning behaviour continued to be identified as early life experiences, a line of thinking that was later developed further by attachment researchers who investigated the phenomenon of unresolved loss in adults' attachment patterns (e.g., Main, 1995). Bowlby found that individuals who displayed chronic mourning were consumed with protracted grief and an inability to return to anything near normal functioning. They were likely to have developed anxious attachment patterns in childhood in response to death of a parent or to parental rejection, threats of abandonment or violence, withdrawal of love, and separations.

In contrast, inhibition or absence of mourning was viewed as a prolonged extension of the phase of numbing, commonly leading to long-term adjustment problems and a resurfacing of the grieving reaction at a later point if the loss was not addressed. Inhibition of mourning typically occurred in individuals who had learned to be deeply distrustful of close relationships and were unwilling to rely on other people. To disguise an unexpressed yearning for love and support, they had developed a style of excessive self-reliance that was sometimes accompanied by compulsive (and possibly intrusive) caregiving for others. When confronted with a significant loss, such individuals coped with the potentially painful experience by a process of defensive exclusion in which he or she deliberately or automatically suppressed and redirected thoughts and feelings about the loss. Eventually this led to the formation of segregated or dissociated memory systems for the loss experience. The memories continued to exist in an unintegrated form, their partial activation priming the attachment system, unconsciously influencing emotions and behaviour of the person. As described below, later researchers used the Adult Attachment Interview to bring these unconscious processes to the fore, examining narrative features of the interview responses to classify such individuals as "unresolved or disorganised with respect to loss or trauma".

Bowlby (1980) accepted that in extreme cases of chronic non-engagement and inhibition of interdependent attachment relationships, emotionally impoverished individuals could be relatively immune to loss, showing a genuine absence, rather than defensive suppression, of grief. However, the view that grief work was an essential part of the recovery process after loss has been challenged by several researchers (e.g., M. Stroebe & W. Stroebe, 1991; Wortman & Silver, 1989;) who reported research findings suggesting that those who displayed the most distress in the early stages of bereavement tended to have the least favourable outcomes in the longer-term, and that those who showed an avoidant initial response to the loss do not inevitably suffer later detrimental effects. The picture is further complicated by inconsistencies in the way the concept of grief work has been operationalised, and the fact that researchers have tended not to look at personality factors or the previous attachment experiences of mourners that would moderate between the defensive suppression and experience of grief.

The Strange Situation Procedure.

Bowlby's theory of attachment was extended by Ainsworth (1969) who expanded the concept of the caregiver as a secure base from which the infant could explore. To reiterate: an infant develops a sense of security from a relationship with a primary caregiver, usually but not necessarily, the mother who is perceived as consistently available, emotionally and physically. A securely attached infant was thus confident that the primary attachment figure or acceptable substitute was there to provide warm, responsive care and that in times of uncertainty, he/she could return to that secure base for help or protection. Confidence engendered by the early relationship resulted in cognitive internal working models that could be carried forward into future relationships in childhood and adulthood.

The development of a tool to empirically measure the quality of attachment relationships between caregivers and young children who had reached the phase of intense, clear-cut attachment was the main substantive contribution to attachment theory by Mary Salter Ainsworth. The Strange Situation Procedure (SSP), as it was named, examined the response of the parent-infant dyad when the caregiving system was exposed to an increasing level of stress in a series of separations and reunion episodes (Ainsworth, Blehar, Waters, & Wall, 1978). Primary caregivers (usually mothers) and infants of about 12 months of age were brought to a laboratory setting and filmed through a two-way mirror as they experienced the eight steps of the procedure. Initially they were taken to a playroom where "secure-base" behaviour was observed as the child played with the toys in this comfortable but unfamiliar environment. The child's reaction to increasing situations of threat was recorded as first a stranger arrived and talked with the mother, and then when the child was left with the stranger as the mother briefly left the room, closing the door behind her. Reunion behaviour was of particular significance in the sequences that followed: the stranger departed, momentarily leaving the child alone; the mother returned and offered comfort, if needed, to the child then left again; the stranger re-entered the room, in turn offering comfort to the child until the mother made her final return shortly afterward.

After examining the exploratory behaviours of the infants, reactions to the stranger, and separation and reunion behaviour patterns of the dyad, Ainsworth et al. (1978) classified infants as either securely or insecurely attached to that particular caregiver. Ambivalent (C-type) or avoidant (A-type) behaviours were observed in insecure infants whose caregivers who were not able to provide warm consistent care and were thus experiencing a form of chronic separation anxiety as a result of receiving rejection or threats of abandonment. Fraley and Shaver (1999) pointed out that these broad patterns of response in situations of very brief separations, like those that can be identified following an irretrievable loss, could be arrayed along a continuum, ranging from intense and chronic distress at one extreme to an absence or avoidance of distress at the other.

Briefly summarised, the 60-70% of infants in Ainsworth's sample who were categorised as *securely attached* ("B") used the mother as a secure base from which to explore. They played happily with the toys and were not unduly distressed by the arrival of the stranger, but protested the mother's departure. On her return they actively greeted her, sought close contact and were easily comforted. *Insecure-avoidant* ("A") infants made up about 20% of the sample and appeared to be independent and unbothered by the separation. They seemed to be uninvolved with the mother when she was present, then to ignore her, both when she left and when she returned, adopting an indifferent, self-composed posture as a protection against rejection. *Insecure-ambivalent* ("C") infants made up about 10% of the sample. These infants were clingy and so anxiously oriented toward the mother that they hardly played at all in the initial phase of the SSP. They became extremely distressed when she left the room and on her return after a shortened absence, they were ambivalent, typically showing a mixture of both angry contact-seeking and rejection.

Ainsworth had also identified in her samples a small percentage of infants who were unable to be classified as A, B or C-types. Later scrutiny of the videotapes failed to find any further identifiable groupings for these children, and they were labelled as "CC" (*Cannot Classify*) with respect to the separation and reunion episodes of the SSP. When it became evident that over 90% of these children showed bizarre, contradictory and confused reactions (such as seeking then avoiding, freezing, showing fear of the parent, crying excessively at the departure of the stranger, and stereotyped behaviours such as rocking and head-bashing) infants who displayed one or more of these behaviours in the presence of a parent were categorized as "*disorganised/disoriented*" (Main & Solomon, 1986).

Whilst secure, ambivalent and avoidant strategies were all judged to be "organised" adaptive patterns that allowed the infants to build a sense of felt security within the particular caregiving environment, disorganised strategies, by definition, consisted of an interruption of organised behaviour and were thus given a dual classification of "D" plus the most closely-fitting category of A, B, C, or CC (Main, 1995). Disorganised infants often had a history of maltreatment by their caregivers, and so experienced the attachment figure paradoxically as both the source of, and the solution to, the child's fear and anxiety. Another subgroup classified as disorganised were infants of non-abusing mothers who had a history of unresolved abuse or trauma in their own lives. Main (1995) further pointed out that whilst *frightening* parental behaviour alarms an infant and leaves him/her without an effective strategy, there is now also evidence that *frightened* parental behaviour has the same effect, especially if the parent withdraws from the infant as if the child is the source of the parent's alarm.

In keeping with Winnicott's notion of "good enough mothering", Solomon and George (1996, p. 192) posited that although there are qualitative differences between the three main organised attachment strategies (secure, avoidant and ambivalent), all of these fundamentally provide an adequate level of care and protection for the child. They even see the flexibility of the alternative avoidant or ambivalent styles as having adaptive advantages in certain difficult environmental conditions. In contrast, disorganised strategies are viewed as cause for serious concern, often associated with a breakdown in the caregiving system, where the mother may psychologically abdicate the caregiving role or struggle unsuccessfully to provide care and protection for the child.

In a pattern that critics could construe as a tendency to make attachment styles into fixed traits, the main attachment classifications identified in the SSP have been found to generally persist throughout the lifespan, to correlate with adult attachment classifications, and to lead to an intergenerational transmission of attachment styles (Bretherton, 1995). Evidence has even been found that mothers' representations of attachment during pregnancy were strongly predictive of infants' specific attachment relationships with their mothers over a year later (Benoit, Parker, & Zeanah, 1997; Steele, Steele, & Fonagy, 1996).

Furthermore, Bowlby's original observation that mourning responses in adulthood are affected by one's early experiences that potentially leave one vulnerable to psychiatric disorders is now interpreted more specifically within the framework of attachment classifications. For example, those with avoidant dismissive attachment styles are reported to be emotionally self-reliant and wary about forming intimate relationships. When faced with the loss of a significant person they were said to defensively suppress their attachment-related feelings, repressing their grief but remaining vulnerable to exaggerated grieving responses to future losses. Adults with secure attachment histories have been shown to cope better with bereavement, suffering less distress and depression. Ambivalent and disorganised attachments have been linked to cases of chronic grief, when the bereaved person is unable to escape their feelings of despair and depression that have arisen from a conflict-ridden relationship characterised by desperate clinging and resentful anger. The bereaved person, who has learned to chronically anticipate loss and rejection, feels pain at the loss of the attachment figure but also acute guilt and self-blame (Howe, 1995; Parkes, 1991; Sable, 1992).

The Adult Attachment Interview.

Building upon Bowlby's notion that responses to specific events in childhood can lead to predictable responses in later functioning of the personality, a clinical interview known as the Adult Attachment Interview (AAI), was designed to access and classify parents' present internal working models of their early relationships (Main, 1995). Unlike the SSP that measures an infant's internal working model of his/her relationship with a specific caregiver, the AAI measures the more global construct of an adult's state of mind with regard to attachment (Benoit, Zeanah, Parker, Nicholson, & Coolbear, 1997). The AAI is an unpublished interview, based on a series of questions exploring attachment-related themes, and available for use only after accreditation through an approved training programme overseen by Mary Main and her colleagues. Transcripts of a verbatim interview are rated on several nine-point scales addressing the person's childhood experiences and current state of mind with respect to these experiences. Based on the coherence and narrative features of the discourse, an overall classification category is then assigned: secure/autonomous (F) with respect to attachment; dismissing (Ds) of attachment and/or attachment-related feelings; preoccupied (E) with or by early attachments; and unresolved/disoriented or disorganized (Ud) state of mind with respect to experiences of loss or abuse (sexual or physical); or cannot classify (CC) when a single primary attachment category cannot be determined (Adam, Sheldon Keller, & West, 1995, p. 317).

An intergenerational relationship has since been demonstrated between secure children and "autonomous-secure" adults (including adults who had apparently "resolved" their early experiences of loss or trauma); avoidant children and "dismissive adults" who deny their memories of unavailable parents; ambivalent children and adults who become "preoccupied" with early attachments; and "disorganised" children with adults who have both an insecure (dismissive or avoidant) representation of attachment and "unresolved" loss and trauma, shown in lapses of the monitoring of reasoning or discourse in their narratives when talking about traumatic events (Bakermans-Kranenburg, Schuengel, & Van IJzendoorn, 1999; Main, 1995).

Coding unresolved mourning.

In the AAI unresolved or chronic mourning following the loss of an attachment figure or traumatic events in early life is coded (Ud) when a rating of at least five is scored on the nine-point scale for unresolved state of mind (Bakermans-Kranenburg et al., 1999). Following Bowlby (1980), Main and Hesse (1990) stated that failure to reorganise the previous attachment representation to fully acknowledge and integrate the changed reality of the loss may lead to the continued existence of conflicting representational models evident in the particular type of incoherent discourse that is indicative of unresolved loss in the AAI. Adam et al. (1995) elaborated:

> Continuing disorganization and disorientation indicative of lack of resolution of loss or trauma are manifest during the interview in (1) lapses in metacognitive monitoring of *reasoning*, such as indications of disbelief that a person is dead, ideas of being causal in the death, indications of confusion between the dead person and self, and other psychologically confused statements; (2) lapses in metacognitive monitoring of *discourse* such as prolonged inappropriate silences, odd associations, unusual attention to detail, poetic or eulogistic phrasing of speech; (3) reports of extreme behavioural responses at the time of the trauma in the absence of convincing evidence that resolution has taken place (p. 318).

Solomon and George (1996) commented that relatively little is known about the impact on the caregiving system of more recent losses and traumas, events such as infant death, high-conflict divorce situations where parents are unable to cooperate with the shared care of their child; and life-threatening illness or accidents. According to AAI protocol, no attempt is made to code recent losses and traumatic experiences on the resolution of loss scale because they are not yet expected to be resolved. However, several recent studies have begun to examine this phenomenon, in some instances using modifications of the AAI for the purpose.

For example, Pianta et al. (1996) developed the Reaction to Diagnosis Interview (RDI) modelled on the AAI to code "resolution of trauma" in parents who had recently been informed that their child had a chronic disability. Their data showed a significant association between resolved versus unresolved status in the parent and the child's attachment classifications in the SSP. Several researchers have investigated recent perinatal losses: (a) Danis and Zeanah (1991) designed the Perinatal Loss Interview, incorporating a modified form of the Resolution of Loss scale from the AAI adapted for perinatal loss situations, (b) Bakermans-Kranenburg et al. (1999) added questions specifically about experiences of miscarriage to the AAI format, comparing mothers' scores on the rating scale for unresolved loss with disorganised attachment behaviour in their infants, and (c) Hughes and McGauley (1997) used the unmodified AAI criteria to classify mothers' resolved versus unresolved status following a relatively recent stillbirth.

Disturbances to the caregiving system.

Yet other adaptations of the AAI have been used to evaluate and treat disordered relationships in clinical and non-clinical samples of mother-infant dyads, focussing primarily on the mother's current representation of a particular infant and her relationship with the child, rather than the prior history of unresolved losses. In this regard, as Zeanah et al. (1997) put it, the phenomenon under investigation is not only the shared environmental influences presumed to be experienced by all children within a family, such as the parental personality characteristics or family income, but it is the most crucial non-shared environmental influence on infant development, that of the specific infant-caregiver relationship.

One instrument for this purpose is the Working Model of the Child Interview (WMCI), modelled on the AAI, designed to identify disturbances in the caregiving system that might place dyads at risk for clinical problems, by assessing mother's representations of a child and her subjective experience of the relationship with that child (Benoit, Zeanah et al., 1997; Zeanah et al., 1997; Zeanah, Larrieu, Heller, & Valliere, 2000). It thus enables the clinician or researcher (a) to assess systematically the "meaning" a child has for the parent, (b) to identify major themes in the caregiver's perceptions and subjective experiences of who their infant is and why he/she behaves in particular way, and (c) to tailor infant-parent psychotherapy to the specific needs of a given caregiver-dyad (Zeanah & Benoit, 1995). Interview transcripts are coded as being balanced, distorted or disengaged according to narrative and content features of the interview, and concordance has been demonstrated between WMCI and SSP classifications (Benoit, Parker et al., 1997).

As has been shown, attachment theory clearly provides a particularly useful framework within which to conceptualise the effects of infant loss on subsequent parent-child relationships because of its attention to the grieving reaction itself, the effects of unresolved loss and other trauma on both the caregiving system, and developmental outcomes in the child (Bakermans-Kranenburg et al., 1999). However, as the next chapter will show, much has been written about the need for crisis intervention and the potential for psychopathology in survivors of SIDS deaths, but the principles of attachment theory have yet to be incorporated into the literature addressing the grieving reactions to the loss of a child to SIDS.

CHAPTER TWO

Literature Review
Part 2

Grieving Reactions to the Death of an Infant to SIDS

Ostfield and Buckalew (1992, p. 693) pointed out that the SIDS mortality statistics present only one side of the picture; for when the definition of victim is extended to the surviving family, the impact of SIDS is "extensive and enduring morbidity" after possibly the most devastating and unbearable loss that parents can experience. Despite the obvious distress associated with SIDS deaths, initial research studies were focussed almost solely on the medical aspects of the syndrome (aetiology, epidemiology and preventative strategies), with little direct attention paid to the psychosocial consequences for families and communities (Bergman, 1986; Bluglass, 1981; Weinstein, 1979).

Professional Recognition of the Impact of SIDS Deaths

In fact, some of the first professionals to recognise and write about the needs of bereaved families were concerned specialist paediatricians and pathologists who had been associated with the original SIDS lobby groups and were attempting to attract members of the medical fraternity to their cause (Valdes-Dapena, 1988). A number of their publications were consciousness-raising articles, exhorting fellow medical practitioners who were dealing with SIDS deaths in their everyday medical practice to be more sensitive to bereaved families' needs for emotional support and understandable information. Doctors were encouraged to confront, rather than to defensively avoid the intense emotional distress and sense of guilt and failure triggered in bereaved families and medical practitioners alike by the crisis of the sudden unexplained death of an infant (e.g., Bergman, 1974; D. M. Davis, 1975; Emery, 1972; Friedman, 1974; Krein, 1979; Mandell, 1988; Mandell & Belk, 1977; Mandell & Wolfe, 1975; Salk, 1971; Walker, 1985; Zebal & Woolsey, 1984).

Support by Mental Health Clinicians

Following the legal recognition of SIDS as a disease entity, government-funded SIDS support centres were established in the United States, employing ancillary mental health practitioners from a wider range of health and social science disciplines (such as nursing, developmental psychology, counselling, and social work) to take over many of the support functions previously assumed by medical personnel and volunteers in the under-resourced parent networks (Bergman, 1986; Weinstein, 1978). Goldberg (1992) detailed the structures and standards for service provision developed for the management of SIDS cases at the Loyola University SIDS Center, Illinois, as a prototype of those set up elsewhere. Soon after the SIDS death, clinicians at the centres would visit the bereaved family, providing information, counselling and support, and referral to local parent support groups. Throughout the medico-legal investigation into the death, they liaised between SIDS families and official agencies associated with the Coroner's office, ensuring that the formalities were completed following the recommended guidelines. As a general policy, an autopsy was conducted within 24 hours of the death, and the term SIDS was entered on the death certificate. A meeting would then be arranged for parents to meet with the pathologist or paediatrician shortly afterward to be informed of the diagnosis and to discuss the autopsy findings. Continued support through home visiting and telephone contact was continued during the first year of bereavement and beyond, in some cases.

In addition to their work dealing directly with the families, staff in the SIDS centres provided education programmes for frontline service providers (such as police, emergency medical personnel, hospital workers, clergy, and funeral directors) to ensure they were informed about the syndrome and knew how to deal appropriately with the survivors. They also worked to facilitate change in judgmental community attitudes to bereaved families, and to promote research into SIDS.

Clinical Literature

The literature expanded considerably as clinicians involved with SIDS families began to write about their work (e.g., Aadelen, 1980; Arneil, 1988; Arnold & Gemma, 1991; Callahan, Brasted, & Granados, 1983; Gaffney, 1992; Gaines & Kandall, 1992; Goldberg, 1992; Hagan, 1974; Hunter, 1988; Kotch & Cohen, 1985; Limerick, 1988; Mandell, 1988; Mandell & McClain, 1988; McClain & Mandell, 1994; McClain & Shaefer, 1996; Nystul, Shaughnessy, & Kaczmarek, 1991; Ostfield & Buckalew, 1992; Ranney, 1991; Smialek, 1978; Tyrrell, 1985; Weinstein, 1978, 1979). Reviewers have cautioned, however, that the majority of these publications were written by people without expertise in psychology or psychiatry, and were based more upon the authors' personal observations in their clinical practice than on any systematic research into family functioning (Bluglass, 1981; Kissane & Bloch, 1994; Williams & Nikolaisen, 1982).

For nurses particularly, the role of a SIDS nurse-counsellor supposedly involved a change in practice from a traditional cure-oriented medical model, to an alternative care-based approach to supporting bereaved parents and families through an emotionally charged situation for which for there was no cure or easy fix (Arnold & Gemma, 1991; Hagan, 1974; McClain & Mandell, 1994). Hagan (1974, p. 374) for example, described her work with bereaved families as "death visiting", and portrayed it as a potentially positive and meaningful experience for nurses, provided death was viewed as an integral part of nature itself, rather than as failure or the antithesis of health and life. Nonetheless, when describing their clinical practice, doctors and mental health clinicians alike (nurses included) appear to have extended the medical approach to the management of the grieving process itself. Their accounts served a mainly educative function for other mental health professionals, focussing particularly on the therapeutic dimension associated with immediate and short-term effects of the loss.

For this purpose, a minority discussed the parental grieving responses in terms of the common reactions (denial, anger, bargaining, depression and acceptance) identified by Kübler-Ross (1969) in dying patients (e.g., Nystul et al., 1991; Smialek, 1978). Most, however, drew on Lindemann's (1944) description of grieving responses to unexpected natural deaths, advising that the predictable course of mourning after SIDS deaths had the potential to become distorted because of the sudden, untimely and traumatic nature of the SIDS event. There was general agreement that preventative psychiatry (from Caplan, 1964) in the form of early professional intervention was necessary to prevent psychiatric disability. This would facilitate normal grieving reactions after the "crisis" for both the family and community, to thwart pathological outcomes such as family break-ups, emotional wounds and long-term effects on surviving and subsequent children. Aadelen (1980) also utilised Bugen's (1977) model to describe how the circumstances surrounding a SIDS death could lead to a particularly intense and prolonged grief reaction given the centrality of the parent-infant relationship and the severe guilt reaction associated with the perceived preventability of the death.

In an attempt to quantify and appraise progress towards grief resolution and to identify families who needed therapeutic intervention to cope with the family crisis, May and Breme (1982-1983) designed a SIDS Family Adjustment Scale to be administered by clinicians at two weeks, two-three months, and six months after the infant's death. The instrument incorporated crisis concepts and family role theory and used a Likert scale of 1 to 5 (with a score of 1 considered to be maladaptive and indicative of poor level of adjustment) to assess families on several dimensions. These included communication of feelings; lifestyle resumption; use and perception of community and family support; level of SIDS information provided; parents' perceptions of the preventability of the death; decision-making about subsequent children based on thorough and rational discussion; religious faith; family morbidity (physical symptoms in family members); infant centrality (preoccupation with the dead infant); family emotional health (emotional dysfunction); functional role of the infant in the family (for example, as marriage stabiliser or family heir); and family solidarity (feelings of closeness of the family members).

As noted, few authors extended their discussion of the symptoms of grieving beyond Lindemann's characterization of the grieving process to include any direct reference to attachment theory. In fact, Callahan et al. (1983) wrote that they saw little that the "sociobiological underpinnings" of attachment theory could contribute to any understanding of the observed "topography of grief" in survivors of loss (p. 149) other than the fact that the painful biological state experienced by the parents after the loss would cause other group members to actively work to avoid future loss of members and thereby ensure greater survival of the species. However, in an edited book said to be the first to combine medical and psychological information about SIDS within the same volume, medical practitioners Culbertson and Willis (1988) appear to have been the first to acknowledge attachment theory as having relevance for understanding parental reactions to the death of an infant. In suggesting ways for clinicians to assist parents through their grief, they summarised Lindemann's symptomatology of grief and linked the principles of preventative psychiatry with Worden's (1982) attachment-based tasks of mourning.

Emergence of Research Studies into the Psychosocial Aspects Of SIDS

By 1980, reports of empirical research into the psychosocial aspects of SIDS were appearing more often in the literature. As with other research into the effects of bereavement, few of the studies were controlled or had more than one assessment point, tending instead to be descriptive, retrospective and to have small sample sizes (Bluglass, 1981; Dyregrov, 1990). Qualitative studies and case reports pursued many of the same themes that had emerged consistently in the clinical reports. These typically described the intense and enduring grieving reactions that were still evident many years after the event (Boyle, 1997) or focussed on the more specific aspects of the loss, such as the adverse effects on older surviving siblings, and problematic relationships with subsequent children (e.g., Beard, 1991; Bluglass, 1980; Halpern, 1972; Mandell, Dirks-Smith, & Smith, 1988).

Quantitative studies too were beset by methodological shortcomings, some of which were related to the sensitive nature of bereavement research in general. Raphael (1986) observed that studies investigating grieving reactions to the loss of a baby lacked a consistent operational definition of the concept of grief, and failed to distinguish the commonly reported symptoms of grief from other pre-existing psychiatric conditions, with a resulting wide variation in outcome criteria. In addition, the predominance of white female middle class samples raised questions about sampling bias evidenced in (a) over-representation of volunteers involved in formal support groups, (b) gender imbalance, and (c) high attrition rates or non-participation by people possibly the most likely to show pathological symptoms, such as unsupported or very young parents, or those with low socio-economic status and limited education, often living in poverty, or in abusive partnerships (Bluglass, 1981; Boyle, 1997; Dyregrov, 1990; Kissane & Bloch, 1994; Rando, 1991; Raphael, 1986; Zeanah, 1989; Zeanah, Danis, Hirshberg, & Dietz, 1995).

Major Studies into SIDS

The Nebraskan studies.

Perhaps the most well-known series of studies was that conducted at the University of Nebraska by John DeFrain and colleagues, who examined the grieving responses of nearly 400 people affected by SIDS deaths (239 parents, 80 grandparents, 73 surviving siblings), in several different investigations over a 15 year period (DeFrain, 1991; DeFrain & Ernst, 1978; DeFrain, Ernst, Jakub, & Taylor, 1991; DeFrain, Jakub, & Mendoza, 1991-92; DeFrain, Taylor, & Ernst, 1982). From the mid-1980s they extended the scope of their research to include families who had experienced stillbirths (350 parents) or miscarriage (101 parents and surviving siblings) (DeFrain, Martens, Stork, & Stork, 1986, 1990).

From a synthesis of the findings of their years of mainly qualitative research into the effects of sudden infant deaths, DeFrain et al. (1991) concluded that their results had consistently shown that for the vast majority of families the SIDS loss was a devastating crisis; that family members were plunged into dreadful unhappiness in the aftermath of the death. Taken overall, more than four out 10 people who had responded to their surveys had considered or attempted suicide to escape the unbearable pain that had been experienced by families in their own desperate way. Bluglass (1981) commented, however, that the lack of objective psychological or psychiatric measurement of phenomena outlined in the descriptive data and the retrospective nature of the study made it difficult to rate recovery or psychosocial sequelae.

The researchers selected postal surveys as the preferred methodology for their studies, in the belief that written responses would be less intrusive and would yield a higher response rate than face-to-face interviews with participants. As it turned out, even this approach to locating and recruiting participants was problematic, as it appeared that about 60% of SIDS families moved house after the loss, leaving no forwarding address (DeFrain et al., 1991). Those who were able to be located were sent a custom-designed 13-paged questionnaire, asking parents who had lost infants six months to three years previously about their experience of the loss and their ability to recover from the crisis. In the first two surveys, parents from 32 families (approximately a third of the number of families that had experienced a SIDS death in the region between January, 1973 and June, 1975), and a further sample of 37 parents (half the number of those who had lost infants to SIDS in the area in the subsequent 18 months, through to 1 January, 1977) completed the questionnaire. Of the 80 or so questions included in the instrument, 30 were open-ended, providing scope for the rich qualitative descriptions of their findings in the two books reporting their work (DeFrain et al., 1982; DeFrain et al., 1991).

Further financial donations enabled the Nebraskan team to widen their investigation in 1979 to include a nation-wide sample of SIDS families and families for whom a longer period of time had lapsed since the SIDS death. Ninety-three families volunteered to participate but of these, only 43 completed and returned questionnaires (DeFrain et al., 1982). In the mid-1980s work then began on three further studies of the effects of SIDS from a broader family perspective. The first of these looked at 127 parents' responses to the loss, and the second examined direct testimony of 73 surviving children about the effects on their lives. In the third study, the original questionnaire was modified for use with 80 grandparents (DeFrain et al., 1991-92). Grandparents reported that one of the hardest things associated with the pain of losing the grandchild was the sense of helplessness that arose from seeing their own children grieve, and being unable to make it better for them. Grandparents, like parents, had numerous different theories of causation. Many experienced feelings of personal guilt for the death, and some, especially paternal grandmothers, blamed the mother for her parenting inadequacies. Whilst most saw the death as not having an adverse effect on their own marriage, grandfathers tended not to talk about the loss as much and were less likely to join a support group.

The Sydney SIDS study.

Another often-cited investigation was conducted in Sydney, Australia where Cornwell, Nurcombe, and Stevens (1977) interviewed parents from 19 families who had lost infants to SIDS, tracing their progression through the first year after the initial bereavement, obtaining much the same type of descriptive data as in the Nebraskan studies. At 13-16 months after the loss, timed to avoid the first year anniversary reaction, a series of questionnaires was introduced to measure the bereavement outcome. These included a health questionnaire, questions designed to assess remnants of parental attachment behaviour, comparisons of parents' ratings of their own and spouse's behaviour, and parents' graphic ratings of how upset they had been over the time interval. Findings indicated that mothers' distress was more acute and longer lasting than that of fathers; that return to relatively normal functioning took 3.6 months for fathers and 10.3 months for mothers.

The Norwegian studies.

In Norway, Atle Dyregrov and colleagues used standardised questionnaires (the Impact of Event Scale (IES); Goldberg General Health Questionnaire (GHQ); State-Trait Anxiety Inventory (STAI-X-1); Bodily Symptom Scale (BSS); and the short form of the Beck Depression Inventory (BDI)) to measure parents' reactions at 1, 6, and 13 months after loss of an infant and to make comparisons with parental grieving responses after SIDS deaths (8 families) as opposed to those after perinatal deaths (29 families) (Dyregrov, 1990; Dyregrov & Matthiesen, 1986, 1987a, 1987b, 1991). Gender differences were again reported in the 37 families who participated. Mothers' mean scores were higher overall but the authors cautioned that the combined results disguised the fact that in several couples the fathers' scores indicated higher distress than the mothers'.

In this study, scores for the subgroup of mothers in paid employment were lower, similar to those of fathers, whilst those who worked at home only ("housewives") showed much higher levels of distress. In terms of the type of loss, SIDS parents scored higher on measures of anxiety, intrusive thoughts, anger, restlessness, and sleep disturbances. In keeping with this finding, a strong relationship was found between the length of time the child had lived with psychometric measures relating to anxiety, depression and general well being. On average, the most acute symptoms decreased in the 6-13 months post-loss period but for some individuals there was little change in the reported levels of distress right through the first year. It was evident for all groups that anxiety scores did not show the same decline that the other measures did; and bereaved parents appeared to have lost their illusion of invulnerability and to expect the worst to happen.

The Chicago SIDS study.

Simon Shimshon Rubin (Rubin, 1981, 1982, 1984-85, 1993, 1996) investigated the experience of loss of a child in (a) Chicago parents of SIDS infants and (b) Israeli parents who had lost adult sons in a war situation. From the findings he developed his "two-track model of bereavement" addressing both aspects of personality change occurring in the process of return to relatively normal function after the crisis of the loss, and the quality of the "recollected and remembered relationship to the deceased" (1996, p. 218). In the Chicago study Rubin interviewed 30 mothers whose infants had died of SIDS, 15 of them in the past 3-10 months, and 15 within 2-6 years of the loss. A further 15 non-bereaved parents from a natural childbirth organisation acted as controls. All participants completed a series of attitudinal, situational, behavioural and affective measures. Semi-structured interviews with the loss groups assessed mothers' affective involvement with the bereaved and alterations in their attitudes and interactions within her self and family situation.

When the three groups were assessed on the broad and general personality variables, the recent SIDS mothers were, at an average of seven months post loss, the most anxious, viewed their environment most negatively, and functioned most poorly. The distant loss group, at an average of 52 months post loss, were indistinguishable from the non-loss group. From the findings, Rubin (1981) concluded that some changes in personality variables following loss are of a transient nature and appear to subside over time and return to pre-loss levels, but that other circumscribed aspects of personality change stabilised in the first year and were still present several years later. Notably, whilst mothers soon returned to their pre-loss levels of functioning in their everyday roles, virtually none had rid themselves of the gnawing sense of responsibility for the child's death at an average of 4.5 years after the loss and continued to show an intense interest in every new theory of the causation of SIDS. Both loss groups showed a high level of affective involvement with the deceased, but this was more extreme in the recent-loss groups. As time progressed, mothers showed more evidence of resolution of the loss, seen in "the ability to respond with flexibility and openness to memories of the deceased child" and to experience "a muted but comfortable dynamic intrapsychic relationship to the memories and thoughts associated with her child" (Rubin, 1984-85, p. 352).

The Wortman and Silver studies.

Loss of an infant to SIDS has also been explored by a group of researchers led by Camille Wortman (State University of New York) and Roxane Silver (University of California) as a component of several sophisticated studies investigating coping with the negative life event of irrevocable loss (e.g., C. Davis, Lehman, Wortman, Silver, & Thompson, 1995; Downey, Silver, & Wortman, 1990; Lehman, C. Davis, & Delongis, 1993; Lehman, Wortman, & Williams, 1987; Lepore, Silver, Wortman, & Wayment, 1996; McIntosh, Silver, & Wortman, 1993; Wortman & Silver, 1989, 1991, 1992;

Wortman, Silver, & Kessler, 1993). Framing the SIDS death as a traumatic loss likened to other events such as paralysis or death of a loved one in a motor vehicle accident, the researchers measured the frequency of emotions reported by 125 SIDS parents in Wayne County, Michigan and Cook County, Illinois, interviewing them at 3 weeks, 3 months, and 18 months after the death had occurred. The sample included a relatively high number of Black participants (50%), with 45% white, and 5% other races (Wortman & Silver, 1991). Respondents were interviewed and completed the Derogatis 40-item Affects Balance Scale and Symptom Check List on which parents were rated as depressed if they scored above one standard deviation above the mean on the depression scale.

At the three months and 18 months measurement points, more positive than negative affects were prevalent. Importantly, those who had scored in the depressed range in either of the earlier interviews were more likely at the 18-month measurement time to be depressed, and to show signs of not having resolved the loss. The authors presented these findings as a challenge to stage theories of grief, arguing that depression may not be a necessary step in the grieving process; and that to expect it to be so may lead to an unjustified diagnosis of pathological absence of mourning. For their purposes, emotional resolution was defined as having taken place if firstly, mothers were able to think and talk about their babies without acute distress and bitterness, and secondly, were cognitively able to find meaning in their baby's death as measured by their ability to give adequate answers to the questions, "Why me?" and "Why *my* baby?" (Downey et al., 1990; Wortman & Silver, 1991). By this second criterion, they argue, there was little evidence found that resolution takes place at all over time, as the majority of parents were unable to find answers to either question at the initial assessment point, and these numbers rose significantly at the three months point then again at 18 months.

Responses to this more existential-type question were complemented with an examination of the importance parents placed on attributing responsibility for the SIDS death as a mechanism to attain a sense of control over an uncontrollable event (Downey et al., 1990). SIDS was described as an event most likely to promote an attributional search because of its unexpected, unexplained nature and "severe" outcome that was by definition, not the result of any role played by the parent, thus making SIDS parents a conveniently homogeneous group. Interestingly, the authors appear to have overlooked the fact that even if actual causes have not been identified, risk factors for SIDS are well known, strongly implicating parenting practices in the deaths.

Bereaved parents were questioned regarding their levels of concern about attributing responsibility; that is, asking whether someone should be blamed, rather than what caused the death. At each "wave", the small minority of parents who considered attributing responsibility to be important were more distressed than those who did not, even though people in the more concerned group were no more likely to have generated a theory or explanation for the death, or to be less likely to have given adequate answers to the why me or my baby questions. In addition, those who attributed responsibility for the death to himself or herself or to someone else, were more distressed over time than those who blamed God or chance.

The Queensland study.

Finally, at the University of Queensland, Australia, a team of mainly medical researchers conducted the Family and Child Health Study (FACHS), a longitudinal study of aspects of mental health of families who had experienced the loss of an infant to SIDS (92 mothers and 80 fathers), stillbirth (52 mothers and 42 fathers) or neonatal death (107 mothers and 85 fathers) in Queensland, between 1985-1988, comparing the bereaved sample at 2, 8, 15 and 30 months post-loss with a control group of 249 mothers and 204 fathers who had a living child (e.g., Boyle, 1997; Boyle, Vance, Najman, & Thearle, 1996; Thearle & Gregory, 1992; Thearle, Vance, Najman, Embleton, & Foster, 1995; Vance, Boyle, Najman, & Thearle, 1995; Vance, Foster, Najman, Embleton, Thearle et al., 1991; Vance, Najman, Boyle, Embleton, Foster & Thearle, 1994; Vance, Najman, Thearle, Embleton, Foster, et al., 1995).

An attrition rate of about 30% was reported by the time of the fourth assessment. At each assessment point semi-structured interviews were conducted with participants, and standardised questionnaires were completed to measure aspects of the mental health status of respondents. The instruments used for this purpose included (a) the Delusion-Symptoms-State Inventory (DSSI/sAD), a self-report checklist with two seven-item scales measuring symptoms of anxiety and depression, (b) the Dyadic Adjustment Scale to assess perceptions of the quality of the marital relationship, (c) the Interview Schedule for Social Interaction to assess levels of social support available, and (d) additional open-ended questions asking about rates of drug and alcohol ingestion, religiosity, and other variables such as past and subsequent pregnancies.

Boyle et al. (1996) presented results showing that for bereaved mothers, levels of depression and anxiety were five times higher than that of the control group at the initial interview, three times higher at the time of the 8-month assessment point and this level declined only very gradually in the 8-30 months period. Bereaved mothers were thus significantly more likely to display high levels of both anxiety and depression more than two years after the loss. When the type of loss was considered, mothers in the SIDS group manifested the highest rates of anxiety and depression, and these levels appeared to fall less sharply over time. Yet when cut-off points were applied to identify scores within the clinical range, it appeared that only one in five mothers were in the clinical range for anxiety, and one in six for depression.

Bereaved fathers as a group showed a significantly higher level of anxiety and depression than controls at the two month assessment point only, and at all four assessment points fathers scored significantly lower on these scales than did bereaved mothers (Vance, Boyle, et al., 1995). The authors suggested that fathers may show their distress in different ways, rather than being simply less affected by the loss. Findings showed that heavy consumption of alcohol, although more common in the SIDS group, was rare in either bereaved or control groups of mothers. However, at the 2 and 30-month assessment points only, bereaved fathers were significantly more likely to be drinking heavily, and again this was especially so in the SIDS group. One unexpected finding was that fathers who were initially more anxious and depressed did not tend to turn to alcohol later on, showing no crossover association between early distress and later increased alcohol usage.

There were no between-group differences found for use of pain relieving medications, but mothers in all three loss groups were more likely to take sedative-type medications instead. Rates of sedative usage were again significantly higher for both mothers and fathers in the SIDS group. Analysis of reports of church attendance showed that expected changes in levels of religious beliefs and activities after bereavement were not found, indicating that bereaved parents did not turn more to religion for consolation (Thearle et al., 1995).

Boyle (1997) also addressed the concept of finding meaning in the loss as an indicator that resolution is taking place. She described this in terms of the capacity for a major loss to bring out hidden personal resources such as strength, resilience and tenacity in the bereaved and for the person to emerge from the experience feeling stronger, more compassionate and tolerant of others, in the same way this had been seen in previous work by Shucter and Zisook (1993) with widowed adults. Hence, to find meaning, the parent would not need to be able to provide a rationale for why the death happened, and why to this baby in particular (the criteria used by Wortman & Silver, 1991). Instead they would be able to reflect on the fact they have survived the loss, and ways in which they have grown and changed for the better as a result of the experience. Many women had commented that the loss had caused them to re-evaluate their priorities in life so that they no longer took their loved ones for granted. Taking stock thus led to a "greater sense of purpose and a heightened enrichment and appreciation of life" (Boyle, 1997, p. 84). Discovery of hidden inner strengths to deal with the tragedy seems to have had an empowering effect in itself, paradoxically leading in some cases to increased self-esteem and sense of mastery in their lives.

Recurrent Themes

A number of themes have consistently emerged in the literature, addressed by clinicians, researchers, and also in lay publications for and by bereaved parents themselves (e.g., D. L. Davis, 1991; Kohner & Henley, 1991; Lord, 1987; Parker, 1986; Smith, 1989; Webb, 1986). For the purposes of review, recurrent themes have been discussed under the following categories: the special nature of SIDS deaths (the age of the infant, SIDS deaths compared to parenting of a child with a congenital disability); typical account of the SIDS death, the immediate reaction to the loss; loss of the mothering role; guilt reactions; effects of the SIDS loss on the family system; effects of the SIDS loss on the marital relationship; fathers' grieving reactions; gender differences in grieving reactions; effects of the SIDS loss on older surviving children; and the longer term course of bereavement, leading into the discussion in the following chapter of the role of a subsequent child in the resolution of the grieving process.

The Special Nature of SIDS Deaths

One characteristic that leads SIDS deaths to be perceived as qualitatively different from stillbirths, neonatal deaths, and most infant deaths from illnesses, is that they usually occur at home in an apparently normal infant, where parents, rather than health professionals, are held responsible for the infant's well-being. Parental feelings of shock, guilt and bewilderment and doubt in one's parenting skills are, therefore, more likely than in situations where the death is expected or understood (Limerick, 1988).

Age of the infant.

The age of the infant at the time of death is another important factor. As has been noted, deaths from SIDS occur most often in infants aged six weeks to 12 months. Studies that have reported on the intensity of parental grieving reactions and the relationship between the duration of the infant's life or the type of death (stillbirth, neonatal death or SIDS) have produced mixed results, probably because of the retrospective design and wide range of temporal differences between the loss and assessment points (Zeanah et al., 1995). DeFrain (1991) commented that in his experience, when parents portrayed the loss as the death of a baby, regardless of size or gestational age, their grieving reaction was likely to be greater than for those who defined the event as simply the loss of a foetus. He cautioned that unintentional insensitivity is sometimes shown to parents who have experienced a miscarriage as opposed to the loss of an older infant, and stressed the importance of listening to the way in which the parents define the event. Nevertheless, their studies had generally shown that parents who had experienced miscarriage were less likely to have entertained thoughts of suicide, and reported they felt they "recovered" somewhat sooner than those who had experienced a stillbirth or SIDS.

In comparative investigations of grieving reactions to different types of perinatal losses, some have reported that there were no reported differences between reactions to miscarriage, stillbirth or neonatal death that could be accounted for by the infant's lifespan (e.g., Benfield, Leib, & Vollman, 1978; Peppers & Knapp, 1980a, 1980b). In contrast, Goldbach, Dunn, Toedter, & Lasker (1991) found that two months after the loss, grief reactions to perinatal loss were significantly correlated with gestational age, and Theut et al. (1989) reported more intense grief reactions as measured on a Perinatal

Bereavement Scale where the pregnancy had gone beyond 20 weeks. Two prospective studies that have investigated both perinatal and SIDS deaths, namely the Queensland longitudinal study (e.g., Boyle, 1997); and the Norwegian study (e.g., Dyregrov & Matthiesen, 1991) have consistently shown stronger grief reactions in SIDS parents, and an association between the length of time the child had lived and parents' experience of recovery.

Studies examining SIDS losses only have also yielded conflicting results. When Price, Carter, Shelton, and Bendell (1985) examined maternal perceptions of SIDS losses in Oklahoma between January 1980 and December 1982, in 73 out of 317 families who had experienced a SIDS death 6-30 months beforehand, one of their key findings was that the age of the child was correlated with problematic maternal adjustment, i.e., the *younger* the SIDS infant was at the time of death, the more likely the mother was to report delayed and more difficult adjustment. The authors explained this in psychoanalytic terms, as an outcome of whether the death occurred before or after the phenomenon of individuation from the mother was expected to take place. Their data were obtained from a questionnaire modified from those used earlier by DeFrain and Ernst (1978) with SIDS families, and Benfield et al. (1978) in an investigation of perinatal loss, and included a 5-point Likert scale and several open-ended and multiple-choice questions.

Ostfield, Ryan, Hyatt, and Hegyi (1993) later adapted the instrument developed by Price et al. (1985) to produce the New Jersey SIDS Resource Center Parent Questionnaire. This was posted to 86 mothers (all clients at that particular SIDS centre) six months after the loss of their infant, 38 of whom completed and returned the questionnaire, rating their grieving symptoms on the 5-point scale twice, once for the first few days after the death, and the second for their current status. Grief scores were computed for items such as sleep disturbance, anorexia, restlessness and physical pain, hearing the baby's cry, guilt, anger, sadness and depression. Findings revealed that the age of the child made no difference, that for both the initial and six-month assessment points, grief levels were *unaffected* by the age of the infant at time of death.

SIDS Deaths compared to parenting of a child with a congenital disability.

On a different tack, Australian authors Nicholas and Lewin (1986) compared the grief reactions of 40 couples caring for an under two-year-old child born with a significant congenital handicap (sic), and who had thus lost a "hoped-for, idealized baby" (p. 292), with those of a small control group of nine bereaved parental couples whose babies had died of SIDS up to two years previously. Data collected included demographic information and responses to a custom-made unresolved grief inventory composed of 25 statements grouped around theoretical parental response patterns to congenital handicap. Although it could be argued that SIDS parents had experienced the loss of *both* a real and a hoped-for baby, it is clear that not all items fitted both situations well. For example, the statement "I remember well the time I was told about my child" (p. 293) would have no obvious parallel for SIDS parents unless it was specified that the question referred to the moment when the dead baby was found, the time of official confirmation of death, or to when the autopsy report findings were communicated to the parents. Nevertheless, findings of the study showed that the SIDS group, especially mothers, experienced significantly more anxiety and depression. SIDS parents as a group also had higher overall grief scores and reported greater difficulty with coping, stigma, and acceptance of the loss, but not surprisingly, lower scores for dealing with issues about how they were told about their baby's problem. The study did not look at long-term reactions but the authors predicted that qualitative differences would be expected between the two groups given the disparity of the situations.

Typical Account of SIDS Death

By all accounts, the death occurs quietly, without apparent distress or warning but in retrospect, some parents report a sense of vague foreboding that something was not right and should have been acted upon. The baby had usually been well, or may have suffered from a mild upper respiratory tract infection, not considered severe enough to have caused any concern. Not uncommonly, he or she may have very recently undergone a routine well-baby check or vaccinations and been pronounced fit and well (Ranney, 1991; Raphael, 1983). The death usually occurs when the infant is alone in a cot or bassinette during a long sleep, but cases have also been reported when the baby was in a room with others, in a car seat, pram, or in the bed or even arms of a caregiver at time of death. Sometimes the child is found lying face down, having moved up to the corner of the bed or slipped down under the bedcovers, raising immediate questions in the mind of the caregiver as to whether the baby had been smothered. As has been described, the sight that meets the caregiver is that of a lifeless, limp baby, with an ashen face and a bluish tinge around the mouth, a trickle of blood-stained white froth coming from the mouth and nose, and what looks like bruising of the body if the death had taken place some time beforehand (Arnold & Gemma, 1991; Smialek, 1978).

Discovery of the dead or dying infant is said to be the most horrifying trauma, inducing a state of shock characterised by disbelief, feelings of unreality, numbness, or abnormal calmness (Cornwell et al., 1977; DeFrain, 1991; Dyregrov, 1990; Limerick, 1988). In the vast majority of cases at least one of the parents is home at the time (Goldberg, 1992; Ostfield et al., 1993). Usually it is the mother in her role as primary caregiver who finds the dead baby but it may be an older sibling, or the father when checking the infant when he gets up in the morning. Ostfield et al. (1993) found that when someone other than the mother finds the child, the mother was likely to be even more distressed and to need additional supportive counselling during the initial phases of grief. Others have commented that when surrogate caregivers (such as foster parents, grandparents, siblings, step-parents, day-care providers or babysitters) were responsible for the baby at the time, their grieving reactions may well be underestimated and their needs for ongoing support overlooked (Bluglass, 1980; Gaines & Kandall, 1992; Ranney, 1991).

Immediate Reaction to the Loss

Typically, when the mother finds the baby, her initial reaction is to scream; an instinctive response that sends a signal for help and is perhaps the first overt expression of her grief (Cornwell et al., 1977; Limerick, 1988; Raphael, 1983; Walker, 1985). She may then pick up the baby in her arms and run frantically to find a relative or neighbour or to telephone for help. Desperate attempts at resuscitation are initiated, possibly disturbing the baby's stomach contents and causing more bruising, and adding further to the appearance of suffocation. Emergency services arrive, and as the parents and possibly siblings watch in stunned disbelief, strangers take over resuscitation of the baby, hurriedly removing the child's clothing and making rapid-fire decisions involving invasive procedures, leaving them feeling left out, and out of control (Arnold & Gemma, 1991). Resuscitation attempts are continued, even if only to assure parents that every effort was made to revive the infant (Weinstein, 1978) and are eventually abandoned when death is pronounced, usually in the hospital after transfer by ambulance.

In the first turbulent hours, days and weeks of bereavement parents must deal not only with their own intense grief but also endure the official investigation of the death, including police questioning of family members separately, and what is often perceived as the desecration of the baby's body in a mandatory autopsy to rule out other causes of death (Weinstein, 1978). Limerick (1988) cautioned that at this time parents are acutely sensitive to any suggestion of their guilt or culpability, particularly as officials attending the baby seek to obtain the history of what had happened in the lead-up to the discovery of the body. An early provisional diagnosis of SIDS provides the opportunity for emergency room staff to deal empathetically with parents, and to possibly ameliorate their profound trauma to some degree (May & Breme, 1982-83). All commentators emphasise the importance of compassionate and tactful management of the emotion-charged situation by attending personnel to avoid the risk of intensifying parental guilt and shock.

Writing for health professionals in the United States and United Kingdom respectively, Smialek (1978) and Limerick (1988) both stressed that at all times the body of the infant should be treated with dignity and respect. Staff were advised to make reference to the dead infant by name in conversation, thereby acknowledging for parents that the baby is still a baby, one who had a life, however brief, and an identity as a real person. They were told that when the infant's death is confirmed, there is normally no reason to hurry the removal of the body. Instead, the baby should be dressed appropriately and parents given the opportunity to see and hold the child again, to allow them to assimilate the reality of the death, and to simply say good-bye.

In the hours immediately after the death, most parents exhibit a strong urge to hold and touch the baby. Mothers, especially, have been known to carry the infant's body with them for hours, struggling to come to terms with the death, the tactile contact in the midst of shock thought to allow momentary reality that could be remembered later (Cornwell et al., 1977; Krein, 1979; Limerick, 1988; Raphael, 1983; Smialek, 1978). Raphael (1983) graphically described a typical scene where the mother may hold the baby's dead body to herself, rocking and walking with it, begging for it not to be true, her anguish at separation from her infant overwhelming as she yearns for the baby with every fibre of her being. Feelings toward the dead baby may be so intense that if insufficient time is allowed at this point, the mother may strongly resist removal of the body for the autopsy, and even need to be physically restrained to have the baby taken from her arms (Cornwell et al., 1977; Smialek, 1978; Walker, 1985).

Whilst there is no suggestion in the recent SIDS literature that visual and bodily contact with the dead baby would lead to the detrimental outcomes shown in some parents who saw and held their dead newborn infants, it appears that a small percentage of SIDS parents express feelings of detachment from the baby and revulsion at the thought of seeing or holding the dead body. Their avoidant responses are usually respected in the short-term as being a normal part of denial but professional intervention would be indicated to help parents acknowledge and face up to the loss if they then also failed to attend the funeral and continued to decline to ask or answer questions about the death (DeFrain et al., 1991; Krein, 1979; Smialek 1978). To help reinforce the reality of the loss, photographs would sometimes be taken of the dead infant and kept in the medical records for later retrieval if needed (Ranney, 1991).

Limerick (1988) recommended that ongoing professional support for the parents be organised before they left the hospital, noting that later misunderstandings could often be averted by an early visit to the family's home by the family doctor and health visitors who were knowledgeable about SIDS and the course of parental grief. An appointment would be made with the relevant medical authority to discuss the official cause of death when the autopsy results became available, and in situations where there was a surviving twin, arrangements (such as monitoring or hospitalisation) put in place to keep the child under close surveillance because of the belief that the other member of the twin pair was at extreme risk as well.

Written information about SIDS was also found to be a useful form of early crisis intervention, prompting questions that parents may have been too embarrassed to ask about (Krein, 1979). However, many health professionals themselves were also shocked and distressed by the death, which may well have triggered personal issues of loss for them in their own lives (McClain & Mandell, 1994). Some delayed making contact with the bereaved family, feeling unable to show honest emotion, or were available in a supportive role for parents because of a sense of failure and guilt, especially if they had recently reassured them that the infant was fine (Cornwell et al., 1977; Krein, 1979; Ostfield et al., 1993; Ranney, 1991).

For reasons discussed further below, accounts of parents' immediate responses to the loss focus almost exclusively on the experiences of mothers, rather than fathers. Reviewing the literature on grieving reactions after perinatal loss, Zeanah (1989) noted that from a psychoanalytic perspective, perinatal loss was narcissistic in nature, associated with intense maternal feelings of self-vilification and inner emptiness. Seemingly, mothers of SIDS babies experienced the loss in much the same way, perhaps not unexpectedly, for as Raphael (1983) pointed out, the baby's development may well have taken place longer *in utero* than in the external environment. The symbiotic nature of the early maternal-child relationship itself was clearly evident in the women's descriptions of the experience as loss of part of themselves, rather than that of a separate person. They spoke of a painful and empty feeling inside, as though the infant had been "torn out" of her body, and of arms that physically ached from wanting to hold and nurse the baby (Hagan, 1974; Ranney, 1991; Raphael, 1983).

Interestingly, Cornwell et al. (1977) observed that in the early phase of acute grieving these feelings were so intense that many mothers in their study expressed a strong urge to immediately replace the lost child and that this was a reaction seldom found following other types of losses, such as in conjugal grieving patterns identified in the widows studied by Parkes (1972). In the same vein, Walker (1985) reported that all the mothers he interviewed spoke of a desperate need in the first weeks after the loss to hold another child, whether their own or not, and experienced a frightening urge to baby-snatch other children from prams when they were out shopping or visiting friends. Fear of succumbing to this impulse led them to avoid situations where they were likely to encounter other mothers and babies.

In other respects accounts of mothers' immediate reactions in the early days and weeks after the loss closely resembled the patterns of symptomatology portrayed in Lindemann's (1944) acute grief syndrome, i.e., waves of somatic distress and mental pain; preoccupation with the image of the dead person; self-accusations and feelings of guilt; withdrawal from social contact; and an inability to initiate and maintain organised patterns of activity. For many, the initial feeling was that of numbness, soon punctuated by waves of agonising sadness and periods of weeping, sometimes lasting for days on end as reminders of the baby sent painful surges and pangs of grief through the mother's body (Cornwell et al., 1977; Krein, 1979; Raphael, 1983). Most experienced an intense preoccupation with the image of the baby, evidenced in yearning and searching behaviours, restless distressed motor activity, poor concentration and a sad reluctance to relinquish parental roles (Price et al., 1985; Ranney, 1991).

Breastfeeding mothers sometimes refused the offer of medication to suppress lactation because they perceived it as a threat to the only physical bond left with the dead child (Ranney, 1991; Walker, 1985). Others treasured linking objects such as clothing and bedding that still retained the smell of the dead infant, and were unwilling to wash these items lest they lost the sensory connection with the child (Goldberg, 1992). Dreams were filled with concern for the baby and not an hour would pass without thinking of the infant. Unless warned to expect it, hallucinations could cause mothers to think they were going crazy, for many had fantasies that the baby was still alive; they could see the baby's face, and hear the baby's cry (Hagan, 1974; Limerick, 1988; Ranney, 1991). In one study, 30% of mothers thought of the baby as still being alive for several weeks after the death. These women secretly or overtly nursed fantasies of the infant's return and for some, parenting tasks such as preparing feeding bottles, bedding and clothing were automatically continued (Price et al., 1985). Others note that at the time of the funeral the burial might not seem final so the mother would then keep vigil at the graveside, worrying about whether the coffin was padded and about exposing the baby to the elements, some even experiencing an almost irresistible urge to dig up the body and take it home again (Cornwell et al., 1977; DeFrain et al., 1991; Walker, 1985).

SIDS deaths typically occur at a time when the mother, traditionally the primary caregiver, is normally very involved with the care of the infant. Raphael (1983) commented that because she has been intensely interacting with her infant, it could seem as though the whole purpose of her existence has been taken away, making the absence of the baby and the associated loss of the parenting role all the more overwhelming. For full-time mothers at home this could well be more so, for Dyregrov and Matthiesen (1991) reported much higher levels of distress in mothers in their study who worked at home only ("housewives"), whereas scores for the subgroup of mothers in paid employment were lower, similar to those of fathers. Boyle (1997) found that whether or not a woman returned to work within eight months of the loss was not associated with mental health outcome following the loss but that many women commented on the therapeutic effects of returning to work.

Loss of the Mothering Role

Obviously, in women without surviving children, the death results in the dual loss of the infant and of the mothering role *per se* (Raphael, 1983). Ranney (1991) observed that although it would be highly insensitive for SIDS counsellors to make a similar comment, bereaved parents speaking to each other agree that death of a firstborn ranks as the worst. They would often express gratitude that it was not their first-born child that died, feeling lucky to have surviving children to comfort them and to offer as evidence that lack of parenting skills was not the reason for the death. Carroll and Shaefer (1993-94) noted that mothers reported comforting and cuddling their surviving children as a coping strategy, and that the more surviving children there were in the family, the less outside support was sought by mothers.

Nevertheless, there is no clear picture that emerges from the evidence to suggest that the birth order or number of children predicts the intensity of the mother's grieving reaction. That the death of a firstborn results in relatively more distress appears to be supported by the findings of a New Zealand study in which it was shown that parents who lose a firstborn child to SIDS are significantly less likely to have a subsequent child than those with other children (Mitchell, Scragg, & Clements, 1996). Ostfield et al. (1993) found that grief scores for mothers with surviving children were no different than for those with no other children; that having surviving children was not shown to ameliorate grief. On the other hand, Boyle (1997) reported the unexpected finding that having other children in the home was associated with significantly *higher* rates of mental health problems following the death of a baby, especially in the form of enduring distress. Many of the women in their study who had surviving children were aware of the assumption that having other children in the home would lessen the impact of their baby's death but reported that for them this was far from the reality. Reasons that emerged from the supplementary qualitative data obtained in interviews with mothers were (a) that since the loss, they perceived themselves and their surviving children to be highly vulnerable and, therefore, in need of constant surveillance to ensure their continuing well-being; and (b) because of their own distress, they felt unable to meet their other children's needs and to deal with their questions and distress.

Guilt Reactions

Lindemann (1944) has long since shown that feelings of guilt and self-accusations of negligence are to be expected in survivors of unanticipated deaths, but all authorities agree that this reaction is hugely magnified in parents who have experienced a SIDS death. The initial feelings of shock and pain experienced immediately after the loss are closely followed by an overwhelming sense of ultimate responsibility and self-blame, sometimes disguised by anger or projected onto a convenient scapegoat (such as the doctor, babysitter or sibling) but more often personalised in the form of guilt (Goldberg, 1992; May & Breme, 1982-83). An infant epitomises vulnerability and dependence on the parent for survival, hence the untimely death leads to lowered self-esteem associated with feelings of emotional impotence, especially in one's parenting skills, and a belief that one should make retribution for the wrong (Ranney, 1991). According to Ranney (1991) guilt is the conviction that one has done wrong by violating some moral, ethical or religious principle. Miles and Demi (1983-84) constructed a useful conceptual model identifying five sources of bereavement guilt in parents, all of which are applicable to the course of bereavement in the SIDS situation: cultural role guilt, death causation guilt, survivor guilt, recovery guilt, and moral guilt.

Cultural role guilt.

Cultural role guilt is the sense that one has failed to live up to societal expectations of the general parental role with the child and implies that one has violated the sacred trust placed in the parent to keep the child safe. As has been noted, loss of an infant is a non-normative event in the present socio-historical era. In individualistic western societies the blame for the SIDS death tends to be placed directly on the parental dyad, although Gaffney (1992) observed that siblings, extended family, caregivers, and friends also feel some sense of guilt and partial responsibility for the infant's demise. In contrast, when Fabrega and Nutini (1994) analysed the social structure and cultural meanings of the sudden death of 47 infants and young children (not necessarily SIDS) in a more collectivist non-industrial society in rural Mexico, they found that a supernatural, rather than scientific, attribution of the cause of infant deaths meant the responsibility and guilt for the death was shared by the whole community.

Death causation guilt.

Death causation guilt is the belief that one has contributed in some direct or indirect way to the child's untimely death. Hagan (1974, p. 378) reported that in her experience, parents appear to reason that, "My baby died because of something I did or did not do. I fulfilled all my baby's needs; therefore I was responsible for the death," and by implication should be punished. Schwartz (1988) drew on classic psychoanalytic literature to discuss the origins of maternal guilt after SIDS as a resurfacing of the unresolved deep ambivalences and conflicts towards the woman's own mother and against the infantile figure. She argued that these dynamics are unconsciously present in all women during pregnancy and are related to the development of the feminine identity and desire to become a mother, but cannot be expressed at the conscious level by the ego. The SIDS event thus triggers major emotional suffering and feelings of guilt, sometimes expressed in dreams, related to intolerable and unacceptable deep emotions directed against the infant.

Rubin (1982), however, concluded that the weight of evidence indicates that feelings of guilt after SIDS are related more to the unknown aetiology of the syndrome rather than to psychodynamics. Ironically, a final diagnosis of SIDS made at autopsy is intended to mitigate blame and legally exonerate parents of wrongdoing, yet by its very definition, SIDS denies the living the means of intellectually comprehending the death, leading to deep-seated parental feelings of vulnerability and loss of control, and attempts to create a rational framework for why the death occurred (Bluglass, 1981; Gaffney, 1992; Rubin, 1982). Ranney (1991), for example, portrayed how for vigilant parents whose infant dies without apparent cause, there is a desperate need to understand what killed their baby and to purge themselves from the overwhelming sense of blame. To this end, they may go on a fact-finding mission to find the cause of death, going over and over the findings of the autopsy, reading and re-reading the literature on SIDS, and making comparisons with records of their dead infant and previous infants. It seems that as part of the quest for answers, parents carefully and painstakingly review and reanalyse everything done for the infant's care, searching for some clue, some difference in ritual that could be evidence of negligence, ignorance or other self-incriminatory behaviour (Krein, 1979; Schwartz, 1988).

In an investigation of parental beliefs of the cause of the loss of their infant to SIDS, C. Davis et al. (1995) looked specifically for evidence of the counterfactual fallacy, defined as the tendency to confuse beliefs about what might have been with beliefs about what ought to have been. Survivors' statements about imagined sins of omission and commission were interpreted as indications of their desire to understand how the negative event could have been prevented. A bereaved parent may thus focus on trivial aspects of his or her behaviour in an attempt to present a plausible counterfactual and to find aspects of the situation that could have been controlled. Self-blame and feelings of guilt are the logical outcome of the irrational causal attribution and the parent eventually becomes convinced that if the death *could* have been prevented, then it *should* have been prevented; therefore, it is his or her own fault that the baby died. The researchers interviewed 172 mothers and 85 fathers at three weeks after the loss of their child to SIDS, and followed up 54% of the sample again at 18 months post-loss. Despite the fact that the events surrounding the SIDS deaths were apparently immutable, counterfactuals were commonly found. Seventy-six per cent of respondents reported mentally "undoing" the baby's death at three weeks post-loss and 42% were continuing to do so at 18 months, generally focussing on what they saw as their own failure to perform an action that might have prevented the death (e.g., "if only I had woken earlier that day, the baby would be still be alive" or "if only I had fed him/her earlier that day"). At both time points, the more respondents were undoing the event in this way, the more distress they experienced as gauged by standardised measures of general distress and emotional states.

Considering these findings, it is not surprising that when the post-mortem report identifies the presence of even doubtfully significant symptoms (such as pneumonitis) in the infant, that parents are likely to experience increased guilt and to feel that they have failed in their obligation to obtain adequate medical treatment for the baby (May & Breme, 1982-83; Ranney, 1991; Raphael, 1983; Weinstein, 1978). Ostfield et al. (1993), for instance, found that mothers whose infants were ill with mild upper respiratory infections within two weeks of death showed significantly more guilt at six months post-bereavement than those whose infants were symptom-free. Rubin (1982) commented that feelings of guilt after a SIDS death seem to last indefinitely. He was concerned to find that at an average of 4.5 years after the loss, virtually none of the mothers in his study had discarded the gnawing sense of responsibility for the child's death and that they continued to show an intense interest in every new theory of the causation of SIDS.

Others too have noted that parents' sense of guilt is exacerbated by the continual emergence of new ideas regarding the aetiology of SIDS, sometimes misreported in the media. Each new theory leads them to re-examine the death of their child (Cornwell et al., 1977; Goldberg, 1992; Hagan, 1974; McClain & Shaefer, 1996; Raphael, 1983), and as Ranney (1991) pointed out, the accepted theory of the day appears to shape both parents' attributions of the cause of death, and the nature of professional interventions with families. Williams and Nikolaisen (1982) reported that of the 54 parents who completed their questionnaire, custom-designed to examine the coping responses of parents to the crisis of the SIDS death, only 29% initially believed that SIDS was actually the cause of death, despite the entry on the death certificate. Most people believed instead that neglect, injury, suffocation, or some unknown disease had caused the death. After education, 67% of fathers and 14% of mothers accepted the diagnosis, the rest still preferring to believe they had done something wrong and this was punishment, or that the death was due to bad luck, allergies or fate.

Survivor guilt.

Survivor guilt is experienced as the result of a violation of the natural order of things, for, in what has been described as a death-denying society (Mandell, 1988), a child should outlive the parent and not *vice versa.* Survivor guilt may also be experienced by siblings of the dead child who describe feelings of guilt for being alive when their brother or sister is dead (Johnson, 1984-85, 1987; Mandell, Dirks-Smith et al., 1988).

Recovery guilt.

Recovery guilt occurs when a parent starts to regain some enjoyment in living even though one's child has died. Recovery guilt may be particularly salient for parents when a subsequent child is considered, for, as Johnson (1984-85, p. 115) pointed out, the previous child had to die for the new child to be conceived and unresolved parental guilt may well be "played out" in a replacement child. Powell (1995) too noted that some mothers expressed guilt and feelings of disloyalty to the dead baby when they enjoyed the subsequent pregnancy and the relationship with the new child.

Moral guilt.

Moral guilt is the sense that the death was somehow punishment for violation of some moral, ethical or religious standard. The deeply entrenched Judeo-Christian ethic within western culture leads some parents to experience the loss of the child as punishment in itself, rather than as an event for which punishment is deserved (DeFrain et al., 1982, p. 17). In his words, because "guilt decrees punishment, the tenet can be self-fulfilling. If you are punished, you must be guilty of something; you are guilty and, therefore, are being punished".

Clinicians' accounts suggest that in SIDS parents moral guilt is more acute in situations where SIDS infants were neither loved nor wanted, were perceived as an emotional and financial burden, or perhaps were even abused. Bereaved teenaged parents may feel especially guilty for what was perhaps an unplanned and untimely pregnancy, and may turn to substance abuse or acting-out behaviours to express their grief (Mandell, 1988; Ranney, 1991). Smialek (1978) reported that mothers who had perceived the dead child as an unmanageable burden sometimes attributed the reason for the death to benign divine intervention because of their inability to cope for even one more day. Because this rationale was a potential source of later guilt and self-recrimination, she advised that it should be actively discouraged, and emphasis placed instead on the medical reasons for the death.

In another illustration of moral guilt, Gaines and Kandall (1992) described how the pervasive guilt normally felt by parents after death of an infant may be exacerbated in addicted mothers who were unable to control their drug use during pregnancy despite the known consequences for the infant, including a higher risk of SIDS. They observed that intolerant attitudes from the public meant that an addicted woman is treated with disdain, and rituals and customs used to help survivors process the loss of a child, therefore, may be scant or non-existent for the drug-using mother. The consequent lack of a family or community context in which to mourn makes these women more susceptible to guilt and self-reproach that may promote continued anti-social behaviours.

Effects of the SIDS Loss on the Family System

Various authors have pointed to the fact that the crisis of the SIDS death affects each family member individually, as well as the family system and subsystems, bringing about an inevitable change in family structure and relationships (e.g., Aadelen, 1980; DeFrain et al., 1991; Gaffney, 1992; Kissane & Bloch, 1994, May & Breme, 1982-83; Williams & Nikolaisen, 1982). Prior to the loss, the family is in a time of transition, typically celebrating the achievement of a completed pregnancy and adapting to the addition of a new family member. With the death of the child to SIDS, the family is abruptly and without warning taken from one of its emotional high points and thrust into profound grief (Gaffney, 1992). The loss entails both dismemberment (the loss of a family member), and demoralisation arising from a situation that brings discredit to the family and creates a loss of morale and unity because of parental feelings of failure (Williams & Nikolaisen, 1982). Important aspects of family functioning that have been identified include the effect of the death on the marriage, the differences in grieving between mothers and fathers, the role of grandparents, and relationships between parents and children (Kissane & Bloch, 1994).

Effects of the SIDS Loss on the Marital Relationship

There is little doubt that the ubiquitous guilt, grief and unknown causal factors of SIDS constitute major emotional stresses for the parents, both as individuals and as a couple, which may lead to a crisis in the marital relationship. For example, Cornwell et al. (1977) identified serious marital difficulties in a third of the couples in their study, ranging from permanent breakdown to a defined need for marital therapy. Likewise, when Powell (1991a) interviewed 40 out of 61 families in Dublin, Ireland who had experienced a SIDS death 13 months to three years previously, she found that marital strain was experienced by over half of the families, with 54.3% reporting problems with poor communication, impairment of enjoyment of life, conflict about decisions about a subsequent pregnancy and gender differences in grieving responses.

In addition to the distress engendered by the loss of the baby, some couples are faced with the additional stressor of moving house shortly after the loss (Cornwell et al., 1977; DeFrain et al., 1991; Hagan, 1974; Krein, 1979; Price et al., 1985; Williams & Nikolaisen, 1982). Krein (1979) stated that in the early days the desire to escape is a common feeling, especially for those without supportive ties in the region. Parents needing to avoid the constant reminders of the loss triggered by the sight of the baby's room and belongings may want to run away, to leave the house, neighbourhood, city or state, or even to leave their spouse. In the study by Cornwell et al. (1977) eight out of 21 moved families moved house as a strategy to avoid reminders of the dead child and, as has been mentioned, Nebraskan researchers had considerable difficulty tracking 60% of SIDS families who had left without leaving a forwarding address (DeFrain et al., 1991). Price et al. (1985) initially mailed 375 questionnaires but at least 75 of these were undeliverable because addresses were no longer current. Of the respondents who did take part in their study, 51% indicated that they too had moved house (83% within the first six months of the death and 51% within the first month of the death).

Whilst the potential for marital problems certainly exists, recent evidence suggests that most couples are able to overcome these difficulties. Reporting on the findings of the Queensland study, Boyle (1997) noted that there was no statistically significant difference between rates of marital problems in the bereaved group when compared with the non-bereaved control group. Others have found that for most parents, relationships with spouses were strengthened in the long run after the initial crisis; that although emotional distancing occurred in a minority of couples, it was more common for spouses to be drawn closer in their grief (e.g., DeFrain & Ernst, 1978; Dyregrov & Matthiesen, 1987a).

Johnson (1984-85) interviewed eight couples who had experienced the sudden death of their children, including three SIDS cases, and found that most couples engaged in sexual abstinence initially because of feelings of guilt and grief but sought and found comfort and feelings of closeness in holding and hugging each other in a way they had not done prior to the loss. Some studies have attempted to quantify changes in marital relationships post-loss. Ostfield et al. (1993) found that 70% of mothers felt closer to their husbands, 20% experienced no change, and 10% experienced distancing after the SIDS death. In their comparable study, Price et al. (1985) found that that 60% of mothers experienced increased marital closeness after the SIDS death, 10% reported that the death had no effect on the marital relationship, and 30% reported emotional distancing.

In the same way that the SIDS death has an impact on the marital relationship, the quality of the marital relationship has also been shown to have a direct bearing on the grieving responses of bereaved couples (Lang, Gottlieb & Ansel, 1996; Zeanah et al., 1995). Studies of SIDS survivors have consistently shown that married women have lower grief scores than single women, and that this is associated with a higher degree of availability of emotional support, usually obtained from marital partners rather than mental health professionals (e.g., Boyle, 1997; Ostfield et al., 1993; Price et al., 1985; Williams & Nikolaisen, 1982).

In a series of controlled studies of the impact of the loss of an infant on marital intimacy and communication between fathers and mothers following perinatal and infant losses, including seven SIDS cases, Canadian researchers (Feeley & Gottlieb, 1988-89; Lang & Gottlieb, 1991, 1993; Lang et al., 1996) compared bereaved and non-bereaved couples on measures of coping styles, bereavement experiences, and various aspects of marital intimacy (emotional, social, sexual, intellectual, recreational, and conventional intimacy). Mothers rated emotional intimacy lower, and sexual intimacy and recreational intimacy higher than did fathers. Mothers who rated their intellectual intimacy lower experienced a greater sense of guilt, meaninglessness, morbid fear, isolation and somatisation. Consistent with the literature, mothers' ratings of their overall grief feelings were higher than those of fathers. The authors cautiously concluded that on the whole it appears that marital intimacy is not adversely affected by the infant death, but that for couples whose coping was discordant, mothers perceived higher levels of conflict in their communication with their spouses than those whose coping styles were concordant. In a follow-up study, Lang et al. (1996) found that at 4-6 years post-bereavement, fathers experienced less guilt, meaningless, yearning and morbid fear than mothers did, but the fathers who showed least morbidity were those who had been able to experience both marital and social intimacy soon after their losses.

Evidence now emerging from the literature indicates that marital problems in the year following the death tend to be an extension of marital and psychiatric difficulties that had existed before the loss (e.g., Carroll & Shaefer, 1993-94; DeFrain, 1991; DeFrain & Ernst, 1978; Halpern, 1972; Mandell, McAnulty & Reece, 1980; Ostfield et al., 1993). The death may drain the energy needed to resolve the couple's problems and exacerbate an already difficult situation. As Gaffney (1992) put it, a death in the family does not cause divorce, but is often the precipitant of prior relationship issues. In one of the few longitudinal, controlled studies to address this issue, Mitchell et al. (1996) investigated the change in marital status and subsequent live births of SIDS mothers who had responded to the NZCDS, and found that at 3.7 years after the SIDS death, marital breakdown was no higher in the SIDS group than in the control group if stratified by marital status at the time of the death for the SIDS group or by the nominated date for the controls.

The literature indicates that when relationship difficulties did persist they appeared to focus on two main areas of conflict. Firstly, one parent may blame the parent who was on the scene at time of the child's demise, suspecting s/he did something to cause the death, feelings that were sometimes fuelled by grandparents who were mistrustful of their own child's partner (e.g., Cornwell et al., 1977; DeFrain et al., 1991; Goldberg, 1992). Secondly, discordant grieving between the parents often emerged as the reason for the deterioration of the relationship, usually because of gender differences in coping strategies (Cornwell et al., 1977; Dyregrov, 1990; Hagan, 1974; Ostfield et al., 1993; Powell, 1991a).

Fathers' Grieving Reactions

As with bereavement research in general, studies of the impact of SIDS largely reported maternal rather than paternal grieving reactions. This appears to reflect societal attitudes that fathers are not as involved in the infant's care, therefore they are not as emotionally involved with their infants; that males are not expected to express their grief as openly; and also the high refusal and attrition rates by males in participation in bereavement research (Dyregrov, 1990; Zeanah et al., 1995).

Furthermore, Cook (1988) identified a problem in applying and operationalising grief concepts to studies of men's reactions, when these concepts were originally formulated to understand the behaviour of women and may carry an implicit female bias. In a study of fathers' grief after a loss of a child to cancer, she found fathers' approaches to grief were often cognitive and solitary. They coped by suppressing and blocking feelings so they would not hurt others. Because expression of powerful feelings to others was viewed as threatening, they cried alone. Such strategies meant that some assessment tools, like inventories of physical and psychiatric symptoms, might not be appropriate for detecting fathers' grief. Fathers were placed in a double bind by societal expectations that men should be strong and comfort their wives, yet according to western cultural ideals, healthy grieving cannot be accomplished without the sharing of emotions.

Likewise, Ranney (1991) summarised several aspects of SIDS fathers' experience in contemporary western society. As she put it, social conditioning teaches men that they must be strong (big boys don't cry); that they must compete and win in a crisis (but how can a man compete with death?); they should protect the family from harm (but death brings failure to this role); be the family provider (therefore, they should return to work early); be a problem-solver (but death cannot be fixed); be the controller (but death makes life out of control); and be self-sufficient (so should stand on their own two feet and not share experiences).

In a study specifically looking at the grieving responses of fathers of SIDS victims, Mandell et al. (1980) found that fathers needed to grieve but required different outlets for their grief. Fathers tended to control the emotional expression of the pain of their grief and instead assumed a managerial-like function immediately after the death, finding that the concreteness of this role allowed for the expression of finality that seemed to reinforce the reality of the death. In general, their coping strategies were externally directed, in an attempt to avoid the pain of the loss. They were preoccupied with the support of the partner, tending to intellectualise the grief and blame, and sought to find a cause for the death partly so the mother would not blame herself. Most men experienced waves of anger and aggression, wanting to lash out, at someone like the physician who was blamed for magnified minor omissions. Fathers who had attempted to resuscitate their infants expressed special feelings of frustration and powerlessness. Even if not present at the time the dead infant was discovered they found it difficult to accept that nothing could have been done.

Most men in the study were reluctant to seek professional help or to talk about their feelings about the death, but were awed by the support from the community, relatives and friends, suggesting that their expectations of support differed from those of their partners. Those who did talk spoke of how a part of them had died with the baby; how they now felt less of a man. They expressed remorse over their lack of inclusion in their baby's care, regretting that they had not had more time with the infant. Fathers who had not spent as much time with their second-born rather than first-born children sometimes felt extreme guilt they did not get to know the baby as well. As time went on, their pattern was to involve themselves in activities outside the home, preferring to keep busy with work or outside hobbies that would absorb their attention. Bereaved fathers reported that a frequent source of conflict between them and their wives was to do with fathers' more urgent desire to have another child as soon as possible.

Gender Differences in Grieving Reactions

Reports of gender differences in parental responses to early infant deaths have revealed two main patterns. Firstly, although Dyregrov (1990) found a strong correlation between a high or low score in one partner with a similar score in the other at one and 13 months post-loss assessment points, the intensity of mothers' grief reactions has consistently been shown to be significantly higher and the duration of their recovery significantly longer than those of fathers. The grouped data, however, tends to disguise the fact that for 20-25% of men grieving is much more intense than that of their partner and that the father's mourning is mixed with his urge to protect and comfort the mother and the need to hold things together for the family (Benfield et al., 1978; Cornwell et al., 1977; Dyregrov, 1990; Zeanah et al., 1995). Bluglass (1980), for example, presented a case study of a deeply distressed young father who resented the fact all the sympathy went to his wife; he was unable to provide the strong support for her that was expected of him and this had driven them apart.

Secondly, differences in parental grieving styles often leads to discordant coping styles and resultant misunderstandings. Because fathers' grief tends to be shorter and less intense, this appears to mediate their grieving process so they might not have the necessary empathy and support for mothers' prolonged and intense grief, thereby exacerbating or producing marital conflict (Thomas & Striegel, 1994-95). In this vein, Cornwell et al. (1977) described how the father might accuse the mother of prolonging the family mourning unduly when he wanted to forget about it, and mothers, in turn, feared their husbands blamed them for the death and were afraid to verify this.

Carroll and Shaefer (1993-94) compared American spouses' coping patterns after an infant death to SIDS. Using a cross-sectional survey design and a specially developed SIDS Parent Coping Inventory (SPCI) with 93 items, each with a 6-point rating scale, they asked 35 couples to identify the frequency of behaviours used to cope with grief and ongoing family life since the death of their baby. Both mothers and fathers acknowledged their loss, but fathers tended not to express their grief openly by crying or verbal expressions of sadness and grief, and relied on their spouse/partner for support and to obtain information about SIDS.

Williams and Nikolaisen (1982), however, found that whilst fathers experienced significantly less intense feelings about the event, they did not feel any lack of ability to express their feelings. In their study, the main differences that emerged were that fathers showed a higher degree of reality orientation, whereas mothers had more difficulty accepting SIDS as cause of death and continued to look for a logical explanation for why the baby died. Fathers tended to use more externally directed action-oriented coping strategies whereas mothers showed more passive or withdrawn responses and often saw fathers as uncaring and lacking in understanding because of their tendency to lose themselves in outside interests. In the Queensland study, Vance et al. (1995) reported that mothers demonstrated more long-term psychological manifestations of grief after SIDS but that whilst both male and female responses were shown in raised levels of anxiety and depression and increased use of medications such as tranquillisers, male responses also included heavy alcohol consumption.

Effects of the SIDS Loss on Older Surviving Children

The death of an infant alters the family structure forever. During the time after the SIDS death surviving children are particularly vulnerable and their needs may go unrecognised (Krein, 1979; Mandell & Belk, 1977). Surviving children experience the trauma, uncertainty, fear, and family disruption associated with the SIDS death; they grieve for themselves, for the dead child and for the changed family system (Davies & Segal, 1991; Krein, 1979; Mandell, McClain, & Reece, 1988).

Parental reactions.

Parental behaviour toward the child is often significantly modified in the wake of the death (Mandell, Dirks-Smith, et al., 1988). Some reports of parental response to surviving children suggest that many parents feel a need to be physically closer to their surviving children, taking comfort from them and wanting to hold and cuddle them more (Carroll & Shaefer, 1993-94; Mandell, McAnulty, & Carlson, 1982). Others indicate that parent-child relationships may be strained to the point of pathology (Bluglass, 1980; Halpern, 1972; Raphael, 1983).

The most dramatic parental reaction portrayed in the literature is that of scapegoating of surviving children. Halpern (1972) presented three often-cited case studies of scapegoating of children who were present at the discovery of the dead or moribund infant and had become the immediate target for the distraught mother's initial reactions to the trauma. In each of the cases, the long-term effects of the panicked mother's implied or outright accusations that the older child was somehow an agent in the death led to a situation where the mother and child were "locked into a relationship marred by fearful doubt, hostile dependency and guilt" (p. 399). All three mothers were said to have lost confidence in their parenting role and this had prompted self-referral. Cases 1 and 2 were both described as being characterised by obsessive rumination about determining the older child's whereabouts and activities at the time of the SIDS death. One finding of interest was that older children will report memories of the death itself but do not spontaneously report having been accused of causing the death.

In Case 1 the mother had lost a baby girl and wanted a daughter. Her son was 3.5 years of age at time of the baby's death. Upon finding the dead baby, whom she had left to cry for an hour on the morning of the death, the mother had thrown her son against the wall and questioned him about hurting the baby. He had been ignored in the mourning period and suffered separation and death anxiety, withdrawal, behaviour problems, and bad dreams about the death. In Case 2, a 23-year-old mother presented with relationship problems with her 4.5-year-old daughter following the death of another daughter to SIDS a year previously. After waking late on a Christmas morning, the day of the SIDS death, the mother had found the then 3.5-year-old strewing gifts around the lounge. When she then discovered the moribund infant with styling gel applied to her hair, she suspected the child of having fed the gel to the baby and blamed her for the death. The older child became clingy, developed sleep problems and had nightmares about the dead sibling. Her mother described her as "sneaky, spiteful, moody and irritable" (p. 399). In Case 3 the mother of a 4.5-year-old daughter believed the then 3-

year-old child had suffocated the baby in the bed they both slept in and she had responded by literally throwing her out of the house. Over the next 18 months the mother continued to be unable to tolerate the girl and because of her rejection the child was put into foster care. When she was returned to the home, role reversal occurred; the mother was unable to provide nurturant care and expected the child to take on the role of caregiver for them both.

Bluglass (1980) presented yet another clinical case study of scapegoating, this time of a surviving child whose twin had died of SIDS at age 11 weeks. Whilst it is well recognised that fear of losing the surviving twin may be acute, and that the immediate demands of a surviving twin may delay grieving for one or both twins (e.g., McClain & Shaefer, 1996; Ranney, 1991; Tyrrell, 1985) the reaction of the young mother in this particular case was quite extreme. She came to believe the surviving twin was evil and was possessed by the spirit of the dead twin. He was blamed for all her social and emotional difficulties after the SIDS death, and she interpreted his normal active and assertive toddlerhood behaviours as dislike and rejection of her.

A second self-reported parental reaction applies equally to surviving and subsequent children. Parents describe an overarching sense of vulnerability of themselves and their children, evidenced in over-concern with safety issues, overprotectiveness of the remaining child/ren, and a tendency toward permissiveness, sometimes leading to behaviour and discipline problems in the children (Cornwell et al., 1977; DeFrain & Ernst, 1978; Krein, 1979; Mandell, Dirks-Smith, et al., 1988; McClain & Shaefer, 1996; Price et al., 1985). Many parents felt compelled to check children at night when they were sleeping and for some the fear was so great in the first year particularly, that they were unable to enter the door of the room (Boyle, 1997; Cornwell et al., 1977; DeFrain & Ernst, 1978). Mandell (1988) found that in some instances parents reported that they had babied a surviving child too much. He commented that this normative behaviour seemed to imply that the parents' need to feel once again the closeness of a parent-infant bond as well as fears for the safety of surviving children. Others have observed that when infantilisation of the surviving child occurs the child may be forced into a replacement child type role with all its possible pathological implications (Halpern, 1972; Raphael, 1983).

The third major area of parent-child relationship difficulty with surviving children is that of non-availability, emotional distancing and sometimes even outright rejection on the part of the parent (Cornwell et al., 1977; DeFrain, 1991; Mandell et al., 1982). Some parents describe being upset by the vulnerability, pain and distress of their children and feel too overwhelmed by their own grief to be available to provide the emotional support they need (Boyle, 1997; Bluglass, 1980; Gaffney, 1992; Ostfield & Buckalew, 1992). Studies have shown that at the 6-month post-loss time period the relationship between the mother and other children had distanced in 16% of families (Ostfield at al., 1993) and 21% of families (Price et al., 1985).

Reactions of the children.

Following the work of Bowlby (1980) it is now accepted that even very young children have the capacity to mourn, but that successful resolution of the child's mourning is dependant upon provision of adequate age-appropriate information about the death, and adequate emotional support from significant others in the child's life. It appears that older surviving siblings grieve very deeply, experiencing sadness, anger, distress, guilt and self-blame after the SIDS death. Parents have carefully prepared them to be big brothers and sisters, and suddenly and inexplicably these roles have been terminated (Mandell, Dirks-Smith, et al., 1988). It has even been suggested that the effects could be long lasting and intergenerational. Mandell, Dirks-Smith, et al. (1988) presented case studies of siblings from the same family in their late teens who were still feeling the effects of the loss that had taken place 15 years earlier. An older brother who was babysitting was thought by parents to have dropped the baby on its head and his sister, a teenaged mother, aged three at the time of their baby sister's death, was now worried about the possibility of her child dying of SIDS too.

Younger children in the stages of preoperational and concrete operational thinking typically cannot understand the meaning of this event and their ability to cope with the loss reflects their developmental concept of death. Preoperational children often see death as going away, as temporary and reversible; to them sleep and death may be considered to be the same thing, whilst to the 6-9-year old child there is a personification of death as happening to a person but only to other people (Culbertson & Willis, 1988; Gaffney, 1992; Mandell, Dirks-Smith, et al., 1988; McClain & Shaefer, 1996; Schwartz, 1988; Tyrrell, 1985).

The egocentric thinking of young children also contributes to the feelings of remorse and guilt almost invariably experienced by surviving siblings following a SIDS death. Siblings may be burdened by a sense of responsibility and self-blame for the death of the infant, convinced that their typical childhood jealousy and hostility may have caused the death of the infant who had usurped their position in the family and competed for the parents' love and attention (Arneil, 1988; Gaffney, 1992; Hagan, 1974; Mandell & Belk, 1977; Mandell & McClain, 1988; McClain & Shaefer, 1996; Price et al., 1985; Schwartz, 1988; Walker, 1985). As Schwartz (1988) put it, the death is viewed as the realisation of the sibling's unexpressed wishes for the disappearance of the infant; the baby that was resented is now dead and the child has but one option, to feel guilty.

Ostfield and Buckalew (1992) noted that some families may avoid talking about the death but that this policy tends to isolate rather than protect the older children and may lead to further feelings of guilt and self-blame. Similarly, Mandell et al. (1982) advised that parents should be encouraged to discuss the death with their other children, to tell them they are loved and that it is all right to cry and express feelings, and to include them in the funeral service and other mourning rituals. Surviving children often have an ongoing sense of vulnerability and concern for their own well-being and safety (Mandell & McClain, 1988). Simple honest explanations, without the use of euphemisms that can be confusing and frightening rather than comforting, can help reassure children they were not to blame for what happened and that their own life is not at risk (McClain & Shaefer, 1996). Smialek (1978) commented, for example, that the use of the terms "sleeping" or "sick" when talking about the dead baby could equally apply to the older child and may imply that it would happen to them as well. Continuation of routine activities, as much as is possible in the circumstances, reassures them that life will go on (Walker, 1985).

Children's signals of grief and insecurity after the death vary in their expression, ranging from acute distress, apparent unconcern (they may copy parents in trying to suppress feelings), or naughty and difficult behaviour displayed in an infantile manner (Limerick, 1988; Walker, 1985). Siblings may not have the verbal skills to make their own needs known and may retreat into isolation (Callahan et al., 1983; Gaffney, 1992). In other situations, parents may misinterpret their children's acting-out behaviours and increase their standards of discipline accordingly (Krein, 1979; Mandell, 1988). Common behaviour problems in older children are listed below but the relative frequency and duration of the difficulties are difficult to assess. This is because (a) extrapolation from clinical case studies with referred or "clinic" children to the majority of children in the community would be unjustified, and (b) few studies indicate whether problems are actually transient and minor, if longer time might be needed for symptoms to show up, or if parents' reports of their children's difficulties are accurate (Bluglass, 1981). Mandell et al. (1982) further suggested that behavioural difficulties of surviving children might be covered up by parents who are unwilling to disclose more evidence of their perceived parenting inadequacies.

Common behavioural difficulties identified in surviving children include:

1. Sleep problems, seen in refusal to go to sleep, fear of the dark, nightmares, fear of failing to wake up and of dying in their sleep, and inability to be reassured by parents (Arneil, 1988; DeFrain, 1991; Mandell et al., 1982; McClain & Shaefer, 1996; Powell, 1991b; Schwartz, 1988; Walker, 1985). Mandell et al. (1982) reported that some children woke up screaming in the night for months afterwards, screaming in the same way as the mother had when she found the dead baby. A typical description by the mother would be, "She was right there when it happened; I was screaming; she wakes up screaming" (Mandell, 1988, p. 192).
2. Changes in attachment behaviours, evidenced in a newly acquired separation anxiety and clinginess with parents, loss of appetite, sadness, anxiety about his/her own safety, and fear that parents would also disappear (DeFrain, 1991; McClain & Shaefer, 1996; Powell, 1991b; Walker, 1985). In a study of 35 surviving children (Mandell et al., 1982) most of the children were distressed and frightened by the sight of their crying and confused parents. There were many instances of role reversal with children trying to comfort parents in times of distress, and a provoking tendency of children to test the limits of discipline for several months after the death (Mandell, 1988). Future pregnancies in the family could precipitate more questions and fears in the surviving children (Gaffney, 1992). Older children sometimes queried whether it was their fault or their parents' fault for not having a monitor for the SIDS baby (DeFrain, 1991).

3. Changes in social interaction with peers were seen in withdrawal or bursts of aggression to other children (DeFrain, 1991, Mandell et al., 1982; Powell, 1991b; Schwartz, 1988; Walker, 1985).
4. School adjustment problems were common, shown in school-phobia, increased motor activity, acting up for attention, discipline problems, and aggressive behaviour (DeFrain, 1991, Mandell et al., 1982; McClain & Shaefer, 1996; Schwartz, 1988, Walker, 1985).
5. Regression in developmental stages included language delays, bedwetting, wanting a bottle, and regression in toilet training (DeFrain, 1991, Mandell et al., 1982; McClain & Shaefer, 1996; Powell, 1991b; Schwartz, 1988, Walker, 1985).

Whilst it appears that the issue has not yet been systematically addressed in the SIDS literature, the typical experiences of an older surviving child (who was likely to have been present at the discovery of the dead baby, witnessed the extreme distress of the caregiver and initial resuscitation attempts by frontline service providers, and suffered the ensuing emotional and sometimes physical unavailability of the parents) suggest that the child has suffered extreme life stressors that would make him or her a likely candidate for post traumatic stress disorders of childhood.

Drell, Siegel and Gaensbauer (1993) outlined the concept of PTSD in children as young as those in infancy and toddlerhood, listing as possible dysfunctional outcomes the following features: hypervigilance, developmental regressions, sleep disorders including night terrors, increased anxiety in strange situations, clinginess with caregivers, attempts to avoid particular situations, and under-usage of words associated with the trauma. In a recent article, Gaensbauer (2002) cited the case of a 9-year-old boy referred for treatment of depression, and who was able to provide detailed descriptions of the traumatic events surrounding the death of his baby brother to SIDS seven years earlier when he himself was nearing his second birthday. His parents confirmed that his descriptions of the events and clothes worn by family members that day indicated that he remembered the events better than they did themselves.

Longer-term Course of Bereavement

Relatively little is known about the long-term course of bereavement after the loss of a child to SIDS. Clinicians' reports in the SIDS literature generally focussed on interventions with client families in the immediate post-loss period in the belief that successful accomplishment of the early tasks of mourning would lead to more adaptive patterns of adjustment in the long run. As has been noted, most research in the field has been retrospective and cross-sectional in design and the outcome criteria used have varied considerably (Raphael, 1983; Zeanah, 1989). Moreover, the few prospective studies of infant deaths that have included SIDS cases have seldom had a follow-up period of more than 18 months (Boyle, 1997). Rubin's two-track model of parental bereavement (Rubin, 1981, 1982, 1984-85, 1993, 1996) is a useful way to summarise the longer-term aspects of parental grieving after the death of an infant, examining as it does the continuing interaction between functioning and relationship; i.e., the global reaction encompassing virtually every area of functioning that tends to subside with time, as well as the covert relationship to the deceased that remains a major ongoing focus of adaptation long afterward.

Relational aspects of the loss.

In keeping with the "continuing bonds" perspective, the outcomes of grief work or mourning have been increasingly regarded as a matter of degree, not an absolute condition. Long-term resolution of grief after the loss of a baby thus tends to be described in terms of adaptation rather than as recovery or completion (Boyle, 1997; Zeanah, 1989). Arnold and Gemma (1991) for example, reported that many bereaved parents were angered by the suggestion that they should "let go" of the lost relationship with their dead child and simply move on with their lives as if grief were a circumscribed reaction that one lives through and eventually overcomes or puts in the past. Others have noted that SIDS parents must instead learn to maintain the connection with the dead child and live with the void of the loss whilst incorporating the baby's death into their lives in a way that allows them to continue to function and to recognise life as worth living and with as much happiness as possible (e.g., Limerick, 1988; McClain & Shaefer, 1996; Ranney, 1991).

Rubin (1984-85, p. 351) coined the phrase the "phantom child phenomenon" to capture something of the permanent presence of the dead child in maternal experience with the passage of time. For example, when asked how many children she has, a mother might reply that three are living and one passed away. He observed that bereaved parents simultaneously mourn the image of their child as at time of death and as he or she would have been at various developmental stages if still alive. Each birthday and anniversary thus becomes an occasion for mourning, and renewed grieving for the lost child is triggered when other living children in the family or community attain culturally important rites of passage such as starting school, graduating from high school or becoming confirmed in the church. Whilst nowadays it is common practice to celebrate occasions like these openly as an acknowledgment of the dead child's continuing place in the family, such "anniversary reactions" have been defined elsewhere in the clinical literature as time-specific manifestations of incomplete mourning, symbolising ongoing attempts to master previous loss and trauma (Gabriel, 1992). In this vein, Cornwell et al. (1977) interpreted the custom of having a cake and candles on the SIDS victim's birthday as a way of avoiding the pain of the loss by cultivating fantasies as if he or she were still living.

Return to pre-loss family functioning.

Drawing on the findings of his cross-sectional controlled study of recent and distant-loss groups of mothers of SIDS victims and a non-loss control group, Rubin (1981) concluded that, on average, bereaved parents soon regained their pre-loss levels of family functioning in their everyday roles. Cornwell et al. (1977) found that the mean time to resume normal functioning was 3.6 months for fathers and 10.3 months for mothers. Without specifying gender differences, DeFrain and Ernst (1978) noted that SIDS parents took an average of 16 months to regain the personal level of happiness they had felt before the death, but somewhat less time to regain their everyday functioning. As has been mentioned, in other loss situations, both Peppers and Knapp (1980a, 1980b) and Martinson et al. (1991) also found that parents reported an early return to family functioning.

Indicators of distress over time.

Rubin (1981) reported that most indicators of distress as measured by broad personality variables changes in the SIDS group showed a more gradual decrease to become virtually indistinguishable from levels in the non-loss group by 4.5 years post-loss. Noting that fathers' levels of anxiety and depression were significantly higher than controls at the 2-month assessment point only, Boyle et al. (1996) also confirmed a gradual decrease in symptoms of anxiety and depression in bereaved mothers over time. Data obtained in the prospective Queensland study indicated that SIDS mothers had initial rates of depression and anxiety that were five times higher than that of the control group. Their scores had dropped somewhat by the time of the 8-month assessment point to be three times higher than for controls, but then seemed to stabilise and to decline only very gradually in the 8-30 months period. Boyle (1997) added that factors associated with enduring distress in bereaved mothers included lack of access to health care, low levels of education, presence of other children in the home, lower levels of marital satisfaction, and perceived inadequacy of social support.

Dyregrov and Matthiesen (1991) observed that in their sample of SIDS parents, anxiety scores did not show the same decline that the other measures did; and bereaved parents appeared to have lost their illusion of invulnerability and to expect the worst to happen. As already stated, Rubin (1983) had been struck by the fact that SIDS parents appeared to have an enduring sense of guilt and responsibility for the child's death and a continuing interest in emerging theories of causation. In the Sydney SIDS study, Cornwell et al. (1977) found that more than a year after the loss, most mothers were still preoccupied with images of the dead child, showing searching behaviours and fears for the safety of their surviving children. Likewise, symptoms of fear, sadness and depression were still present up to 30 months later in almost half of the mothers surveyed by Price et al. (1985).

Other studies have analysed mothers' retrospective accounts of changes in the levels of their grief symptoms over shorter time spans. Ostfield et al. (1993) reported that the levels of distress remained measurable six months after the loss but had dropped significantly for every item over that time. During the initial phases the five most intense symptoms of grieving were (in diminishing order of intensity) sadness/depression, concentration difficulties, restlessness, sleep disturbances, and anger. At six months, sadness/depression was still the most intense, but anger had moved to the second most intense item. Replacing the other symptoms, in order of intensity, were fear of additional losses, being uncomfortable around infants, and guilt feelings. The changes indicated a shift to the more cognitive than somatic aspects of grief but by themselves did not represent a termination of the grieving process.

Similarly, in a sample of mothers who had experienced a SIDS death six months to 2.5 years previously, Price et al. (1985) found that in the initial stages of bereavement mothers reported sadness and depression, restlessness, fearfulness, sleep disturbance, concentration difficulties, feelings of discomfort around other pregnant mothers, loss of energy, loss of interest in social activities, loss of appetite, guilt feelings and job difficulties. The level of perceived emotional support was again related to the severity of mothers' grief symptoms initially and several months later. Over 50% of mothers reported feeling at least 12 of these symptoms in the first days after the death but a subgroup of 15% still had the same high level of symptoms at six months after the death. Although the majority of symptoms experienced by mothers subsided during the first few months, the primary symptoms of fear, sadness and depression were still present several months to 2.5 years later in almost half of the mothers in the survey.

The point made by Price et al. (1995) that a smaller group of people in their sample showed no decline in symptoms by six months post-loss again confirms the pattern that whilst the gradual and noticeable decline in symptoms occurs in the majority of people, a smaller proportion of people may show one of two alternative responses: either an absence of distress, both at the outset and later; or enduring high levels of distress. This range of responses, from avoidance of distress at one extreme to chronic distress at the other, was also reported by Dyregrov and Matthiesen (1991) who found that on average, the most acute symptoms on measures of anxiety, obtrusive thoughts, anger, restlessness and sleep disturbances decreased in the 6-13 months post-loss period, but for some individuals there was little change in the reported levels of distress right through the first year.

Likewise, Wortman and Silver (1989, 1991) had demonstrated that early levels of distress were highly predictive of long-term adjustment; that it was the bereaved parents who had shown initial high distress and scored in the depressed range in either of the earlier interviews who were more likely at the 18-month measurement time to be depressed, and to show signs of not having resolved the loss. As many as 30% of parents had shown muted emotional reactions to the loss, apparently without long-term negative effects, leading the researchers to conclude that intense distress or depression were by no means an inevitable part of the mourning process.

Measurement of resolution.

Various authors have attempted to characterise resolution of maternal grief by measuring ways in which the mother has succeeded in her cognitive and metacognitive attempts to accept and make meaning of the SIDS loss. However, interpretation of the data is again complicated by the fact there is a lack of consistency in the outcome measures adopted as evidence of resolution. Some researchers have pointed to the mother's ability to respond comfortably and without acute distress to questions relating to the memories and thoughts associated with the deceased child as evidence of resolution of the loss (Rubin, 1982, 1984-85; Powell, 1991a; Wortman & Silver, 1989, 1991). Wortman and Silver (1991) had the added requirement that mothers should have cognitively found meaning in their baby's death; a milestone that most had failed to reach by 18 months post-loss by their criteria, but those who did come up with a meaningful account of the loss did so within a few weeks of the baby's death. By three years after the loss less than half of the parents in the study by Powell (1991a) expressed an acceptance of the SIDS death, and this was evident in their inability to rationalise the loss, difficulty in talking about the death, ongoing marital difficulties, and a permanent sense of void in their lives. Boyle (1997) also addressed the concept of finding meaning in the loss as an indicator that resolution is taking place but she portrayed this more in terms of personal growth and change in mothers themselves as a result of surviving the tragedy.

Overall, the evidence indicates that there is considerable individual variation in patterns of parental mourning, and that for the majority of parents, the passage of time alleviates but does not completely heal the sense the loss. Although there is a return to relative normality on most standardised measures, SIDS parents' affective involvement with the dead child is not time-limited, and is often accompanied by lasting feelings of guilt and responsibility for the death, along with a sense of personal vulnerability, fear for safety and an ongoing need to find the reason for the death. As described in the next chapter, these significant components of the mourning process inevitably influence and are influenced by the conception and later development of children born subsequently.

CHAPTER THREE

Literature Review

Part 3

The Subsequent Child

Subsequent children (sometimes referred to in the medical literature as subsibs) are routinely, but rather vaguely, referred to in the clinical literature as being at risk of replacement pathology, with the potential for a variety of associated behavioural and developmental problems arising from, and as symptoms of, distorted forms of mourning. Early advice to parents and clinicians (E. Lewis, 1979; Bourne & E. Lewis, 1984a, 1984b; Bowlby, 1969, 1980) indicated that bereaved parents should wait at least a year before conception of another child to allow time for the work of mourning to be completed and for emotional energy to be available to invest in a separate relationship with the subsequent child. Whilst it is unclear how and when the shift in thinking occurred, others now define conception within six months of the loss as being early replacement (e.g., Bluglass, 1981; D. L. Davis, Stewart, & Harmon, 1989; Phipps, 1985; Theut, Moss, et al., 1992). The premise, drawn primarily from psychoanalytic theory and supported by clinical case studies, was that pregnancy too soon after an infant death may lead to an interruption in the mourning process which is then resumed after the birth of the next baby, whose own identity may be lost when the dead infant's presence becomes mislocated within the new child (Bowlby, 1969, 1980, Cain & Cain, 1964; Poznanski, 1972). This phenomenon, of course, takes on a new significance with the realistic prospect of cloning emerging as the ultimate in replacement strategies.

D. L. Davis et al. (1989, p. 481) identified three major difficulties with parenting of a subsequent child that can arise from a mother's "prolonged and unresolved" grief following the death of an infant:

(1) Depression and other grieving emotions that may interfere with mother-infant attachment and maternal responsiveness (Bowlby, 1980; Emde, 1980; Klaus & Kennell, 1982).

(2) The Replacement Child Syndrome, where the mother views the subsequent baby as a replacement for the dead baby (Cain & Cain, 1964; Poznanski, 1972), and

(3) The Vulnerable Child Syndrome, where the mother is overprotective of the subsequent child, leading to separation/individuation difficulties in the mother-child relationship (Green & Solnit, 1964).

Replacement Child Syndrome

Several well-known public figures thought to have suffered from replacement pathology have been described in the literature. Author Henri Beyle, for example, was said to have spent his life haunted by the death of an older sibling and the later death of his mother Henriette when he was only seven years old. He constantly sought a personal identity, using a number of aliases until he found the name "Stendahl" that he felt could become his own (Porot, 1993). Artists Salvador Dali and Vincent Van Gough were also apparently conceived as replacement children (Meissner, 1995; Sabbadini, 1989). Van Gough's experience as a substitute for a stillborn older brother, whose name he was given, resulted in a lifelong preoccupation with death that was evident in his paintings, and ended with his suicide in early adulthood (Meissner, 1995). In New Zealand, educator Sylvia Ashton-Warner grew up in the shadow of a dead older sibling and she too was given the names of the deceased previous child (Hood, 1988).

The initial description of the "Replacement Child Syndrome" (drawn upon by Bowlby, 1969, 1980) was written by Cain and Cain (1964) based upon their clinical assessment of families in which a subsequent child was used by guilt-ridden, depressed and phobic older parent(s) as a substitute for a dead child. Later authors (e.g., Bluglass, 1980; Poznanski, 1972; Twomey, 1995) have presented similar case studies of the same phenomenon. Cain and Cain (1964) reported that parents of replacement children had often shown an intense narcissistic investment in the child who had died and had not adequately worked through their intense anguish and grief before the birth of the subsequent child. Instead of gradually and "healthily" withdrawing their emotional investment in the lost child and then redirecting their interest towards new objects (the Freudian expectation), they showed a distortion of the mourning process, known as "pseudo resolution of mourning". The grieving process was supposedly stalled at an early stage of resolution and the new object (child) brought into existence in a futile attempt to regain the child they had lost. Their apparent outward focus on a new object (the replacement child) was, therefore, not so much evidence of having relinquished their bonds to the lost child, but rather an indication that they were only superficially moving forward.

The substitute child thus becomes virtually "smothered" by idealised images of the lost (Cain & Cain, 1964). The parents are continually preoccupied with talking about and remembering the dead child. Ultimately, they impose the identity and the hyperidealised, grossly unrealistic image of the dead child upon his/her substitute. In more extreme cases, like the adult ones mentioned above, the unfortunate new child is given the name of the previous child and constant unfavourable comparisons with the dead sibling are made. Occasionally, mothers scapegoat a replacement child because of an irrational fantasy that he or she is in some way responsible for the death of the sibling.

Volkan (1981) introduced the idea that a replacement child can become a living "linking object" with the dead child. In much the same way that a preschool aged child uses transitional objects to provide a sense of security when moving toward independence from the mother (Winnicott, 1964), a grieving parent may use the substitute child to evoke the presence of the idealised dead child. Ambivalence then characterises the relationship between the mother and replacement child. Whilst the mother may perceive the child as very "special" in the replacement role, the care she provides is typically unempathic and neglectful, falling short of adequate mothering because of her ambivalence and chronic, unresolved mourning. In some such children this deprivation of care would be the precursor of later narcissistic personality disorder, in which the individual displays grandiosity because he or she feels unlovable in the absence of perfection.

A common pathological outcome of the Replacement Child Syndrome is supposedly "maternal overprotection" of the substitute child and heightened concern over the possibility of accident or illnesses. Maternal overprotection, in turn, is a phenomenon described by D. Levy (1943, 1970) as being synonymous with excessive maternal care of children in one or more of four main areas: excessive physical contact, infantilisation, prevention of independent behaviour, and lack or paradoxically, excess of control of the child's behaviour. Consequently, replacement children reportedly experience the dead child's physical symptoms, are preoccupied with their own mortality and perceive themselves as inadequate, vulnerable and living in a world of constant unpredictable dangers (Cain & Cain, 1964). The Replacement Child Syndrome is, therefore, often linked in the literature to the "Vulnerable Child Syndrome" with which there is considerable overlap.

Vulnerable Child Syndrome

According to Thomasgard and Metz (1995, p. 47) the central construct of the Vulnerable Child Syndrome is "an increased parental perception of child vulnerability to illness or injury, secondary to separation or loss, which is either real or feared". The three core dimensions of the syndrome include (a) parental perceptions of vulnerability, (b) an overprotective parent-child relationship, and (c) resulting behaviour problems in the child (Forsyth, McCue Horwitz, Leventhal, Burger, & Leaf, 1996). Furthermore, Thomasgard, Metz, Edelbrock, and Shonkoff (1995a, 1995b) stressed that parental perceptions of vulnerability and parental overprotection are two separate clinical constructs and believe that failure to differentiate the two has been the reason for some of the conflicting reports in the literature of the incidence of the Vulnerable Child Syndrome.

As shown in the examples listed below, several attempts have been made to develop quantitative measures of the various aspects of the Vulnerable Child Syndrome.

1. *Parental perceptions of vulnerability:* Measures quantifying parental perceptions of vulnerability include (a) the Child Vulnerability Scale (CVS), with 12 original items which were later culled to eight (Forsyth & Canny, 1991; Forsyth et al., 1996); and (b) the Vulnerable Child Scale, which was adapted from the original CVS to produce 16 items with four response choices (Perrin, West, & Culley, 1988).
2. *Parental overprotection*: Wright, Mullen, West, and Wyatt (1993) developed the Vulnerable Child/Overprotecting Parent Scale (VCOP) with 28 items, to measure both parental overprotection and perceptions of vulnerability. Thomasgard et al. (1995a, 1995b) separated out these two dimensions and designed and validated the Parent Protection Scale (PPS) to assess parental overprotection of children aged 2-10 years. The PPS contained four subscales: Supervision, Separation Problems, Dependence and Control. Predictably, the

overall sub-scores for each of the subscales reduced with the increasing age and growing autonomy of the child, so norms were established for various age-bands.

3. *Parental reports of child behaviour problems:* The measure most widely used to assess parental reports of child behaviour problems is the Achenbach Child Behavior Check List (CBCL) for two distinct age-bands: 2-3 years (e.g., Achenbach, 1992), or 4-18 years (e.g., Achenbach & Edelbrock, 1986), both containing rating scales on items describing behavioural/emotional problems. Children with a standardised total problem score of greater than 64 are considered to be in the clinical range for behaviour problems (Forsyth et al., 1996).

The original concept of Vulnerable Child Syndrome was also derived from clinical observations, this time made by paediatricians Green and Solnit (1964) who documented 25 cases of children considered by their mothers, for reasons not founded in reality, to be vulnerable. These cases were drawn from a subgroup of children who had a history of a serious illnesses or accidents, usually in infancy, from which they were not expected to recover and who subsequently suffered a disturbance in the parent-child relationship and resulting problems in their psychosocial development. The mothers had a sense that the children were destined to die during childhood and so were only theirs on tenuous loan. Presenting symptoms of the syndrome included difficulty in separating from the child, frequent checking in the night to see if the child had died, school phobia, sleep disturbances, infantilisation (overprotective, overindulgent, oversolicitous parent, unable to set discipline boundaries, and a child who is uncooperative, dependent, irritable, disobedient), bodily overconcerns (hypochondria, school absences, described as "sickly") and school underachievement (associated with difficulty in separating from the parent who is the only person who can keep the child safe).

Significantly, Green and Solnit (1964) also discussed the origins of the Vulnerable Child Syndrome in terms of distorted mourning reactions. Parents of children who suffered life-threatening illnesses typically were said to experience an anticipatory grief reaction when they became convinced or informed that their child would die. When this grief was interrupted by the survival of the child despite the odds, the grieving process was incompletely aborted and the parent was left with an ongoing exaggerated perception of the risk status of the child. The authors suggested that parental misperceptions of vulnerability could be corrected if the doctor pointed out the origins of parents' concerns and reassured them that the child was physically healthy. SIDS parents, however, might not be easily convinced, having had doctors and other health professionals tell them that their babies who died were perfectly healthy.

In addition, among the list of predisposing factors for susceptibility to the Vulnerable Child Syndrome were parents' unresolved grief reactions; for example to the loss of another child, or older first-time parents who had resigned themselves to never having children because of previous losses from infertility, miscarriages or stillbirths. By these criteria, subsequent siblings of SIDS victims would appear to be candidates for the Vulnerable Child Syndrome on both counts: an anticipatory parental grieving reaction may well occur as medically they are at a slightly increased risk of dying in infancy of SIDS, and they have been born to parents who are likely to be still mourning the traumatic loss of an infant.

The notion of the vulnerable child has increasingly been extended to include children with non-life-threatening disorders (Wright et al., 1993). Boyce (1992) cautioned that the potential for iatrogenesis has been increased by the huge advances in technological medicine, for medical interventions, especially early in a child's life, can change the character of parent-child interactions for years to come. A number of studies have confirmed that overprotective tendencies may be based on parental perceptions of the child as vulnerable, rather than on the actual severity of the illness, for even apparently innocuous conditions thought to have no long-term effects have been shown to affect parent-child interactions. Stern and Hildebrandt (1984) for example, demonstrated that parents' stereotypical perceptions of a child as premature or fragile can become a self-fulfilling prophecy and thus adversely affect the caregiving environment and later development and adjustment of the child.

Furthermore, in a follow-up study of infants who had suffered mild neonatal jaundice, Kemper, Forsyth, and McCarthy (1990) illustrated how mothers of infants treated for jaundice were more likely to have stopped breastfeeding, were less willing to leave the child with a babysitter, and more often made visits to the emergency room with the child. Forsyth and Canny (1991) showed too that 3.5-year-old children with a history of excessive crying in infancy were significantly more likely to be perceived as vulnerable by their mothers if their milk formula had been changed at the time to exclude allergies as a possible cause of their distress. This was despite the fact there was no difference in the incidence between the groups at 3.5 years for prevalence of other atopic conditions such as asthma or eczema. Estroff, Yando, Burke, and Snyder (1994) reported that of 50 healthy preschoolers who had been born prematurely, children whose mothers who perceived their children as vulnerable also expressed a diminished sense of parental efficacy and of being less in control of their child's behaviour. In addition, they rated the child on the CBCL for 2-3-year-old children as having more somatic problems, as being more aggressive, destructive and poorly socialised.

Some have shown that children perceived as vulnerable overuse medical resources without any objective justification for doing so. In a large sample of 750 children attending paediatric practices in the Boston area, J. Levy (1980) coded parental perceptions of vulnerability based on responses to a question on the standard interview recording form, "Do you have special worries about the child's health or feel the need for extra cautiousness?" (p. 956). The data showed that 27% of the children were perceived by their parents as vulnerable, and this group made many more visits to the emergency room than did other children even though for 40% of them (around 15% of the overall sample) there was no medical basis for parental concern.

As part of a study designed to develop and validate an instrument to identify children perceived as vulnerable, Forsyth et al. (1996) screened over a thousand 4-8-year-old children attending paediatricians' offices for significant psychosocial difficulties, and for scores in the clinical range for behaviour problems as shown by the parent-completed version of the Child Behavior Checklist (CBCL) for 4-18 years (Achenbach & Edelbrock, 1986). Parents of the children in the study were also asked to complete the Child Vulnerability Scale (CVS) to identify heightened parental perceptions of vulnerability, independent of parental reports of overprotective parenting styles. The overall findings showed that 10.1% of children in the total sample were perceived as vulnerable. Subgroups of children who had, or had not ever been considered by their parents to be at risk of dying from either a present or past illness were then distinguished. For those for whom no current medical conditions were reported, and no prior fears by the parents that the child might die, only 1.5% were categorised as "perceived vulnerable". Of the children with a current potentially life-threatening medical condition (such as moderately severe asthma) 41% were perceived as vulnerable, and this number reduced to 23% for those whom the parents had previously feared that the child might die. Demonstrating external validity of the scale, 20% of the children with a score in the clinical range on the CBCL were perceived as vulnerable, in comparison to only 8% of those with a CBCL score in the normal range. Even when children with medical conditions that potentially made them medically vulnerable were excluded from the analysis, children perceived as vulnerable had a significantly higher number of visits to doctors for acute medical problems.

Some follow-up reports on children who were born with low birthweight indicate that the incidence of the Vulnerable Child Syndrome has been exaggerated, and that the effects, if present, may be only transient. When McCormick, Brooks-Gunn, Workman-Daniels, and Peckham (1993) investigated up a sample of 8-10-year-old children, of whom more than two thirds had had low birthweight, they found that parental ratings of their child's vulnerability were associated with the child's current health status at school age, but not with any previous adverse events in infancy. No specific measures of parental overprotection, child behaviour problems or numbers of unwarranted medical consultations were reported but the authors concluded that there was no evidence that the Vulnerable Child Syndrome persists.

Schraeder, Heverly, O'Brien, and McEvoy-Shields (1992) conducted a controlled study comparing parental ratings of vulnerability and child temperament measures of 39 seven-year-old school children who had been born with very low birthweight with a control group of 30 of their peers who had been born with normal birthweight. They found no between-group differences of their caregivers' perceptions of their children's vulnerability status but noted that child temperament made a significant contribution to perceptions of vulnerability in both groups.

In another follow up study of low birth weight infants, Scheiner, Sexton, Rockwood, Sullivan, and H. Davis (1985) studied a group of 17 mothers of low birthweight infants at 12-18 months past the infants' due dates, and matched them with a control group of the same number of mothers of infants of normal birthweight. To complement interview data about mother's perceptions of the seriousness of the child's condition at birth, and current parenting practices, mothers completed a Mother-Child Relationship Evaluation questionnaire to measure the parent's acceptance, overprotection, overindulgence, and rejection of the child. In this small sample, no differences were found between the LBW or control groups on any of the measures used, though it is interesting that as many as a third of mothers in both groups scored as overprotective of their children but did not also perceive their children as vulnerable.

Implications for Subsequent Pregnancies

Powell (1995) pointed out that the view that replacement child pathology is less likely if parents have grieved and mourned the lost child is a largely conceptual argument that is not as yet supported by research, and runs contrary to suggestions by some that an early subsequent pregnancy can be a means towards adjusting to the death and resolving the grief process. Subsequent pregnancy and early parent-subsequent child relationships following perinatal and neonatal losses have been the focus of several studies but very few researchers have looked specifically at the experience in families who have lost an older infant to SIDS.

Decision to have a Subsequent Child

The decision to begin a planned subsequent pregnancy can be a difficult one to make, for whilst the need to fill the void may be strong, the thought of another child may also increase parental feelings of guilt and anxiety (Mandell & McClain, 1988). In addition, the decision often needs to be made at a time when energy is not available, and is affected by factors such as parental age, family finances, prior ease in conceiving, number of existing children, sterilisation (seldom reversible) of either parent, and pre-loss plans to have more children (Ranney, 1991; Walker 1985). Price et al. (1985), for example, stated that in their sample of SIDS parents 63% had planned to have another baby anyway, 36% reported that the SIDS death had had a significant effect on their decision, 44% said it had had no effect, and 20% were unsure. In the parallel study by Ostfield et al. (1993), by six months post loss, 10% of the sample had decided against more children, 13% were undecided but 76% planned more children and 24% were already pregnant.

D. L. Davis et al. (1989) administered a perinatal loss interview to 24 mothers who had experienced perinatal loss, asking mothers about decisions and advice regarding timing of subsequent pregnancies. Of the 24 mothers, 17 decided to wait less than six months after the loss to conceive again. Four decided to wait six months or more but this was only because they happened to agree with their doctors' advice to do so, not because they were merely following instructions. Those who had been advised to wait were displeased with this advice in retrospect, feeling that timing of the subsequent pregnancy should be a personal decision made after weighing up the many situational factors for the individual family. The authors concluded that parents should be educated about the relative risks and advantages of postponing pregnancy to enable them to make an informed choice about whether or when to conceive again.

Replacement Dynamics

Fertility patterns

Indirect evidence for replacement phenomena is shown in demographic data of increased fertility following perinatal loss in both developed and developing countries (Zeanah, 1989). For quite some time it was thought that the opposite was true for SIDS parents who expeditiously decided to have another child, as it appeared they were often frustrated by difficulty in achieving pregnancy or by spontaneous abortion. In a landmark study that became the basis of much of the advice given to parents by doctors and SIDS counsellors, Mandell and Wolfe (1975) interviewed a sample of 41 women whose infants had died of SIDS and reported that early subsequent fertility was adversely affected by the emotional distress engendered by the grieving process. The expected rate of infertility in population at the time was 10%, and of spontaneous abortion was 15%, but of the 32 women in the sample who wanted further children, over 30% had their first spontaneous abortion, and 35% could not conceive for more than a year, despite previous proven fertility. These findings were construed as psychosomatic symptoms of severe parental grief reactions in SIDS parents, and echoing the melodramatic words of Cain and Cain (1964), the authors wrote, "In this psychological atmosphere, shrouded with mourning and self-condemnation, women who have lost children attempt to conceive" (p. 775).

Reporting on the mixed-loss Queensland study, Boyle (1997) was also surprised to find that almost one in four subsequent pregnancies in the SIDS group alone resulted in miscarriage. In contrast, a much larger controlled follow-up study of subsequent live births of SIDS mothers who had taken part in the NZCDS has shown no increase in infertility or miscarriage after a SIDS death (Mitchell et al., 1996). With the exception of those whose first baby had died of SIDS and who had thus not experienced what the authors described as the joys of parenthood, mothers in the loss group were more likely than controls to have further children (many were pregnant within three months of the SIDS death) and to have them sooner after the SIDS death/nominated date.

Readiness for another child.

As has been noted, for many mothers the urge to replace the lost child is strong in the phase of acute grieving and may be an unconscious attempt to assuage her narcissistic loss and to avoid the pain of grief (Cornwell et al., 1977). In other couples it is the father who has a more urgent desire to have another child as soon as possible, to help deal with his grief and perhaps to reassure himself of his virility, and the disparity in opinions is a frequent source of conflict between them (Mandell, 1988). Hense (1994) aptly pointed out that parents must face the reality that the death has changed the family forever; for no matter how much it is wished for, having a new baby cannot fix things or undo the loss.

Cornwell et al. (1977) suggested that parents might be ready for a next child when they realise that the subsequent child will not replace the one that died but will be a separate individual. However, D. L. Davis et al. (1989) found that the majority of mothers in their sample spontaneously described overprotective and replacement feelings regardless of the timing of the subsequent pregnancy. Replacement feelings for these women appeared to be the result of never having had the chance to get to know the baby that died. A total of 20 out of the 24 mothers spoke about having difficulty separating the dead and living babies but only two women idealised the image of the dead baby and felt disappointed in the next one in comparison. The other 18 tended to use the subsequent child as a comparison (in the style of what Rubin (1984-85) had referred to as the phantom child syndrome) to help them satisfy their "benign" curiosity as to what the dead child would have looked like, sometimes superimposing the looks, personality and activities of the living child upon their image of the dead child.

Differentiation of the dead child and subsequent child.

DeFrain et al. (1991) reported that for most of the people in their studies, having another child was a joyous but terrifying experience. For some, early thoughts of a new baby caused tremendous guilt for parents, who felt they were desecrating the memory of the baby who died by thinking so soon of having another baby. The authors advised that parents who have a subsequent baby need not think of this baby as a replacement for the baby who died, but rather as having entered the world in honour of the memory of the baby who died, quoting one grandmother who said, "She has Jason's eyes. Jason lives on in Ellie" (pp. 222-223).

From her interviews with 14 couples in a mixed loss group, Johnson (1984-85) noted that there were several differences between the parents in her sample and those described in the classic case studies by Cain and Cain (1964). Johnson's participants were younger parents who were not chronically depressed, apathetic or withdrawn. They had made a joint decision with their partner to start living again and to have another child to fill the void, and to give them a chance to ameliorate their lingering sense of guilt from the death of the previous child. Nevertheless, replacement dynamics were evident in issues to do with the name and gender of the subsequent child. Some parents wanted immediate replacement of the dead baby with another one of the same sex. They would have liked to have given the dead child's name to the new child and reluctantly refrained from doing so because of an awareness of the undesirability of this practice, but instead unconsciously chose a name for the subsequent child that started with the same letter as the dead child's name. When the new child was not the same gender as the dead child, the parents were initially disappointed and upset but then decided to "keep him or her" (p. 114).

Similarly, Beard (1991) presented a clinical case study of a woman who had lost two sons to SIDS and had a surviving older daughter. When her next child (from an unplanned pregnancy) was born, she "froze" when she heard at the delivery that the baby was a boy, thinking it was a foregone conclusion that it would happen again with a boy, that they simply were not meant to have a son. In other case studies, Drotar and Irvin (1979) described the case of a woman who had lost a daughter, and believed her sadness would be relieved by another baby but only if it was another girl, and Halpern

(1972) described a case of scapegoating an older surviving son by a mother who had lost a 6-week-old daughter and wanted another daughter.

Hense (1994) conducted a qualitative study of livebirth following stillbirth, listening to the stories of 10 women as they lived through the experience of a subsequent pregnancy after stillbirth and then analysing their stories to identify a shared experience. She reported that each woman re-lived the previous loss before talking about the subsequent pregnancy. For many, the stillbirth had been their first experience of loss. They were left with a feeling of having failed as a woman, that their bodies had failed them. Loss of a live child meant loss of plans to be a mother and also failed other people such as siblings or grandparents. After the stillbirth their reaction was to want to get pregnant as soon as possible to replace what they had lost. However, they resented it when other people, unaware that once stillbirth occurs it changes the mother's life forever, thought the birth of a live child would resolve their grief for the lost child immediately.

When the new pregnancies were confirmed, these women felt ambivalent. The birth of the live subsequent child resulted in relief and happiness but also rekindled their grief for the lost child. They wanted to replace the lost child yet also needed to acknowledge that the dead child would always be a part of the family. To accept the new infant the mother had to differentiate him/her from the one she had lost. Clothing and baby equipment and maternal love had to be shared between the new infant and the lost infant. They wanted either a boy or girl as long as the child was healthy. At the same time they thought it would create fusion of the two children in their minds if the next one were to be the same gender as the lost child, as actually happened in one instance when a mother used the same name for the lost and subsequent child.

Powell (1995) investigated the role of the subsequent child in a sample of 40 Irish SIDS families in the Dublin area, conducting interviews with both parents one to three years after the loss. Within two years of the SIDS death half the sample had a subsequent child, and a further six women were pregnant. The mean age of the subsequent babies was eight months, and the average time gap for conception was eight months after the SIDS death. Of the 14 families who had not had subsequent children, two fathers had had vasectomies prior to the SIDS event, three women had miscarried, seven mothers were opposed to the idea of further pregnancy, and two had just not conceived.

The author did not comment on spontaneous parental reports of replacement feelings but noted that the birth of a subsequent child in some way filled the vacuum precipitated by the loss. In this study, parents' descriptions of relationships with both the SIDS victim and the subsequent child were coded and categorised and compared with their ratings of each infant's temperament. On the temperament scale, 25% of SIDS babies and 15% of subsequent children were reported as having symptoms of difficult temperament. A content analysis of parents' descriptions of their children showed that 20% of mothers (but not fathers) said they idealised the dead baby and a similar proportion said the same of the dead baby. The low incidence of maternal idealisation and lack of paternal idealisation of the subsequent child was interpreted as evidence that the centrality of either child to a mother's sense of well-being and purpose in life was not confined to a replacement child. Replacement of the child was said to have facilitated parents' own confrontation of feelings and emotions pertaining to the SIDS death and could be a factor in assisting some parents to come to terms with the loss. Most parents appeared to be enjoying a close attached relationship with the new child and had also done so with the previous child. A quarter of the parents expressed a functional or ambivalent relationship with the dead child, as did one third of parents when describing the relationship with the subsequent child. Only one couple reported a pronounced negative outcome from having another child so quickly, stating that whilst they were pleased to have him, the birth of their son had by no means filled the void left by their dead daughter.

Impact of the Subsequent Pregnancy on the Course of Mourning

It seems that parents are generally well informed of the potential problems of an early subsequent pregnancy, but that both mothers and fathers generally experience a sense of making good and of finding reassurance of worth in being able to produce a good, whole, live baby again (Raphael, 1983; Theut et al., 1989). However, the question as to whether a subsequent pregnancy facilitates or hinders resolution of mourning is a vexed one. Zeanah (1989) observed that a pattern emerging from studies of perinatal losses is that a sizeable minority of parents are either adamant about not becoming pregnant again, or want rapid and immediate replacement of the lost child; both avoidant responses that could be interpreted as manifestations of disordered mourning. Special concern has been expressed about the well-being of mothers already pregnant at the time of the baby's death (obviously a feature of SIDS rather than perinatal losses) or with a surviving twin, fearing that mourning may need to be suspended until after the birth of the next child (Limerick, 1988).

Adverse outcomes.

In one of the earlier studies supporting the notion that mourning was adversely affected by early replacement, Rowe et al. (1978) conducted a retrospective telephone interview 10-22 months post-loss with 26 mothers who had experienced a perinatal death. In contrast to the pattern seen in the NZCDS participants (Mitchell et al, 1996), their findings showed that those with no living children were significantly more likely to be pregnant again. Mothers with a surviving twin or subsequent pregnancy less than five months after the death were found to be at higher risk for a prolonged grieving reaction than those without a subsequent pregnancy or who conceived six months or more later. Five of the 26 mothers (19.2%) had a morbid and prolonged grief reaction 12-20 months later, evidenced in emotional distancing for fear of losing the new child, displaying a photograph of the dead baby on the mantelpiece (these days unlikely to be regarded as a sign of problematic grieving), continuing feelings of self-directed anger for the loss of the baby, or suicidal wishes. Further support for the suggestion that early replacement leads to adverse outcomes was lent by Hughes, Turton, and Evans (1999) in a study of 60 pregnant women who had experienced perinatal losses and 60 matched controls, measuring depression and anxiety at four assessment points between the third semester and 12 months postpartum. Their data indicated that women who conceived within 12 months of a perinatal loss showed more vulnerability to depression and anxiety in the next pregnancy than those who waited for 12 months or more.

Neutral effects.

Others have tentatively suggested that a subsequent pregnancy does not necessarily have a major influence on grief resolution. Ostfield et al. (1993) found that in their sample, subsequent pregnancies followed quickly after SIDS losses. At six months post-loss, grief scores were lower for pregnant or trying mothers than for postponing or undecided ones, but the initial grief score as retrospectively recalled by these mothers did not differ significantly between groups. They concluded that the grief level was not the determining factor in the decision to have another baby, but cautioned that it was not possible to determine from their data whether the mothers' pregnancy efforts actually accelerated grief resolution. Carroll and Shaefer (1993-94) reported that mothers found both surviving and subsequent children to be a source of comfort. Most of the couples in their study had a child or were pregnant after their loss, yet they continued to affirm and grieve for the child that died. This raised questions for the authors about the advice not to have another child too soon after the loss and they speculated that it was the affirmation of the child that died that was more important than whether a subsequent pregnancy occurred.

In one of the few controlled studies of the impact of a subsequent pregnancy on components of parental grief following a perinatal loss, Franche and Bulow (1999) compared depressive symptomatology, anxiety, marital adjustment, as well as active grief, despair and difficulties in coping in 25 women and 24 partners who had lost a baby and were pregnant again, with a similar loss group of 25 women and 18 partners who were not currently expecting another child and had not attempted a subsequent pregnancy since the loss. Their data revealed that women overall experienced higher negativity than men and significant between-group differences were seen only in mothers, not in fathers. Mothers who were not pregnant showed higher levels of despair and problems with coping but grief intensity itself remained high for women even in the pregnant group. The conclusion drawn was that the mourning process might, therefore, be unhindered by a subsequent pregnancy, and that the new pregnancy might well have had a beneficial effect on the mourning process. Boyle (1997) too found that whilst 40% of bereaved mothers in the Queensland sample became pregnant again within eight months of their loss, the impact of early pregnancy neither increased nor reduced the likelihood of enduring mental health problems for them. This did not negate the fact that women's own accounts of the subsequent pregnancies conveyed that this was inevitably an emotionally difficult and challenging time for them.

Beneficial effects.

Videka-Shearman (1982) investigated parental adjustment and coping strategies following the death of a child in a mixed loss group of 322 bereaved parents in the Chicago area. Parental coping strategies were rated in terms of their adaptive value. Internally directed strategies such as escape and preoccupation with the child were found to be least adaptive and to be associated with higher levels of parental depression at one year. The most adaptive strategies were externally directed, such as altruism and replacement of the lost child with a new role or another child, and led to lower levels of depression at the second assessment point at one year. The author suggested that replacement *preceded* reduction in depression hence an early subsequent pregnancy may assist in the adjustment to the loss. Unfortunately, as no other measurements of depression levels were reported throughout the first year of bereavement, it is not known how it was determined when the decline in depression actually occurred.

The findings of another recent prospective study by Cuisinier, Janssen, de Graaw, Bakker, and Hoogduin (1996) also suggest that resolution of grief may actually be facilitated by a subsequent pregnancy. However, in light of the fact that others (e.g., Theut, Moss, et al., 1992) have shown significantly higher levels of grief after the birth of a subsequent child in mothers who had experienced a late perinatal loss rather than miscarriage, it is important to note that 85% of the 227 mothers who participated in the later study had experienced an early miscarriage and only 15% had had a later perinatal death. At each of four post-loss assessments, the women completed a Perinatal Grief Scale and indicated whether or not they had conceived again and how they felt about it. Both conceiving again and the birth of a living child were shown to have lessened grief and a speedy new pregnancy was only rarely found to be detrimental. The authors advised that parents should not be told to wait a specific time to conceive again, instead, doctors should discuss with parents their individual situations in order to help them make their own informed decision concerning the subsequent pregnancy.

Attachment Disturbances

The relationship between unresolved parental loss and trauma as measured by instruments derived from the AAI and attachment disturbances in subsequent children has been another recent focus of investigation, but not yet in the context of SIDS deaths. As has been described, the pioneering work in this field was that of Pianta et al. (1996) who developed the Reaction to Diagnosis Interview (RDI) modelled on the AAI, to investigate how a parent's resolution of the trauma of learning that one's child has a disabling chronic illness affects the caregiving system, and the relationship between mothers' resolution of the diagnosis and their children's attachment classifications in the SSP.

Researchers in the Netherlands (Bakermans-Kranenburg et al., 1999; Schuengel, Bakermans-Kranenburg, & Van IJzendoorn, 1999) added a question to the original format of the AAI asking 85 middle-class non-clinical mothers of one year old infants specifically about experiences of miscarriage, and used the standard AAI rating system to rate participants' responses to the question and follow-up probes. They reported that mothers' scores on the rating scale for unresolved loss were related to disorganised attachment behaviour in their infants but this was only so when the mothers had an otherwise insecure (i.e., dismissing or preoccupied) representation of attachment. Unresolved status was related to the duration of the pregnancy before the loss, but not to length of time since the miscarriage.

In the same genre, a case controlled study of 53 mothers who had suffered perinatal losses was conducted by Hughes et al. (2001) who ascertained that in comparison to the non-bereaved control group dyads, subsequent children of bereaved mothers showed a significant increase in disorganisation of attachment to the mother, and this was strongly predicted by maternal unresolved status with respect to loss in the AAI. Hughes and McGauley (1997) presented an interesting case study of a dysfunctional mother-infant dyad where the mother's first child had been stillborn. The mother was interviewed using the AAI at 32 weeks gestation during her subsequent pregnancy. At that time she described the lost child as simultaneously dead and alive and was classified as unresolved with respect to loss (U). The subsequent child was classified as D/A1 in the Strange Situation at 13 months and the researchers observed the mother-infant interaction weekly for some time thereafter, looking for frightened/frightening behaviour in the mother associated with her U classification. The mother's tendency to show frightened behaviour was evident in that she rushed her daughter to the emergency department at the hospital in fear that germs had gotten inside her but this obsessively protective behaviour was accompanied by non-verbalised hostility toward the child, expressed in behaviours that paradoxically exposed the child to increased risk of physical injury.

Heller and Zeanah (1999) too investigated possible attachment disturbances in mothers who had suffered the trauma of a perinatal loss and who went on to have a subsequent child. At two months after the loss, bereaved mothers were interviewed using the Perinatal Loss Interview (Danis & Zeanah, 1991), a semistructured clinical interview designed to elicit content and qualitative features of mothers' accounts of their loss. The first scale was a modified form of the Resolution of Loss scale from the AAI adapted for perinatal loss. High scores on this scale were given to those mothers (7 out of 16) who reported feeling overwhelmed or confused by the loss and whose interviews were incoherent and difficult to follow. The remaining nine mothers who were strongly affected by the loss, but described their experiences clearly and coherently, were coded as "Resolved." When the subsequent children participated in the SSP at the age of 12 months, 55% were classified as secure, and 45% were designated insecure/disorganised (three times the incidence usually found in middle class samples) but none were considered to be insecure/avoidant or insecure/resistant.

Contrary to expectations, the Resolved or Unresolved classifications did *not* predict secure or disorganised attachment patterns in the children. The authors questioned whether the time interval of two months post-loss was too soon to have completed the interview and whether factors other than clarity, coherence, or emotional integration of the descriptions warranted more attention. They also observed that the Perinatal Loss Interview devoted a whole hour to talking solely about the loss experience, but that experience of loss is only one of several topics explored in the AAI, and suggest that this factor may have affected the narrative features of the interviews.

Parental Anxiety with the Parenting of a Subsequent Child

One of the most consistent findings in the literature is that the subsequent pregnancy and early parenting experiences following a foetal or early infant death are characterised by increased parental anxiety and feelings of vulnerability. To a large extent these fears are based on fear of recurrence of the loss but may become generalised to other aspects of life as well rather than being immediately alleviated by the birth of a healthy subsequent child. Certainly, parental anxiety appears to continue well past the time period at which the previous child died. Timing of the next pregnancy may or not be a factor as Hughes et al. (1999) reported higher levels of anxiety in mothers who conceived less than 12 months after the death but D. L. Davis et al. (1989) found that mothers expressed fears of death of the subsequent child from illnesses or accidents or choking regardless of when subsequent conception had occurred.

Anxiety Following Perinatal Losses

Qualitative accounts.

Qualitative studies provide some helpful insights into the shared experiences of mothers who have experienced perinatal losses and were parenting subsequent children. Phipps (1985), for example, interviewed 15 couples who had lost an infant from stillbirth or neonatal death and had a healthy subsequent child, aged between five months and three years at time of interview. Parents retrospectively reported that the subsequent pregnancy, rather than being characterised by joyful anticipation, had become task-oriented and clinical. They became hypervigilant in order to gain a sense of control over the situation and showed an intensely heightened awareness of any and all potential disasters, taking nothing for granted. Parental feelings of personal vulnerability were carried over past the pregnancy into their parenting of the new child but the author's impression was that this was not at the level that would be expected in the Vulnerable Child Syndrome. Parents were found to be open to simple interventions on the part of health care professionals who were sensitive to the reasons for their anxiety. He concluded that concerns about replacement child pathology have been over-emphasised but nevertheless recommended that six months post-loss was appropriate as the minimum time before starting a subsequent pregnancy.

From her interviews with mothers who had experienced a stillbirth, Hense (1994) observed that feelings of vulnerability did not resolve after the live-birth but continued into the postpartum period and further, even in those who had had intervening live births. Throughout their pregnancies women felt conflicting emotions. There was a reluctance to personalise or to find out the gender of the unborn baby. They hid their pregnancies as long as they could, feeling a sense of unreality about the pregnancy and disbelief that they would ever deliver a live child. Mothers did everything they could to protect their foetuses, trying to remedy in this pregnancy the things they found they felt guilty about in the previous pregnancy. Although they acknowledged they really had no control over whether the infant lived or died, the sensation of foetal movements was reassuring and their confidence increased as the gestational age increased. For some, fear of loss caused them to resist attachment to their unborn child for several weeks after the birth. They hesitated to prepare nurseries remembering how painful it was to have them ready and then have no infant to put in them. Anxiety increased as the women neared full-term. They wanted to keep the babies inside them to keep them safe but also wanted them delivered because it might not be safe in there. The anniversary of the stillbirth date was stressful as was the time when the foetus reached the gestational age at which the lost infant had died. Constant reassurance and information were needed right through into the postpartum period and even mild conditions such as neonatal jaundice were a source of great concern.

Peppers and Knapp (1980a, 1980b) found that many of the 65 women who had had a perinatal loss experienced a strong desire to replace the lost child, believing the loss could be ameliorated by substituting another child. Confirmation of a subsequent pregnancy, however, produced acute anxiety and distress at the thought of facing the same painful reaction all over again. Mothers plagued their doctors, during the pregnancy and after, wanting them to recognise they were special cases needing extra care and attention. After the birth they protected themselves by emotionally distancing themselves from the new child, some even refusing to see or hold the infant until the doctor had issued a clean bill of health for him or her. The anticipation that the loss could happen again was overwhelming for some, and once home, they overprotected the child, openly admitting that their reactions were over the top.

Controlled studies.

In other studies showing that maternal anxiety and negative emotions affect adaptation to a subsequent infant, Hunfield, Taselaar-Kloss, Agterberg, Wladimiroff, and Passchier (1997) compared a non-loss control group of new mothers with a sample of 27 women with a history of late pregnancy loss and who had recently given birth to a subsequent live-birth child. Their data showed higher levels of depression, anxiety, and psychological distress in the loss group at four weeks postpartum, especially those with high levels of trait anxiety, and these mothers perceived their babies as being less ideal, and having more problems with sleeping, crying, eating, and establishing a regular pattern of behaviour than the average baby. They expressed anxiety about losing this baby too and admitted to checking the baby's breathing during the night and first thing in the morning to ensure he or she was still alive. These effects had lessened somewhat by the 16th week but the loss group still considered their babies to be less ideal at the second assessment point.

Likewise, Theut, Pedersen, Zaslow and Rabinovich (1988) developed a custom-designed questionnaire for use with 25 couples who had experienced a perinatal loss and were expecting another child and 31 expectant non-bereaved couples, from the eight month of pregnancy until the child was 16 months old. Their data showed that subsequent pregnancy appeared to represent a chance for a woman to re-establish herself in the reproductive role, but was at the same time a tremendous risk and responsibility for her. Fathers, on the other hand, saw the new pregnancy more as a separate event independent of the previous loss. In a follow-up assessment at 16 months following the birth of the child (a time well past the period of risk of perinatal loss), Theut, Moss, et al. (1992) found that mothers who had lost infants were concerned that something bad would happen to their subsequent child. Compared with the control group, they were inordinately invested in the subsequent children, expressing more concerns about the child's physical well-being, hovered and were over-attentive, and were more reluctant about differentiating from their child, feeling more disappointment that the child would grow and become less dependent on them in the months to come.

Anxiety after SIDS Deaths

Loss of confidence in parenting skills.

Parenting of a subsequent child after a SIDS death, rather than following a perinatal loss, differs in that the period of increased medical risk (albeit very slight) extends beyond the time of the pregnancy and birth to include the entire first year of the child's life and beyond. Furthermore, since future SIDS deaths cannot presently be explained, accurately predicted or prevented, parents report feelings of helplessness and anxiety throughout the subsequent pregnancy and when caring for the new baby, particularly in the short term until their subsequent infants have passed the age at which the SIDS victim had died (Cornwell et al., 1977; DeFrain et al., 1991; Fraiberg, Shapiro, Bennett, & Pawl, 1980; S. Lewis, 1983; Limerick, 1988). Bluglass (1981) commented that the inevitable anxiety, sometimes bordering on phobic symptoms, engendered by the need to handle and care for a statistically higher-risk subsequent baby, may well be ill-understood by professionals and may give rise to serious misunderstandings and failure of relationships between parents and practitioners.

Therefore, whilst mothers who have experienced perinatal loss may believe they have failed in their biological reproductive capacity, those whose previous child has died of SIDS typically feel a lack of confidence in their parenting skills and face the prospect of another uncontrollable loss, for despite their best efforts, an apparently healthy child died whilst in their care. In this vein, case studies have been presented in the literature of (a) a worried mother who constantly had to call her doctor at home for reassurance (Schwartz, 1988), (b) emotional distancing from a 15 month old subsequent child by parents who were preoccupied with the fear of a second SIDS death (Aadelen, 1980), (c) tension and anxiety in young parents whose previous child had died of SIDS and were having interactional and feeding problems with their 4-month-old subsequent child (Fraiberg et al., 1980), and (d) severe anxiety and overprotection of a subsequent child by parents who grossly overfed their child and who again constantly consulted their GP, receiving little sympathy and understanding of the reason for their concerns (Bluglass, 1980).

State versus trait anxiety.

Recognising that caring for a subsequent infant under these circumstances would be particularly stressful and anxiety-producing, S. Lewis (1983) measured maternal trait and state anxiety with the Spielberger State Anxiety Inventory (STAI), in a sample of 30 mothers of subsequent children born after the death of a previous child in the family from SIDS, and in a control group of 30 mothers who had not experienced bereavement. The first assessment point was when the infants were 3 months old (an age at which infants are most at risk of SIDS), and the second when the infants were 15 months old (an age past the risk period for SIDS deaths to occur). On both occasions she also measured the emotional security scores of the subsequent infants with the Flint Infant Security Scale (FISS). The results showed no significant differences in trait anxiety between the two groups of mothers, but significantly higher levels of state anxiety were found in the bereaved mothers at both data-collecting points. Lower levels of state anxiety for bereaved mothers were found at 15 months than at three months suggesting that state anxiety can be expected to decrease as infants develop and mothers gain confidence in their maternal role. The evidence lent tentative support to the idea that a relationship exists between maternal anxiety and infant emotional insecurity, and that state anxiety related to a particular fear may inhibit the development in infants of a feeling of well-being and of inhabiting a safe and secure world.

Apnoea monitoring.

In some areas special support programmes (such as Care of the Next Infant (CONI) in Sheffield, England) have been established to assist SIDS families through the subsequent pregnancy and first year of the infant's life (Beard, 1991; McClain & Schaefer, 1996; Stewart et al., 1993; Waite, 1994). Efforts by clinicians and SIDS families to prevent recurrence of the loss inevitably resurrect the SIDS-apnoea controversy, and one of the key decisions SIDS parents must make is whether or not to monitor their subsequent child at home (DeFrain et al., 1991; Ranney, 1991). Goldberg (1992) commented that he was always amazed by the depth of feeling aroused by divided opinions as to the value of monitoring. He personally believed that parents should always be reassured that risk of another SIDS death is extremely low but that the decision should be made between them and their doctor.

Ranney (1991) observed that when monitoring is prescribed to relieve parental anxiety rather than for risk of apnoea, stress in an already stressful household can be augmented. This is particularly so when parents are drug users for whom the use of monitors is not recommended because their anxiety may be exacerbated by a distracted and disorganised lifestyle (Gaines & Kandall, 1992). As has been pointed out, false alarms are often an unfortunate part of the monitoring experience especially when anxious parents misinterpret them as genuine apnoeic episodes and perceive their children as likely to die at any moment. The monitor may intimidate friends and family and put them off visiting or baby-sitting the infant (Ranney, 1991). The mother, in turn, may feel reluctant to entrust the monitored baby to any one else's care and become, in effect, a round-the-clock human respirator (Limerick, 1988; Szybist, 1973/2002).

Clinical case studies describe situations where the monitor became the over-riding focus in the mother's life. In one instance, a subsequent child was placed on an apnoea monitor and the mother became so despondent that she seldom left the bedroom and the infant was rarely off the monitor (McClain & Mandell, 1994). In another family a subsequent child born to parents who had lost two previous babies to SIDS, slept in a crib right next to the parents' bed for several months with the monitor right next to the mother's pillow (Beard, 1991). Monitoring was continued for 14 months even though the previous SIDS deaths had happened at five and nine weeks of age. The mother felt she needed the monitor to feel she could get any sleep at all but experienced extreme anxiety when false alarms occurred.

Regardless of the recognised difficulties associated with monitoring, Waite (1994) noted that of the various options available to parents in the CONI programme (monitoring, weekly visits from health professionals, weighing scales to make regular checks of the baby's weight gains, or the use of symptom diaries) parents ranked the monitor as most helpful, and visits second. In the CONI programme, 87% of parents chose to use an apnoea monitor and of these 78% reported that they were willing to cope with the technical difficulties and false alarms because the monitor gave them increased confidence and reassurance that they would be alerted in the event that their baby should stop breathing.

Overprotective parenting behaviours.

In an article for SIDS parents, Szybist (1973/2002) advised that parents of subsequent children could be expected to experience waves of panic and anxiety, particularly so when the new baby neared the age at which the previous one died, or when he or she had a cold. She added that some degree of overprotectiveness is natural in the circumstances, and that parents themselves would be the first to admit that at one time they checked their sleeping babies to see they were still covered, but now the checks are to ensure they are still breathing. In addition they must make decisions that at this time seem much harder to make, such as whether or not to breast feed the baby, what room temperature to maintain, whether to smoke and whether or not to monitor the child.

Cornwell et al. (1977) too reported that parents inevitably suffered when they brought a new baby home, especially when the child was asleep. They tended to call the new baby the dead child's name, checked the baby often at night, and were attuned to every cough and grunt. In an attempt to gain control over an unknown force, parents adopted many preventive strategies to try to ensure the child's survival. They took first aid courses, fly-screened the house, gave up smoking and tried to arrange for conception at a certain time so the baby would be born when there was a statistically lower chance of cot death. A turning point was reached when the subsequent child reached the age at which the previous one had died and parents felt more confident thereafter.

More than 90% of SIDS parents in the Nebraskan studies said they had changed the way they cared for their subsequent and surviving children (DeFrain et al., 1991). Most admitted they were overprotective and took extraordinary measures to ensure they would not lose another child. They often kept their children in bed with them or in the same room. At night they would get up to check the sleeping children (even teenagers) and if uncertain that a child was still breathing, would shake him or her awake to be on the safe side. They were afraid of sickness and would panic at minor injuries, and became much more likely than before to call the doctor for health-related matters. Monitoring was inevitably a big issue for them. Every day was celebrated and nothing was taken for granted. Parents reported that their children were appreciated and seen as special hence they were more permissive and found it hard to say no to the child. Whilst most developed a close attachment to their subsequent children, a smaller number of parents were unable to feel close to their subsequent children and distanced themselves as a protective mechanism against future loss.

Powell (1995) reported that in her Irish sample, subsequent pregnancy sometimes reactivated feelings and emotions about the deceased child. She found that some degree of maternal anxiety in caring for the subsequent child persisted, and would perhaps be alleviated by information for parents about the low risk to subsequent children. However, vigilant and overprotective behaviour was not the norm for the couples she interviewed and there was little evidence to suggest avoidance of attachment to the subsequent child. Perhaps because the researcher's background was as a social worker not as a health professional, issues to do with fear of a recurrence of the loss, and decisions about apnoea monitoring were not explored further despite the fact that the average age of infants in her sample was only eight months.

Summary

In the past decade or so there has been a gratifying decrease in the incidence of SIDS in the New Zealand context, largely as a result of the identification of modifiable risk factors by epidemiological studies, and a national campaign to change parenting practices found to place infants at risk. However, this success story appears to contain mixed messages for SIDS parents: Whilst there is presently no fail-proof method to distinguish SIDS deaths from those resulting from illnesses, or accidental or deliberate suffocation, a diagnosis of SIDS officially excludes any known cause of death and absolves parents and health professionals of any blame, taking little account of whether or not the child's death was linked with any of the known risk factors. At the same time, publicity about avoidable risk factors implies a causal relationship between the deaths and undesirable parenting practices often associated with lower socio-economic class and particular cultural groups, and hints at a return to the judgmental attitudes of the past. Moreover, caring for a subsequent child is complicated by the fact that avoiding the known risk factors does not guarantee the baby's survival; that some babies may have an innate physiological vulnerability making them more susceptible to SIDS, and home apnoea monitoring may be deemed to be a necessary, if stressful, additional precaution to be taken by parents.

As it happens, public awareness of the impact of infant and foetal deaths is at its highest at a time when the infant and foetal mortality rate is the lowest in recorded history. Few would now disagree that the loss of a baby results in a parental grieving reaction that is likely to be just as profound and far-reaching as that following the death of an older child. In fact, concerns have been expressed that the scales may have tipped too far the other way; that institutionalised expectations regarding the course of maternal grief may have become unintentionally prescriptive. In this vein, Leon (1992) and Zeanah (1989) have pointed to the problems inherent in uncritically applying hospital protocols that actively encouraged mothers to confront the reality of the loss, without due consideration of individual differences, or knowledge of the long-term consequences.

As has been shown, the literature portrays fathers' grief for the most part as less intense and of shorter duration than that of mothers, but a consistent finding has been that a minority of men experienced more intense grief than their partners. Attachment patterns are not portrayed as being gender-specific yet the research shows that parental reactions to situations of loss are for the most part clearly differentiated by gender roles. One of the most significant indications that gender-related differences are at least to some extent situationally determined is the finding reported by Dyregrov and Matthiesen (1991) that levels of distress in the subgroup of bereaved mothers in paid employment were similar to those of fathers and considerably lower than those of full-time mothers at home.

Descriptive accounts of the ubiquity of parental distress following the death of an infant are further open to challenge in light of the findings of several studies that indicate that grieving responses tend to fit one of three patterns broadly corresponding to the normal, absent, and chronic grieving styles: (a) high levels of grief initially, with a gradual decline in intensity over time, (b) a relative absence of high levels of distress either initially or later, or (c) enduring high levels of distress (e.g., Boyle, 1997; Dyregrov & Matthiesen, 1991; Martinson et al., 1991; Price et al., 1995; Wortman & Silver, 1989, 1991). Indeed, it is debatable whether or not absent or prolonged grieving responses should be considered disordered mourning, as some evidence suggests that the suppression of grief may not necessarily be harmful (e.g., Wortman & Silver, 1989); and a greater awareness of the importance of "continuing bonds" between the mourner and the deceased person means prolonged grieving responses are less likely to be interpreted as pathological (e.g., Klass et al., 1996).

Zeanah et al. (1995) pointed out that the relatively little focus in the literature on individual grieving differences has arisen partly because of sampling bias in bereavement studies. This is evident in the fact that many of those who deviate from the norm in their grieving reactions tend to be excluded from participation, particularly those who adopt avoidant strategies to minimise the impact of the loss. The question then arises as to when subsequent pregnancies become indices of disordered mourning, for both the desire for immediate replacement and a determination to never have any more children are strategies to avoid the pain of the loss (Zeanah, 1989).

Clearly, the literature addressing the psychosocial aspects of SIDS has been based primarily on crisis theory derived from the work of Lindemann (1944) and has not kept pace with advances in attachment research that presently inform other areas of bereavement research. As has been noted, attachment theory provides a theoretical framework for understanding the effects of infant loss on subsequent parent-child relationships because (a) it attends to the importance of early attachment-related experiences within one's family of origin that later contribute to the organisation of the parent-child caregiving system when in turn one becomes a parent, (b) early attachment styles have been shown to be fairly stable across life, to be intergenerationally transmitted from caregivers to infants, and to be reflected in ontogenetic grieving reactions to a significant loss, (c) it has been shown that unresolved grief and trauma have the potential to disrupt the parent's ability to respond appropriately to the child's attachment behaviours and to lead to adverse developmental outcomes in the child, (d) the non-shared environment of the unique parent-child relationship has been shown to have a major influence on development, and (e) the emergence of attachment research with reliable assessment of aspects of an infant's emotional development has offered a means of systematic evaluation of young children (Bakermans-Kranenburg et al., 1999; Hughes et al., 2001; Zeanah et al., 1997).

One of the hallmarks of successful resolution of grief is the ability to reinvest energy and love in another person, but contradictory evidence exists as to whether the birth of a subsequent child aids or hinders resolution of grief (Powell, 1995). The literature suggests that guilt, anxiety and distress engendered by the SIDS death can be expected to remain relatively high after the birth of a subsequent child, because of the particular nature of the loss and the lack of a definitive cause of death. However, little is known as to whether these reactions continue in the longer-term once the subsequent child has survived the risk period of infancy.

The purpose of this study was to investigate whether vulnerable child and replacement child pathology were realistic fears for subsequent siblings of SIDS victims once they reached the age of two-three years and were past the risk period for dying of SIDS themselves. To date, no other study has looked systematically at this phenomenon in subsequent children in this age group. In addition, following Pianta et al. (1996) it was hypothesised that unresolved parental grief and trauma from the death of a previous child to SIDS would lead to a traumatic disruption in the parent-subsequent-child caregiving system, adversely affecting the parent's ability to function as an effective protector and nurturer for the child, leading to adverse developmental outcomes in the child.

CHAPTER FOUR

Methodology

Objective

The objective of the present study was to investigate the assumption that the ongoing grieving processes following the loss of a previous child to SIDS would lead to a traumatic disruption to the parent-child caregiving system in the parenting of a subsequent child, with resulting adverse effects on the subsequent child's development evidenced in symptoms of the vulnerable and replacement child syndromes.

The following questions were addressed:

1. *Assessment of the parent-child caregiving system.*

   Is there evidence of any significant disturbance in the caregiver-subsequent child relationship as measured by the Working Model of the Child Interview (WMCI)?

   The WMCI is a clinical interview, modelled on the AAI, and designed to elicit parents' representations, perceptions and subjective experience of their child's characteristics and their relationship with that child (Zeanah & Benoit, 1995; Zeanah et al., 1997).

2. *Assessment of grief resolution.*
   - (a) Is there evidence of resolution, or lack of resolution of parental loss/trauma associated with the death of a previous child as measured by a modified version of the Reaction to Diagnosis Classification System (RTDCS)?
   - (b) Does resolution of parental grief as measured by the modified RTDCS predict ratings on the WMCI or scores on the instruments used to identify symptoms of the Vulnerable Child Syndrome?

   As will be shown, the RTDCS is used to code the Reaction to Diagnosis Interview, another structured interview modelled on the AAI, and was originally designed to assess parents' resolution or otherwise of the loss/trauma associated with receiving a diagnosis of severe disability in their child (Pianta et al., 1996).

3. *Replacement Child Syndrome.*

   Is there evidence in mothers' narrative accounts that children conceived after the death of a previous child to SIDS have taken the role of a replacement for the lost child?

   That is,

   (a) Do mothers spontaneously report replacement feelings?

   (b) Is there evidence that they are preoccupied with the dead child and have imposed the identity and idealised image of the dead child upon the subsequent child?

4. *Vulnerable Child Syndrome.*

   Is the risk of the Vulnerable Child Syndrome a realistic concern for this sample of children aged two-three years who were conceived after the loss of a previous child from SIDS? That is, in the absence of significant medical risk to the child,

   (a) Do parents of subsequent children have heightened perceptions of their children's vulnerability as measured by the Vulnerable Child Scale (VCS) (Perrin et al., 1988) in comparison to a control sample of non-bereaved parents of children of the same age?

   (b) Is there evidence that parents of subsequent children report more parental overprotective tendencies as measured by the Parent Protection Scale (PPS) (Thomasgard et al., 1995a) in comparison to a control sample of non-bereaved parents of children of the same age?

   (c) Is there evidence that previously bereaved parents report more behaviour and personality problems in their subsequent children as measured by the Achenbach Child Behaviour Checklist for pre-school children aged two-three years (CBCL/2-3, Achenbach, 1992) in comparison to a control sample of non-bereaved parents of children of the same age?

Participants

Participants recruited for the purposes of this study were allocated to one of two groups:

1. A "SIDS group" consisting of a convenience sample of 20 parents (as it happened, all those who volunteered were mothers) who had lost a previous infant to SIDS and at the time of the study were primary caregivers of healthy two-three-year-old subsequent children. Parents in this group first participated in the audiotaped WMCI and immediately afterwards, completed the set of three questionnaires. The selection of parents of children who were two-three years old was a deliberate strategy. In the absence of any other medical condition, children who had survived infancy were well past the major risk period for SIDS; hence any ongoing parental perceptions of vulnerability would not be based on actual medical risk.
2. A control group of 100 non-bereaved mothers who had not suffered a major loss or trauma in the last ten years, who were primary caregivers of healthy 2-3-year-old children, and had at least one older child in the family. The control group completed the three questionnaires only.

Demographic Details of Participants

For the "SIDS group" the mean time since the date of the SIDS death was 7.1 years (range 3.5-13, SD 3.1). Nineteen of the 20 SIDS mothers (95%), and 85% of the 100 mothers in the control group were currently in two-parent families. The groups were identical in terms of self-reported ethnicity. All but one of the mothers in the SIDS group self-identified as European, the other as part-Maori; and in the control group 95% of mothers were European, 5% Maori. In the SIDS group, 13 of the 2-3-year-old children were male, seven were female, and these numbers did not differ significantly from those in the control group of 47 males, 53 females (Chi square = 2.160, p = .142). No significant differences were found between the groups for the age of the mother (mean age for SIDS mothers was 33.8 years, SD 3.6; mean age for control group was 33.52 years, SD 3.940); the age of the child (mean age of children in SIDS group was 32.75 months, SD 7.873; mean age of children in the control group was 35.64 months, SD 6.14); or for scores on the Elley-Irving socio-economic index (Elley & Irving, 1985) (mean score for SIDS group was 3.55, SD 1.432; mean score for the control group was 3.15, SD 1.114).

The groups did differ significantly at the .000 level on both measures of the number of children in the family (for the SIDS group the mean was 4.20, SD .951; for the controls the mean was 2.90, SD .870) and for birth order (for the SIDS group the mean was 3.90, SD .912; for the controls the mean was 2.54, SD .809). This difference was expected given that SIDS victims were included in the number of children in the family, and that New Zealand parents who have lost a child to SIDS are more likely to have another child after the death of one of their children (Mitchell et al., 1996).

Access to Participants

Ethical approval was obtained from the Massey University Human Ethics Committee prior to the commencement of the study. It soon became apparent that there was no easy method to locate 2-3-year-old subsequent children in the country or to make contact with their parents. An initial enquiry revealed that the information contained in the New Zealand Cot Death Register was under the control of the NZCDS team. Efforts to recruit participants from this source were eventually not pursued because of issues concerning access rights to the Register and ownership of the data. However, the NZCDS team offered assistance, if needed, from the nation-wide network of support counsellors already in place for SIDS families taking part in the NZCDS on an ongoing basis.

Eventually, participants for the "SIDS group" of parents were recruited through publicity gained from a short article published first in the local newspaper and then in all the major newspapers throughout the country, by word of mouth between SIDS families, and by contact with officials from SIDS support group organisations. Introductory letters and copies of the information sheets detailing the study were sent to representatives of the two major SIDS support organisations (New Zealand Cot Death Association, and Sudden Infant Death Support (SIDS) New Zealand Incorporated) with a request for the information to be disseminated to members. Both national SIDS support organisations were generous with their willingness to help locate participants despite the fact it was evident that some tension existed between the two, largely because of competition for members and for funding which had been drastically reduced following the controversy surrounding the toxic gas theory. Membership numbers of most branches of the NZ Cot Death Association were reportedly on the decline with the decrease in the incidence of SIDS cases in European families particularly. Sudden Infant Death Support (SIDS) New Zealand Incorporated was directing their support toward lower income, single parent and Maori families and, as a relatively new organisation, had a growing membership. In preliminary conversations with members it emerged that cultural concerns (such as "shyness" at talking to a non-Maori researcher) could be a factor in non-participation by any Maori members of their group. However, the "outsider" status of the researcher (i.e., not having personally experienced the death of a child) appeared to be somewhat tempered by having a background as a neonatal nurse with some knowledge about Sudden Infant Death Syndrome and familiarity in supporting parents of critically ill and sometimes dying infants.

Recruitment of a non-loss control group to complete the questionnaires only was comparatively straightforward and was accomplished by word of mouth and with the assistance of a local preschool organisation. Written permission was obtained from the regional manager of the Kindergarten Association to allow copies of the information sheet for the control group (Appendix C), and the three questionnaires to be circulated to local kindergartens for teachers to leave in the parents' information corners of their centres, or to distribute to mothers who met the criteria specified. Questionnaires were returned to the researcher anonymously by parents in the pre-addressed postage-paid envelopes supplied.

Ethical Issues

There was obviously a need to consider carefully the ethics of conducting any research with a highly vulnerable group such as bereaved parents. When the criteria for participation in the study were met, an interval of at least three years would have elapsed since the death of the SIDS victim. Whilst it was recognised that the loss of the previous infant would still be painful for parents, it was considered that the interval between the loss and timing of the interview was long enough for parents who had volunteered to participate to be able to talk about the loss without arousing acute distress, in the context of an interview about the subsequent child.

Some authors have commented that because the subject of death is an uncomfortable one in western society, there is a reluctance on the part of researchers to address the topic, and in turn, researchers' access to vulnerable participants tends to be blocked by well-meaning health personnel, worried about the deleterious effects of any unwarranted intrusion upon the psychological well-being of the bereaved family (e.g., Bluglass, 1981; Callahan et al., 1983). Protection of vulnerable families who had experienced the particularly traumatic loss of a child to SIDS certainly appeared to be at least part of the motivation behind the gate-keeping role assumed by the NZCDS team. On the other hand, public attitudes to death and dying have become rather more open in New Zealand in recent times, both as a result of the influence of the hospice movement, and because many New Zealanders of European origin are now tending to adopt the more demonstrative expression of grief observed in traditional Maori culture as a healthier way to mourn. Furthermore, writing about research involving members of vulnerable social groups generally, an Australian sociologist cautioned against "the arrogance of assuming that comfort and safety are more important to them than their desire to be heard, or their desire to contribute to our attempts to understand them" (Kellehear, 1999, p. 66).

It appears that whilst the sensitivity of people at such a time must surely be taken into account, participants may find the telling of their story to be part of a healing process. Raphael (1986) reported that in her experience of conducting research with widows, most participants found that a supportive interview situation was helpful, providing an opportunity for the bereaved to relate their experiences, and that this sometimes prevented a need for bereavement counselling later on. Boyle (1997) too gained an overall impression that women who participated in the Queensland study had obtained personal benefit from the interview process, and that the majority of participants had indicated that their motivation for taking part had been to help other bereaved families. In fact, it seems that this almost universal desire to help others through the same experience is actually self-serving and therapeutic in that it is an externally-directed coping strategy for dealing with the pain of the loss (Callahan et al., 1983; Dyregrov, 1990; Videka-Shearman, 1983).

Although there was scope for the participants to obtain some benefit from participation in the present study, it was acknowledged that there was potential for emotional distress to be triggered and strategies to limit this outcome were implemented. Every effort was made to ensure that there was no pressure to participate exerted by the researcher or any intermediary person such as health professional, teacher or member of any support group. As noted above, initial information about the study was disseminated at a distance via newspapers, SIDS support group organisations, and by word of mouth among parents themselves. Bereaved families were not approached directly by the researcher and the onus was on interested parents who fitted the criteria outlined to initiate contact by free phone for further information. Once contact was made, the general purpose of the study was explained to them verbally and a copy of the information and consent forms was supplied for them to read and discuss with family members before making a decision as to whether or not to participate. Copies of the consent form and information forms are appended (see Appendices A and B).

As part of the process of obtaining consent to participate in the SIDS group, parents were informed that the formal consent form would need to be completed and signed before commencement of the interview. They were advised that their involvement in the study would consist of (a) an audiotaped interview of approximately one hour in length, that would later be transcribed and analysed; and (b) completion of the written questionnaires, typically taking another 10-15 minutes, either after the interview or at another time negotiated with the participant. It was specified that parents were free to choose to discontinue their involvement at any time without penalty. All parents who did phone to make contact decided to proceed with the study. Arrangements were then made to conduct the interviews in participants' own homes at a time convenient for both parties. Throughout the study every effort was made to maximise confidentiality of the information told in personal stories. Audiotapes and transcriptions of tapes were kept confidential to the researcher, typist, co-coder and project supervisors only and key identifying details of participants were omitted from transcripts. Arrangements were made to either destroy the audiotapes or to return them to the participant at the completion of the study.

During the interviews there was potential for conflict between the roles of researcher versus therapist when parents were telling their stories to an interested listener. Knowing from the literature that because SIDS is a diagnosis made by exclusion, parents would be likely to follow up on any lead that provided a clue as to why the death occurred, care was taken to word the questions in a way that would not aggravate parents' sense of guilt about the SIDS death. An attempt was made to provide participants with a supportive listening environment without any direct remedial action as such. One mother was referred for professional counselling at her own request and it appeared that her motivation for participation in the study had been partly because of her need for assistance with what she perceived as a distancing of her relationship with her 3-year-old son. In response to her request, an appointment was made for an almost immediate consultation (free of charge) with an attachment-oriented parent-child therapist in the area. The mother was advised that if she needed any further help in accessing assistance to ring on the free phone number supplied on the information sheet, an offer she did not pursue.

Instruments

Working Model of the Child Interview

The Working Model of the Child Interview is a structured clinical interview modelled on the AAI, developed as a clinical and research tool to identify disturbances in the caregiving system by eliciting parents' representations, perceptions and subjective experience of their infant's characteristics, and their relationship with that particular infant (Benoit, Zeanah, et al., 1997; Zeanah & Benoit, 1995; Zeanah et al., 1997; Zeanah et al., 2000). It thus enables the clinician or researcher to (a) assess systematically the "meaning" a child has for the parent, (b) identify major themes in the caregiver's perceptions and subjective experiences of who their infant is and why he/she behaves in particular way, and (c) tailor infant-parent psychotherapy to the specific needs of a given caregiver-dyad (Zeanah & Benoit, 1995). The interview normally takes about one hour and is taped and then transcribed verbatim. Each transcript is rated using fifteen 5-point Likert-type scales to assess qualitative, content and affective features of the narrative considered to be indices of the parent's representation of the child, these being: richness of perceptions, openness to change, coherence, intensity of involvement, caregiving sensitivity, acceptance/rejection, infant difficulty and fear of loss. The interview is then assigned a primary classification of "balanced" or "non-balanced". Subtypes of balanced representations are balanced-full, balanced-strained, or balanced-restricted. Non-balanced representations are classified as either "disengaged" (disengaged-impoverished or disengaged-suppressed) or "distorted" (distorted-distracted, distorted-confused, distorted-role-reversed, or distorted-self-involved) (Zeanah et al., 2000; Zeanah & Benoit, 1995).

The stability and predictive validity of the WMCI have been established by the findings of several studies, summarised by Benoit, Zeanah, et al. (1997). Firstly, Zeanah, Benoit, Hirshberg, Barton, and Regan (1994) found a high level of concordance (69%) between mothers' narrative descriptions of their infants as assessed by their WMCI classifications and their infants' classifications in the Strange Situation Procedure at 12 months of age. Secondly, Benoit, Parker, and Zeanah (1997) found 73% concordance between WMCI classifications of mothers' narrative descriptions of their unborn baby and the infant's SSP classifications at 12 months of age. The overall stability of the WMCI classifications from the third semester of pregnancy to 12 months postpartum was 80%. Furthermore, interrater agreement on randomly selected scripts to establish interrater reliability was 87%, demonstrating that it was possible to establish reliable coding of the transcripts without clinical experience or prior expertise in the AAI scoring system.

Overall, WMCI classifications have been shown to be a sensitive means of identifying dyads at risk for clinical problems but not for specific clinical problems as such. Benoit, Zeanah, et al. (1997) compared mothers' representations of their infants in clinically referred and non-referred groups as measured by WMCI classifications. Mothers whose interview responses were classified as disengaged or distorted appeared to have infants at increased risk for the development of or perpetuation of clinical disorders. In three different studies using the instrument, 91% of mothers with children with clinical problems (sleep disorders, failure to thrive, and those seen in a general psychiatry clinic) had representations of their infants that were classified as "distorted" or "disengaged" despite differences in demographic information, including socio-economic status.

The unpublished WMCI schedule and coding manual (Zeanah, Benoit, Barton, & Hirshberg, 1996) were supplied and used for the present study with the kind permission of the first author. As shown in the extract below from Zeanah et al. (2000, p. 230), the interview itself opens with an open-ended invitation for the parent to tell the story of the child's development and then moves through the series of more structured questions related to the parent's representations of the infant or preschool-aged child.

> After this story of the baby is elicited, beginning with pre-pregnancy thoughts about the idea of children and continuing up to the present, a number of other specific questions are pursued. These include descriptions of the child's personality, of whom the child reminds the parent, how the child is like and unlike each parent, and what the child's behavior is like in general and in specific situations. We inquire about instances when the child is upset or displays difficult behavior and we pay very careful attention to the feelings and thoughts elicited in the parent at these times. Parents describe their relationship with the child, what pleases or displeases them about that, and what they might change if they could. Parents describe their anticipation about the child's future development and their hopes and fears about it. ..... We listen carefully for consistent themes of content in the interview. Nevertheless, the major areas that are important in our work beyond the content of the interview materials are its narrative features, affective tones, and narrative organization, all of which are inferred to be meaningful characteristics of the parent's representation of the child.

In the present study, each interview was introduced with a brief reiteration of the purpose of the study and a reminder that the interview could be terminated or the tape recorder turned off at the participant's request at any time. The open-ended section of the WMCI interview schedule provided scope for the participants to describe the death of the infant both as the background setting in which the subsequent child entered the family and as a significant loss experience in itself. Their accounts thus provided data for analysis of the narrative features and content of the interview: the parent's representation and experience of the child, evidence of resolution of the loss, and dominant themes such as spontaneous reports of replacement feelings.

The largely uninterrupted story of the loss of the previous child was followed by the more structured questions of the interview related to the development of the subsequent child. This progression enabled mothers to talk about the subsequent child as an integral part of the loss experience, with a change of focus from the past to the present. For the most part, the story of the loss of the baby was told freely and openly, at times with tears and great emotion. The tenor of the interview then gradually changed as the focus of the story moved to the changes that had occurred over the years since the loss (range 3.5-13 years) and the decision to have another child, and on to the more structured questions regarding the pregnancy, birth and present relationship with the subsequent child. At the end of the interview, the three questionnaires (VCS, PPS and CBCL/2-3) were completed by the mother, typically taking another 10-15 minutes.

The Reaction to Diagnosis Interview

The Reaction to Diagnosis Interview (RDI), derived from the AAI, was developed by Pianta et al. (1996) to investigate possible disruption to the parent-child caregiving system created by the relatively recent trauma of learning that one's child has a disabling chronic illness (an experience known to lead to a grief reaction in many ways similar to that following bereavement). Interviews with mothers of children aged 15-50 months, with cerebral palsy or epilepsy were classified on the Reaction to Diagnosis Classification System (RTDCS) as Resolved (R) or Unresolved (U) with respect to their child's diagnosis, and then into subcategories within these major R/U groupings. Of the 91 mothers in their sample, 48% were classified as Resolved, and 52% were classified as Unresolved. Validity of the instrument was demonstrated by a strong statistical relationship between Resolved/Unresolved status and the classification of children as secure or insecure in the Strange Situation. Resolution of the diagnosis was unrelated to the length of time since the diagnosis was received, diagnosis type, severity of condition, developmental age of the child, years of maternal education, or mean yearly family income.

Pianta et al. (1996) noted that parents of chronically ill children are faced with a caregiving role in a crisis-type situation where they feel they cannot fulfil the basic function of a parent, that is, protection of the child from harm. Consequently, their sense of themselves as effective nurturers and protectors is challenged, and they feel guilty and search (usually in vain) for the cause. To elicit parents' representations of themselves as caregivers in relation to the specific trauma, the RDI uses a specific list of questions as "probes for episodic recall of events and experiences at the time of the diagnosis, emotions associated with that experience, change in these emotions since the time of diagnosis, and the parents' search for reasons for this experience" (Pianta et al., 1996, p. 242). Parents' responses to these questions are coded, not so much for the content, but for elements reflecting integration of the experience into parents' representations, allowing for a reorientation and refocus of attention and problem solving on present reality.

All interviews in their study were found to contain elements of both resolution and lack of resolution. Pianta et al. (1996) pointed out that because the RTDCS does not utilise preset criteria to quantify allocation to a major classification category, the task of the coder is to determine the organisational pattern to which the particular configuration of elements best corresponds. In their study, interviews classified as Resolved showed the following elements of resolution: recognition of change since the loss, assertion of moving on with life, suspension of the search for a reason, accurate representations of the child's current status, and balanced statements regarding the effects of the experience to oneself. In contrast, Unresolved interviews were characterised by cognitive distortions (seen primarily in unrealistic beliefs about the child's health status), an active search for reasons diverting attention from attending to painful emotions, and evidence of being "stuck in the past" (p. 243) showing detailed recall of the painful event recounted in the present tense, thematic preoccupying anger, and a view of self as defined by the trauma of the event and deserving of the interviewer's sympathy. In some instances the parent had defensively minimised the impact of the event, or emotions linking the self to the trauma had become mentally uncoupled and thus unavailable for report. Other unresolved accounts were extremely lacking in coherence, containing oscillations and contradictions that indicated a lack of an organised mental strategy to address the impact of the loss.

As described above, for the present study the WMCI provided data for analysis of both content and narrative features of mothers' accounts, using the coding protocols of the RTDCS to categorise them as Resolved (R) or Unresolved (U) with regard to the previous loss of a child to SIDS. In the stories they told, mothers relived the event of the SIDS death and described their emotions both at that time and in the intervening period. In doing so, they spontaneously provided details that (a) the interviewer would not have asked about lest the questions caused undue distress, and (b) would have been difficult to have obtained using specific questions asked in the RDI for, as Nicholas and Lewin (1986) had shown, items in the various scales developed to enquire about the experience of caring for a child with congenital disabilities do not necessarily fit both situations well.

For the purposes of the present study, several items in the list of elements of resolution of loss on the coding protocols used for the RTDCS were adapted for use in the SIDS context. The item "balanced representations of the benefits of the experience to the self" was changed to "balanced representations of the effects of the experience on oneself" and "accurate representations of the child's abilities" was changed for the SIDS group to read "accurate representations of the subsequent child's risk status". This meant that perceptions of vulnerability and overprotective behaviours as conveyed in the interview data were available both as evidence of resolution of grief/trauma in the RTDCS and for the "fear for safety" scale on the WMCI. In addition, whilst Pianta et al. (1996) described resolution in their sample in terms of recognition of change in the baseline emotion since the confirmed diagnosis of permanent disability was conveyed to the parent, the time of the SIDS baby's death was taken as the comparable crisis point for this study but differences in the circumstances of the two events were taken into account. In this regard, it was assumed that the diagnosis of cerebral palsy or epilepsy was of relatively little surprise to the parents of the disabled children; that symptoms such as their child's failure to reach developmental milestones, or physical signs and symptoms such as epileptic seizures would have alerted them to the possibility of the condition beforehand. SIDS parents, however, typically had no warning of the imminent death, and even those whose children were put to bed in the prone sleeping position were likely to have been unaware at the time of the inherent risks in doing so.

Furthermore, it is well documented that SIDS parents have a strong tendency to experience guilt and to continue for years after the death to search for the cause of death. For coding purposes it was thus accepted that the more traumatic nature of the critical incident (that of finding the dead baby as opposed to confirmation of an already suspected diagnosis) would influence both the quality and quantity of detail given in the re-telling of the story over time, and that a prolonged sense of guilt or failure to suspend the search for the reason for the loss would be expected in this particular sample of mothers.

Standardised Questionnaires

Validated standardised questionnaires such as those typically used to identify symptoms of the Vulnerable Child Syndrome come into the category of what Holden and Edwards (1989) labelled Parent Child-Rearing Attitude questionnaires (PCRAs). Unlike qualitative methods, or case studies that arguably present only the casualties, PCRAs attempt to document global attitudes with a focus on universality rather than the individuality of people's experiences. As Holden and Edwards (1989) pointed out, PCRAs are useful in that they are cost effective in terms of time and money, are resistant to being affected by situational factors, provide data in a format convenient for analysis and have utility in predicting behaviour. They cautioned, however, that care should be taken when interpreting results because (a) very few instruments have psychometric properties documented, and test-retest reliability of PCRAs tends to be low, (b) bald, single-sentence phrases do not necessarily capture the complexities of parent-child interactions, (c) parents are likely to give a socially-desirable response based on cultural norms rather than what their usual practice is with their own child, (d) many instruments have items that are not age-appropriate for a particular child causing parents to use another child as a referent, and (e) the context in which the child is raised is not taken into consideration so parents are often forced to give a definite answer when in many instances their inclination is to reply, "it depends........".

For the present study the VCS, PPS and CBCL2/3 all provided supplementary sources of data for the WMCI. All three instruments were designed to obtain parental reports of children in the target age group of 2-3 years; their psychometric properties have been well documented, and to counter concerns about contextual influences, both the SIDS group and a control group of 100 non-bereaved parents completed the questionnaires. A cutoff point of ±1SD from the mean of the scores obtained on each instrument for the control group was used to indicate scores in the clinical range rather than the norms obtained in the American data. This circumvented the need to collapse the four corresponding age bands used in the PPS to match the ages of the NZ children, and also addressed the issue of cross-country differences in parenting practices.

Vulnerable Child Scale (VCS).

To measure parental perceptions of vulnerability, all parents in the SIDS group and control group completed the Vulnerable Child Scale (VCS), modified by Perrin et al. (1988) from an original 12-item Child Vulnerability Scale developed by Forsyth and Canny (1991). To develop the scale, the VCS was administered by Perrin et al. (1988) to a sample of 103 three-year-old children designated into four groups based on their neonatal history and current health. Groupings and mean scores for each group are set out below in Table 1. The items from the VCS, listed below in Table 2, are said to reflect specific statements of concern about a child's health. Responses are scored using a 4-step scale of 0-3 (0 for "Definitely True," 1 for "Mostly True," 2 for "Mostly False", 3 for "Definitely False"). Items 5 and 9 are reverse coded. Scores range from 16 to 64 with *lesser* scores representing a *greater* perception of vulnerability. Parents reporting a strong sense of vulnerability are identified by VCS score of 1SD *less* than the mean. Inter-item reliability of the VCS was shown to be acceptable (Cronbach's α = .75). Reliability of the VCS was established by selecting a random 40% of the sample to complete the questionnaire a second time, half by phone and half by mailed administrations. Test-retest reliability showed a correlation of .95 between phone and mailed administrations, and .96 with two phone administrations. In addition, scores on the VCS were significantly correlated with those on the Undisciplined/Poor Self Control and Internalization/Somatic symptoms subscales of a Personality Inventory for Children (Perrin et al., 1988).

Table 1. Mean VCS scores in US samples

Group	Number of children	Mean VCS Score ± SD	% in clinical range (i.e., ≥ 1SD *less* than sample mean)
A Formerly sick premature infants	39	52.05 ± 6.11	27.5%
B Healthy full-term infants	41	55.54 ± 4.52	2.8%
C Children with current problems	14	50.14 ± 9.56	25%
D Formerly sick full-term infants	9	55.22 ± 3.30	0%
A,B,C,and D	103	53.50 ± 6.11	

Note. From "Is my child normal yet? Correlates of vulnerability," by E. C. Perrin, P. D. West, and B. S. Culley, 1988, *Pediatrics*, *83*(3), p. 359. Copyright 2003 by *Pediatrics*. Reproduced with permission.

Table 2. Items from the Vulnerable Child Scale

1. In general, _________ seems less healthy than other children of the same age
2. I often think about calling the doctor about _________.
3. When there is something going around, _________ usually catches it.
4. _________ seems to have more accidents and injuries than other children.
5. _________ usually has a healthy appetite.
6. Sometimes I get concerned that _________ doesn't look as healthy as he/she should.
7. _________ usually gets stomach pains or other sorts of pains.
8. I often have to keep _________ indoors because of health reasons
9. _________ seems to have as much energy as other children of the same age.
10. _________ gets more colds than other children of the same age.
11. I get concerned about circles under _________'s eyes.
12. I often check on _________ at night to make sure he/she is ok.
13. I sometimes worry that _________ will die.
14. I feel anxious about leaving _________ with a baby-sitter or at day-care.
15. I am sometimes unsure about my ability to care for _________.
16. I feel guilty when I have to punish _________.

Note. From "Is my child normal yet? Correlates of vulnerability," by E. C. Perrin, P. D. West, and B. S. Culley, 1988, *Pediatrics*, *83*(3), p. 358. Copyright 2003 by *Pediatrics.* Reproduced with permission.

Parent Protection Scale (PPS).

Thomasgard et al. (1995a) developed and validated the Parent Protection Scale (PPS) for use with children aged 2-10 years as part of a larger study (Thomasgard et al., 1995b) designed to test the hypothesis that parental perceptions of child vulnerability to illness or injury are independent of parental overprotection. The authors make much of the finding that the two phenomena were not synonymous as only 20% of the sample scored in the clinical range on both dimensions. However, it is noteworthy that when the scores from both scales were treated as continuous variables there was a significant correlation between the two, a factor they do not discuss when concluding that parental perceptions of child vulnerability to illness or injury and parental overprotection are distinct and separable clinical phenomena.

Items comprising the PPS are listed below in Table 4. Data for the development of the scale were obtained from a reliability sample of parents of children aged 2-5 years; clinical samples of parents of children aged 2-5 years and 5-10 years; and a validity sample of parents of children aged 2-10 referred to a mental health professional. Across the samples, over 90% of parents completing the scale were mothers. Responses were scored using a 4-step scale of 0-3 (0 for "never", 1 for "sometimes", 2 for "most of the time", and 3 for "always"). Items 5, 6, 10, 14, 16, 19 and 25 are reverse coded. The total score is derived from the sum of all items (possible range 0-75) with higher scores representing greater levels of protection. Total PPS scores were normally distributed and ranged from 13-54 (possible range 0-75).

As predicted, the overall subscores for each of the scales reduced with the increasing age of the child and norms by child age in terms of cut-off points were determined. The normative data for children in the age bands corresponding to those in the present study are tabled below, along with cutoff points corresponding to +1SD (85%) indicating a score in the clinical range (see Table 3). Internal reliability of the total PPS score was alpha = .73. Test-retest reliability 3-5 weeks later was $r = .86$, $p = .001$. There were no significant differences in the total PPS score based on the child's gender at any of the age groups studied. Demographic correlates of higher total PPS scores were younger parental age, non-married parents, lower socio-economic status, and having one child only in the family. Interestingly, no significant associations were noted between parental overprotective behaviours and history of infertility, prematurity, major loss, or history of life-threatening illness or injury in the child.

Table 3. Normative PPS data for US children aged 2-3 years

Age 22-27 months	Mean 35.6	SD 6.2	Cut-off 85% 41
Age 28-33 months	Mean 34.0	SD 5.4	Cut-off 85% 39
Age 34-39 months	Mean 33.5	SD 5.4	Cut-off 85% 39
Age 46-51 months	Mean 31.5	SD 5.4	Cut-off 85% 36

Note. From "Parent-child relationships disorders. Part I. Parental overprotection and the development of the Parent Protection Scale," by M. Thomasgard, J. P. Shonkoff, W. P. Metz, and C. Edelbrock, 1995a, *Developmental and Behavioral Pediatrics, 16*(4), p. 247. Copyright 2003 by Lippincott Williams & Wilkins. Reproduced with permission.

Table 4. Items from the Parent Protection Scale

1. I blame myself when my child gets hurt
2 I comfort my child immediately when he/she cries
3. I encourage my child to depend on me
4. I have difficulty separating from my child
5. I trust my child on his/her own
6. I let my child make his/her own decisions
7. I have difficulty leaving my child with a baby-sitter
8. I decide when my child eats
9. I use baby words when I talk to my child
10. I urge my child to try new things
11. I determine who my child will play with
12. I keep a close watch on my child
13. I feed my child even if he/she can do it alone
14. I feel comfortable leaving my child with other people
15. I protect my child from criticism
16. I let my child choose what he/she wears
17. I make my child go to sleep at set time
18. I go to my child if he/she cries during the night
19. I encourage my child to play with other children
20. I give my child extra attention when he/she clings to me
21. I decide what my child eats
22. I dress my child even if he/she can do it alone
23. I decide when my child goes to the bathroom
24. I know exactly what my child is doing
25. I allow my child to do things on his/her own

Note. From "Parent-child relationships disorders. Part I. Parental overprotection and the development of the Parent Protection Scale," by M. Thomasgard, J. P. Shonkoff, W. P. Metz, and C. Edelbrock, 1995a, *Developmental and Behavioral Pediatrics, 16*(4), p. 245. Copyright 2003 by Lippincott Williams & Wilkins. Reproduced with permission.

Achenbach Child Behavior Check List for 2-3 year-old children (CBCL/2-3). The measure most widely used to assess parental reports of child behaviour problems in 2-3-year old children is the Achenbach Child Behavior Check List 2-3 years, designed to obtain parents' ratings of their children in everyday contexts. The information summarised below was obtained from the *Manual for the Child Behavior Check List/2-3 and 1992 profile* (Achenbach, 1992).

The CBCL/2-3 can be completed by most parents who have at least fifth grade reading skills. Parents' reports can be supplemented by reports by other caregivers such as day-care personnel, or by developmental tests, physical examinations and direct observations of the child in various contexts. Modelled on the problem portion of the CBCL for rating older children aged 4-18 years, the CBCL/2-3 consists of 99 items describing behavioural/emotional problems, plus an open-ended item for additional problems which provides clinically useful data that is not scored in a formal fashion. Parents rate their child on each item that describes the child currently or within the last 2 months, assigning a 2 if the item is very true or often true; 1 if the item is somewhat or sometimes true; or 0 if the item is not true.

Parents' responses to the CBCL/2-3 are then scored on the Child Behavior Profile form for Ages 2-3. The profile separates the items on the CBCL/2-3 into six narrow-band syndrome scales and a further scale for "other problems". These scales were derived from factor analyses of 398 CBCLs for non-referred children as well as children referred for mental health services, or considered to be at risk of problems because of low birthweight. The word "syndrome" was used to denote problems that occurred together rather than referring to any particular model or disorder.

The syndromes identified were Internalising (anxious/depressed; withdrawn), Externalising (aggressive behaviour; destructive behaviour), and neither Internalising or Externalising (sleep problems; somatic problems). To hand-score the profile the user writes on the profile form the score that was circled by the respondent for that item, and then sums the scores of the items on each scale and marks the corresponding number in the profile display. Percentiles from the normative sample can be read from the left hand side of the profile and raw scores can be converted to *T* scores on the chart on the right hand side of the page. Broken lines printed across the profile at the *T* scores of 67 and 70 represent a score in the borderline clinical range, and scores above *T* = 70 are designated as being clearly in the clinical range. A total score is then obtained by summing the scores for Other Problems, Internalising, Externalising, Sleep problems and Somatic problems. Children are not assigned to a category of primarily Internalising or Externalising patterns unless their total score exceeds the clinical cutoff point, and the difference between their Internalising and Externalising *T* scores is at least 10 points.

Test-retest reliability of the CBCL/2-3 scale scores was supported by a mean test-retest *r* = .85 for the problem scales over a period averaging 7.7 days. Scores did show the commonly-found tendency to decrease over brief rating intervals but it accounted for a mean of only 4.3% of the variance in scores. Inter-parent agreement was shown by a mean *r* = .63 at age two and .60 at age three years. Content validity of the scale was evident in that clinically referred children obtained significantly higher scores than similar non-referred children on nearly all items.

Construct validity was demonstrated by significant convergence between the CBCL/2-3 and an analogous British instrument, the Richman Behaviour Checklist, whilst discriminant validity was shown by a lack of correlation with a range of standardised developmental measures, such as the Bayley Mental Scale at age 2. Criterion-related validity was supported by the ability of the CBCL's quantitative scale and clinical cutoff points to discriminate significantly between referred and non-referred children when demographic effects were partialled out.

Data Analysis

Interview Data

Transcripts of the WMCI were coded by the researcher (who had also conducted the interview and thus had the advantage of having had personal interaction with the participants) and by a second coder who was a certified coder of the AAI and who had access to the transcripts only. Interviews were coded on the overall major categories of balanced, distorted or disengaged, and on each of the eight narrative features considered to be indices of the parent's representation of the child: richness of perceptions, openness to change, coherence, intensity of involvement, caregiving sensitivity, acceptance/rejection, infant difficulty and fear of loss (Zeanah et al., 2000).

The initial part of the interview was also coded using the RTDCS, rating the participants' accounts as either Resolved (R) or Unresolved (U) with respect to the SIDS loss, and then into the relevant subcategories within these major R/U groupings (feeling oriented, action oriented, and thinking oriented; or emotionally overwhelmed, angrily preoccupied, neutralizing, depressed/passively resigned, distorting, or confused). As described above, content themes relating to grief resolution and replacement dynamics were also identified in the interview data.

Statistical Analyses

A description of the variables is given in Table 5 below. For the purposes of this study, non-parametric tests were undertaken to analyse nominal, ordinal and interval data. Whilst Siegel (1956, 1988) has traditionally advised the use of non-parametric statistics for use primarily with nominal or ordinal data, others (e.g. Williamson, 1974) have advocated a more liberal interpretation of the rule, permitting their use with interval or even ratio data in situations such as in the present study where the distributional assumptions for parametric procedures could not be assumed.

For the SIDS group, Pearson chi square statistics were initially computed to assess the relationships between WMCI and RTDCS classifications and the gender of the child. Grouping categories for these three variables were then used to create two groups, and Mann-Whitney U tests were computed for each with scores on the VCS, PPS, ACTLT, scales and subscales of the CBCL/2-3, age of child, age of mother, Elley-Irving Index of socio-economic status, number of children, birth order, and the number of years since the SIDS death. Spearman's rho correlation coefficients were then calculated separately for the SIDS and control groups to evaluate the relationship between the VCS, PPS, CBCL scales and subscales, the age of child, age of mother, Elley-Irving Index, number of children, birth order, and (for the SIDS group only) the number of years since the SIDS death. Mann-Whitney U tests were conducted to identify between-group differences on demographic variables and for the VCS, PPS, CBCL scales and subscales.

Table 5. Variables

Variable Label	Description	Type of Measure	Outcome
RTDCS	Reaction to Diagnosis Classification System	nominal	2 groups 1 resolved 2 unresolved
WMCI	Working Model of Child Interview coding 9 categories	nominal	9 groups (3 clusters) 2-3 balanced 4-6 distorted 7-9 disengaged
WMCI bal-unbal	Working Model of Child Interview coding 2 categories	nominal	1 balanced 4 non-balanced
PPS	Parent Protection Scale	interval	range: 13-54
VCS	Vulnerable Child Scale	interval	range: 30-63 (reversed)
ACTLT	Achenbach CBCL/2-3 total problem T score	interval	range: 24-72
ACH1T	CBCL/2-3 Scale 1 anxious/ depressed total T score	interval	range: 50-67
ACH2T	CBCL/2-3 Scale 2 withdrawn total T score	interval	range: 50-72
ACH3T	CBCL/2-3 Scale 3 sleep problems total T score	interval	range: 50-68
ACH4T	CBCL/2-3 Scale 4 somatic problems total T score	interval	range: 50-68
ACH5T	CBCL/2-3 Scale 5 aggressive behaviour total T score	interval	range: 50-68
ACH6T	CBCL/2-3 Scale 6 destructive behaviour total T score	interval	range: 50-70
ACHOTHER	CBCL/2-3 other problems raw score	interval	range: 0-30
ACHINT	CBCL/2-3 internalizing scale total T score	interval	range: 30-71
ACHEXT	CBCL/2-3 externalizing scale total T score	interval	range: 30-80
GENDER	Gender of child	nominal	1 = Male, 2 = Female
EIINDEX	Elley-Irving index of SES	ordinal	range: 1-6
Time since SIDS death	Years since SIDS death (yy)	Interval	range: 3.5-13
AGEMOTHE	Age of mother (yy)	interval	range: 24-44
NUMCHN	Number of children	interval	range: 2-6
BIRTHORD	Birth order of index child	ordinal	range: 1-5
AGE_MTH	Age of index child (mm)	interval	range: 24-47

CHAPTER FIVE

Results and Discussion

In this chapter, the results of the study are presented and discussed in the following sequence: First, independent comparisons are shown of the relationships between the WMCI classifications, RTDCS classifications, and gender of the child, and between each of these three variables and demographic details of participants, scores on the VCS, PPS, and CBCL/2-3 instruments, and time since the SIDS death. The questionnaire data are then examined for evidence of the three aspects of the Vulnerable Child Syndrome, presenting the correlations between the demographic details of participants and scores on the three instruments for the SIDS and control groups separately, and between-group differences in the scores on the three instruments.

The interview data are shown next. To begin with, the major category ratings of the interview transcripts for the WMCI and RTDCS are presented and briefly discussed in terms of the findings in comparable studies. From there, a more detailed analysis of the interview transcripts is undertaken to illustrate resolution of mothers' grief as measured by the RTDCS. Features of the accounts of the loss are described and characteristics of Resolved versus Unresolved grief are identified. Replacement themes in the interview content are then examined, and discussed in terms of idealisation of the dead baby and subsequent child, the decision to have another child, sex and names of the subsequent child, and identity issues associated with replacement pathology.

Finally, disturbance to the caregiving system is examined with regard to major classifications, and narrative and content features of the WMCI transcripts. The caregiving relationship is described in terms of the following themes that emerged from the interviews: defensive distancing against the prospect of further loss, the functional nature of the early relationship, hypervigilance (with or without apnoea monitoring as a control strategy), under and overprotection of the child, ongoing parental perceptions of the child's vulnerability and inability to project to the child's future, and the shift in parenting style when the child attained the transitional age of 2-3 years.

Questionnaire Data

Crosstabs Analyses

Using an alpha level of 0.05 for tests of significance, Pearson chi square statistics showed no significant relationships between final WMCI classification ratings (collapsed and coded into the two major categories, balanced and non-balanced), RTDCS categories (Resolved or Unresolved), and gender of the child (male and female).

Grouping categories for the WMCI, RTDSC, and gender of the child were then used to create two groups and Mann-Whitney U tests were computed for two independent samples. For the SIDS group, no significant relationships were shown between the WMCI, RTDCS, and gender of the child respectively, with the age of the child, birth order, age of the mother, number of children, Elley-Irving Index of socio-economic status, or scores on the VCS, PPS, ACTLT, subscales of the CBCL/2-3. For the control group, no significant relationships were shown between the gender of the child and the age of the child, birth order, age of the mother, number of children, Elley-Irving Index of socio-economic status, or scores on the VCS, PPS, ACTLT, or scales or subscales of the CBCL/2-3. These findings are in keeping with previous reports of no significant gender effects for either PPS scores (Thomasgard et al., 1995a) or VCS scores (Perrin et al., 1989). In normative US samples, total problem scores for the CBCL/2-3 are not generally adjusted for gender of the child but boys' scores tend to be higher on 12 of the items for the externalising scale, and more girls have elevated scores on four items of the internalising scale (Achenbach, 1992).

Correlational Analyses

Correlates of parental perceptions of vulnerability.

Correlational analyses (see Appendix D) showed moderate but significant negative correlations for the SIDS group between the VCS (reverse scored) and scores on the PPS, ACTLT, ACH1T, ACH4T, ACH5T, ACHOTHER, ACHINT, and ACHEXT. For the control group, correlations between the VCS and scores on the PPS, ACTLT, ACH1T, ACH4T, ACH5T, ACHOTHER, ACHINT, ACHEXT and for the ACH6T were also significant but tended to be lower in this sample. Taken together, these findings provide support for the hypothesis that parental perceptions of child vulnerability and parental overprotection are separate but related constructs (Thomasgard et al., 1995b).

For both groups, higher parental perceptions of vulnerability are associated with increased anxiety and depression, somatic problems and aggressive behaviours in the child, whereas for the SIDS group only the VCS scores were not significantly correlated with ACH6T (destructive behaviours), a subscale on which the scores for the SIDS group were comparatively high (see below). In contrast, Perrin et al. (1989) had found that in samples of 3-year-old children with low or normal birth weights both the case and control groups showed a significant association between the VCS and scores for the comparable dimensions of undisciplined/poor self control, as well as for the internalisation/somatic symptoms in the child.

In the SIDS and control groups alike, parental perceptions of vulnerability were found to have no strong association with socio-economic class, and seem to be unrelated to time factors as they were not significantly correlated with the time since the SIDS death in the SIDS group, and in neither group with the age of the child, age of mother, birth order, or number of children. By comparison, Thomasgard et al. (1995b) reported parental perceptions of vulnerability to be related to lower socio-economic status and birth order (firstborn children were perceived as more vulnerable), and Perrin et al. (1989) noted significant correlations between VCS scores and socio-economic status and birth order, but not with parental age. Taking into consideration that no firstborn children were included in either the SIDS or control groups, the only disparate finding is the lack of relationship between the VCS score and socio-economic status. This can perhaps be accounted for by the relative homogeneity of the New Zealand parents, of whom over 60% were classified as socio-economic groups two or three, roughly translated as lower middle class.

Correlates of parental protection of the child.

As noted, the PPS and VCS were significantly correlated for both groups. Whilst the correlations were again low, for the control group only the PPS was also significantly negatively correlated with the age of the child and positively correlated with scores for ACTLT, ACH4T, ACH6T and ACHEXT. These results suggest that the expected developmental effect (i.e., a linear decline in the total protection scores as the child gets older) was seen in the control group but not to the same extent in the SIDS group. It appears that the protective tendencies of SIDS mothers are not as age-differentiated as those of other mothers indicating that some degree of infantilisation of subsequent children may occur.

Age of the child.

The age of the child in months was significantly negatively correlated with ACH6T for the control group only, suggesting that the undisciplined externalising behaviours of toddlerhood tend to decrease with age in the control group but to persist in the SIDS group. In addition, there was a significant positive correlation between the age of the child and the ACH1T score in the SIDS group only, showing a moderate age-related increase on the anxious/depressed scale as the subsequent children get older.

Time since the SIDS death.

Ongoing effects are also seen in scores on the scales for withdrawn and aggressive behaviours and for somatic problems that show an increase as time since the SIDS death lengthens. Although these two and three-year-old children are past the risk period for SIDS, sleep problems are not shown to lessen with the increasing age of the child but do tend to decline with the length of time since the SIDS death.

Correlates of parental reports of behaviour problems in the child.

As noted, the total problem score (ACTLT) on the CBCL/2-3 was significantly correlated with the VCS in both groups and with the PPS for the control group only. It was also evident that significant associations existed between the total problem score and all the subscales of the CBCL/2-3 for both groups except for the ACH3T for the SIDS group. This is perhaps because parents in the control group tend to see sleep problems as part and parcel of a child's general behavioural repertoire, whereas SIDS parents view the subsequent child's sleep periods as times when the risk of dying without warning is most salient.

Measurement of the Vulnerable Child Syndrome

The results of the present study showed that across the two groups, correlations between the VCS, PPS and ACTLT were all significant at an alpha level of 0.05 except for the PPS and ACTLT (and logically, none of the subscales) for the SIDS group. As the

SIDS sample is supposedly a vulnerable group, where it could be anticipated that there would be a significant correlation of scores across the three instruments, the weak association between the PPS and ACTLT for these children is an unexpected finding. Following the reasoning by Thomasgard et al. (1995b), higher parental perceptions of vulnerability would not necessarily be translated into the overprotective behaviours assumed to be the antecedents of behavioural problems in the child, hence one would expect that it would be the PPS, not the VCS that would be correlated with the total problem score on the CBCL/2-3.

This introduces the possibility that attachment-related parenting dynamics other than overprotective behaviours may mediate between heightened perceptions of vulnerability and the behaviour problems in the child in the SIDS group. It is not possible to draw any definite conclusions along these lines, especially with the small sample size and lack of a significant relationship between WMCI coding and PPS score, but the interview data indicate that for SIDS mothers protective distancing in their initial relationship with the subsequent child led in some cases to emotional unavailability rather than overprotection of the child. Heightened parental perceptions of the child's vulnerability in SIDS parents would be expected in the SIDS sample, both as an outcome of the trauma of the SIDS death and of the relative risk status of the subsequent child. In the SIDS sample, nine of the 20 cases (45%) scored in the clinical zone for high parental perceptions of vulnerability. Of this number, three were in the high clinical zone for the PPS and ACTLT as well and it would be these three children, making up 15% of the SIDS sample, who would meet the specified criteria for the Vulnerable Child Syndrome. Two of the nine perceived vulnerable children were in the high clinical zone for the PPS but in the normal range for the ACTLT; a further four were in the normal range for the PPS and of these, three were in the high clinical range and one in the normal range for the ACTLT.

Of particular interest, however, is that three of the twenty cases in the SIDS sample (15%) scored more than 1SD *above* the mean for the VCS, indicating very *low* perceptions of the child's vulnerability. One of these mothers scored more than 1SD below the mean for both the PPS and ACTLT as well and two other cases had scores in the normal range for the VCS and ACTLT but in the low clinical zone for the PPS. Given the contexts in which the subsequent children were raised, it is again reasonable to assume that scores in the low clinical zone for the SIDS group would be linked to distancing in the parent-child relationship, that they would be associated with muting of emotion and a lack of contingent responsiveness to the child's needs. The data for the SIDS group appear to provide support for this assumption in that all five cases scoring in the low clinical zone for the VCS or PPS scales were coded as "Disengaged-suppressed" on the WMCI, a coding category characterised by a pervasive constriction of emotion and aloofness associated with a defensive maintenance of emotional distance. The single case in the SIDS group scoring in the low clinical zone for all three dimensions was coded as disengaged-suppressed on the WMCI and Unresolved (neutralising) on the RDI. This mother's account of the loss experience minimised emotions associated with the death, yet showed evidence of excellent recall of idiographic detail and indications of an extreme emotional reaction to the loss at the time.

Whilst it has been well documented that parental perceptions of vulnerability based on unrealistic appraisals of their child's health status can lead to overprotection at one extreme of the continuum, and neglect at the other (e.g., Boyce, 1990; D. Levy, 1970; Thomasgard et al., 1995a), this taxonomy of vulnerability has not yet been incorporated into the instruments developed to quantify the dimensions of the Vulnerable Child Syndrome. Scores significantly below the norm for perceived vulnerability or protective tendencies are not flagged as reason for concern, so by implication, the lower the score the less problematic the parent-child relationship. In the frequently asked question section of the user manual for the CBCL/2-3, Achenbach (1992, p. 176) sidestepped the issue of whether extremely low scores on the total problem scale should be considered deviant by commenting that (a) because the 1992 profile scoring procedure compresses the lower end of the syndrome scales, very low scores may be obscured, and (b) a total problem score below the normative range was likely to be the outcome of the respondent's failure to understand the questions or lack of candour for reasons of social desirability.

As has been previously mentioned, Forsyth et al. (1996) contended that the Vulnerable Child Syndrome is composed of three dimensions: (a) parental perceptions of child vulnerability, resulting in (b) parental overprotection, and (c) ensuing behaviour problems in the child. However, surprisingly, no studies (including their own) were found to have investigated all three distinct aspects of the syndrome. In the development of the original Child Vulnerability Scale Forsyth et al. (1996) examined perceived vulnerability and behaviour problems on the CBCL, but omitted measurement of protective behaviours. Of their weighted sample, 28% of cases scored as perceived vulnerable and 20% of these scored in the clinical range for behaviour problems as well. Perrin et al. (1989) also examined parental perceptions of child vulnerability and presenting behaviour problems in the child, but not parental overprotection as a separate scale. They found that 27.5% of formerly premature children scored in the clinical zone on the VCS as opposed to only 2.8% of children with normal birth weight, but unfortunately, they did not report the actual numbers of those who scored in the problem range for both scales. In an investigation of three-year-old children with previous feeding problems in infancy, Forsyth and Canny (1991) rated 14% as perceived vulnerable, but only 33% of this number also scored in the clinical range for behaviour problems. On the other hand, Thomasgard et al. (1995a, 1995b) examined parental perceptions of child vulnerability and parental overprotection, but not behavioural difficulties in the child, noting that 20% of those considered vulnerable were also categorised as overprotected, compared with 14% of those not considered vulnerable by their parents.

In the absence of comparable data from other studies, a case-wise examination of the New Zealand control group showed that the percentage of cases scoring in the high clinical zone on one or more of the three instruments was significantly higher in the SIDS group but in the control group proportionately more cases were in the low clinical zone for the VCS. In the control group 15% scored in the high clinical zone on the VCS (see descriptive data, Table 7 below). Of these, only one met the criteria for the Vulnerable Child Syndrome by scoring in the high clinical zone for all three scales, and another three scored high on perceived vulnerability but in the low clinical zone on the PPS. Scores in the low clinical zone for the VCS were found in 22 cases. Three of the 22 had low scores on all three scales, four were low on the VCS but high on the PPS, and two of these four also scored in the high clinical range on the ACTLT.

Descriptive Statistics

Descriptive statistics for the SIDS and control groups are presented separately in Table 6, below. Scores described as in the clinical range for both groups were those ± 1SD from the mean for the New Zealand control group.

Table 6. Descriptive Statistics

Group		N	Min	Max	Mean	SD	Non-clinical range	% of scores in high clinical zone	% of scores in low clinical zone
SIDS	VCS reverse scored	20	30	62	50.10	8.372	61-50	45% (↑vuln)	15% (↓vuln)
	PPS	20	13	50	34.20	8.489	24-38	30%	15%
	ACTLT	20	35	64	50.90	8.565	40-55	35%	10%
	ACH1T	20	50	62	51.60	3.331	48-56	35%	0%
	ACH2T	20	50	67	53.65	5.622	48-58	25%	0%
	ACH3T	20	50	62	55.20	3.982	49-55	50%	0%
	ACH4T	20	50	67	54.50	5.880	48-56	30%	0%
	ACH5T	20	50	67	54.60	6.038	48-57	35%	0%
	ACH6T	20	50	68	56.95	6.278	48-58	40%	0%
	ACHOTHER	20	1	17	6.85	4.380	2-11	25%	20%
	ACHINT	20	30	61	47.85	8.732	39-56	25%	15%
	ACHEXT	20	36	66	52.00	8.927	40-57	35%	5%
	Time since SIDS death	20	3.50	13.00	7.0875	3.1175			
	AGE_MTHS	20	24	47	32.75	7.873			
	AGEMOTHE	20	27	41	33.80	3.563			
	NUMCHN	20	2	6	4.20	.951			
	EIINDEX	20	1	6	3.55	1.432			
	Valid N (listwise)	20							
CONTROL	VCS reverse scored	100	33	63	55.64	5.679	61-50	15% (↑vuln)	22% (↓vuln)
	PPS	100	18	54	31.01	6.539	24-38	14%	12%
	ACTLT	100	24	72	47.92	7.456	40-55	21%	14%
	ACH1T	100	50	67	52.01	4.103	48-56	21%	14%
	ACH2T	100	50	72	52.87	5.235	48-58	25%	0%
	ACH3T	100	50	68	51.85	3.224	49-55	16%	0%
	ACH4T	100	50	68	52.21	4.048	48-56	18%	0%
	ACH5T	100	50	68	52.34	4.188	48-57	19%	0%
	ACH6T	100	50	70	53.17	4.791	48-58	15%	0%
	ACHOTHER	100	0	30	6.63	4.282	2-11	15%	12%
	ACHINT	100	30	71	47.42	8.488	39-56	17%	12%
	ACHEXT	100	30	80	48.74	8.447	40-57	18%	15%
	AGE_MTHS	100	24	47	35.64	6.144			
	AGEMOTHE	100	24	44	33.52	3.940			
	NUMCHN	100	2	6	2.90	.870			
	EIINDEX	100	1	6	3.15	1.114			
	Valid N (listwise)	100							

Between-group differences

Mann-Whitney U statistics were computed to compare the SIDS and control groups for the VCS, PPS, CBCL scales and subscales, the age of child, age of mother, Elley-Irving Index, number of children, and birth order, again using an alpha level of .05 for 2-tailed tests of significance. The results showed significant differences ($p = .000$) between the SIDS and control groups on the number of children and birth order which, as noted in the previous chapter, are likely to be an artefact of the inclusion of the SIDS victims in the number of children in the family. As the descriptive data shows, scores on all scales were higher in the SIDS group than the controls but the differences reached significance only for the VCS ($p < .005$), PPS ($p < .025$), ACH3T (sleep problems, $p = .000$), and ACH6T (destructive behaviours in the child, $p <.002$).

Taken together this cluster of variables suggests that mothers of subsequent children have ongoing concerns and anxieties about the survival of their children and that they tend to be more vigilant, indulgent and protective of their children, especially with respect to guarding them throughout periods of sleep. In comparison to their control group peers, the subsequent children tend to display more sleep problems (an inability to sleep alone, resistance to going to sleep, frequent waking in the night, and less time sleeping), and age-inappropriate reckless, hyperactive behaviour (getting into everything, showing a short concentration and attention span, moving quickly from one activity to another, prone to hurting others accidentally, and destructive of property).

In summary, these data show that for the SIDS group as a whole, two of the three criteria for the existence of the Vulnerable Child Syndrome are satisfied (increased parental perceptions of vulnerability and parental protective behaviours) but although problem scores for all scales and subscales of the CBCL/2-3 are elevated in the SIDS group, this reaches significance level for two specific subscales only. Sixty percent of children in the SIDS group had scores that were outside the normative range for perceived vulnerability, and 20% had scores that deviated by more than 1SD from the mean for the control group on all three major instruments, as opposed to only 4% of the control group. Follow-up studies are needed to determine whether the observed effects are transient and will disappear as the child becomes more separated/individuated with the approach to school entry age and as viability past the stage of infancy is increasingly assured.

Interview Data

Both coders rated all twenty transcripts for both WMCI categories and for Resolved or Unresolved status on the RTDCS. As the researcher cum interviewer had access to contextual cues that were not available to the second coder who was coding from the interview transcript only, this tended to influence interrater judgements of overall coherence and resolution. Nevertheless, initial interrater agreement for the major category classifications was 90% ($\kappa = 0.856$, $p = .000$) for the WMCI, and 85% ($\kappa = 0.700$, $p = .000$) for the RTDCS, and full agreement for both instruments was reached after conferencing. Figure 1 below illustrates the numbers of resolved/unresolved cases for each major WMCI category. As noted, no statistically significant relationship was found between the WMCI and RTDCS categories but it was evident that in this small sample none of the transcripts coded as distorted was also coded as resolved.

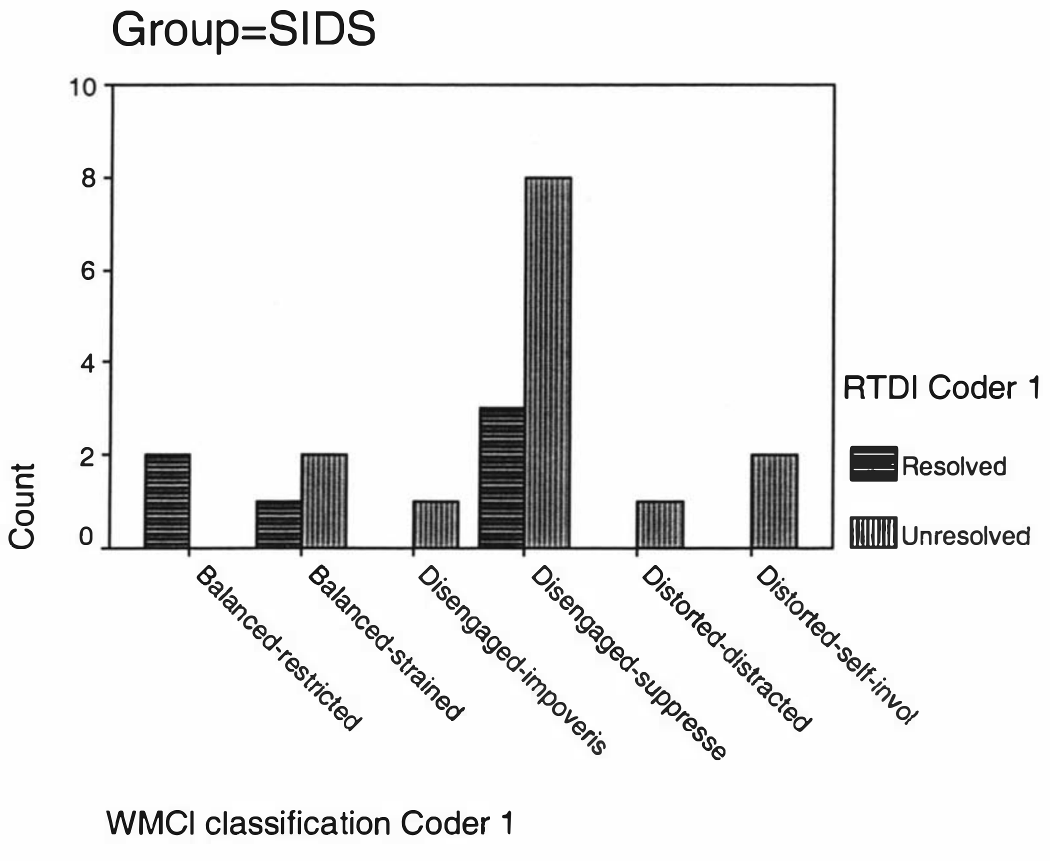

Figure 1. SIDS group: Resolved/Unresolved Status by WMCI category

WMCI Major Categories

For the major categories of WMCI, five transcripts (25%) were classified as balanced, two as balanced-restricted because of evidence of some degree of emotional distancing from full engrossment in the child, and the other three as balanced-strained because of parental perceptions of the child as difficult. Fifteen transcripts (75%) were classified as non-balanced. Of these, one caregiver did not seem to know the child as an individual and the transcript was coded as disengaged-impoverished. Eleven (55%) were rated as disengaged-suppressed because the caregiver conveyed a pervading sense of emotional aloofness, and appeared to be defensively maintaining emotional distance from the child. Another was rated as distorted-distracted because of the mother's primary focus on concerns unrelated to the child whilst the remaining two transcripts were classified as distorted-self-involved on the basis of striking examples of caregiving insensitivity and preoccupation with self rather than with the child. By comparison, previous studies using the WMCI with clinical samples (24 infants with FTT, 17 with serious sleep disorders, and 13 with other clinical disorders) only 7% were given a classification as balanced as opposed to 42% of control group infants (Zeanah & Benoit, 1995). Despite their elevated scores on theACH3T and ACH5T, healthy subsequent children such as those in the SIDS group are not a referred group as such, and in the absence of control group data for the WMCI categories the 25/75 ratio for the SIDS group comes somewhere between that of the referred and non-referred North American groups.

RTDCS Major Categories

After inter-rater conferencing, 6 (30%) of the 20 interview transcripts were coded as Resolved (R), and 14 (70%) as Unresolved (U) on the RTDCS. The number of resolved cases was comparatively low for in the two groups of parents interviewed by Pianta et al. (1996) 46% and 56% respectively were classified as Resolved with respect to the diagnosis of congenital disabilities in their children. Again this difference was not untoward, for as has been commented upon, Nicholas and Lewin (1986) had shown in an Australian study that mothers of SIDS victims experienced significantly more anxiety and depression and more extreme grief reactions to the death of their infants than those who had recently had confirmation of their child's disabling medical condition.

Grief Resolution as Measured by the RTDCS

Pianta et al. (1996) pointed out that an excessively "absorbed recounting" with extreme details of the loss experience is one of the benchmarks of lack of resolution in both the AAI (Main, 1995, p. 442) and RTDCS. As had been anticipated, in the present study this criterion was of limited use in differentiating the Resolved versus Unresolved status in the SIDS group. Clearly, the events of the day of the baby's death were graphically and indelibly printed in the mothers' memories. Telling of the story of the initial loss in great detail, "as if it were yesterday" was a feature of all the interviews, including one with a mother who initially denied any memory of the day. None, however, reverted to using the present tense to tell the tale of the loss. Their stories enlisted the sympathy of the interviewer regardless of any intention or not by the participant to do so, thus making that particular coding criterion also difficult to apply as an indicator of grief resolution.

Furthermore, when it came to applying the coding criteria for the RTDCS to the narrative accounts of mothers in the SIDS group, it was found that unresolved status was best determined by generic indicators of grief and trauma (such as unremitting sadness, denial, persisting guilt, and symptoms of victimisation) rather than by the more narrow criteria by which resolution of loss/trauma is assessed in instruments derived from the AAI. The majority of SIDS mothers showed loss reactions that were far from resolved by any of the usual criteria yet they were able to reflect thoughtfully on their own behaviour and its effects on the caregiving system without the lapses in the monitoring of reason and discourse expected to be seen in the Resolution of Loss scale of the AAI. After inter-rater discussion, the decision was made to code such cases as Unresolved based on content themes in the interviews that indicated that they were "stuck in the past" and overwhelmed by the loss, with a view of themselves as helpless and an identity defined by the trauma of the event. In fact, a closer examination of the elements of lack of resolution listed by Pianta et al. (1996) revealed that in their study only two subclassifications (neutralising and confused) were assigned primarily on the basis of incoherent narrative or evidence of dissociative processes indicative of a lack of integration of the loss with present experience. Other subclassifications (emotionally overwhelmed, angrily preoccupied, depressed or passively resigned, or distorting of perceptions of the experience) were derived largely from content themes in the narrative and a style of engagement with the interviewer that indicated that the person was still strongly affected by the loss.

Invariably, SIDS mothers' accounts were situated in the context of everyday routines of households with young children. As the rather lengthy extract below from the transcript of the first interview illustrates, these mundane activities typically stood in stark contrast to the shock and horror of discovering the dead baby, in this instance, more than ten years before:

> P#1 I remember I walked out into the hall to go into her room - she'd been in bed for probably an hour or so. I'd checked her about 45 minutes before I'd found her and she looked like she was waking up. She was in that, you know, that bit of a restless stage, before you wake up. And I thought, "Oh well, I'll go and put her bottle on and umm, get organised so that when she does wake up, I can be ready for her." And I came back in the lounge, got her bottle on and things and my older son [name, aged 18 months] he fell over so I had to pick him up and be a mum to him. And you know, she was in her cot, so she was fine. My other daughter [aged 2.5 years] was watching TV and then I can remember the music for the six o'clock news starting and I thought, "Gosh, that baby hasn't screamed out to me yet to go and pick her up", so I thought I'd go and check her. [Son] was still a bit unsettled after having fallen over so I took him and put him in his cot in the other room, in his bedroom and then as I got to the door of [baby]'s bedroom I just knew without even going in, I just knew... And I pushed my other daughter out of the way and went in and umm, she was in the corner of her cot, curled up, like in a foetal position really, with her knees to her chest, and like off her tummy, but with her knees tucked right up under her and her arms pulled in and her chin was right down touching her chest. She was completely curled up in this little ball. And, umm, I remember just how unnatural it looked, it didn't look like how a little baby was lying. And I picked her up and umm, turned her away from me, turned her face away from me as I picked her up rather than pulling her towards me, turned her away, and I can remember feeling really, just disgusted, really quite repulsed at the sight of the death, more than anything. [Crying]. And I remember, I didn't want to touch her, it was like if I touched her, it would be real, that if I didn't, I could go out and shut the door and pretend that it wasn't real. And umm, it was just horrible, it was that look of death, the colour, everything about it was just - hideous, and coldness. And umm, I just started screaming, "Not my baby, please God, don't take my baby!" And I came out into the kitchen to use the phone and I umm, I stood screaming, I just didn't know who to ring. In my head I knew I didn't need an ambulance, I didn't know if I was supposed to ring an ambulance. Because, you know, ambulances come for sick people. They don't come for dead people. And I didn't know what to do. And umm, I rang my mother-in-law and she didn't know who I was on the phone at first, I was in such a mess. I mean, when she finally, when she finally understood who I was, I just told her that [baby] was dead and she said, "No, she's not, no she's not!

> What's wrong with her?" And I just kept on saying she was dead. I just kept saying to her.... So, she, she said she would come down straightaway and they don't drive, so she had to get a taxi down. And I ended up in the back yard screaming and my neighbours came over and it just seemed, it was about, it seemed like it was going on for hours and it was only about five minutes in all from when I got off the phone to when my mother-in-law was here and everything. My father-in-law rang my husband and got him to come home straightaway and he arrived. So, my neighbours were here and my husband arrived and my mother-in-law arrived and the ambulance arrived. So all of a sudden it went from having nobody here to having all these people here wanting to know and I felt like I was up on the ceiling somewhere watching it all going on. It was, it seemed like things were happening in slow motion. It was just, it seemed I stepped back from it all and was watching. It just didn't seem like I was there at all.... [Crying].

Content Themes

Initial reactions.

The stories of the initial events following the loss closely paralleled the descriptions in the SIDS literature. As portrayed in the account above, the first reactions for most mothers on the discovery of the dead baby were shock, horror, and an initial repugnance at the sight of the lifeless baby whose appearance was grotesquely changed in death. This was their baby but not their baby as they had known him/her. Their instinctive response was to scream and yet paradoxically they needed to stay calm to summons help and to attempt resuscitation. The dilemma of who to call when the baby was apparently already dead was a very real one for most people. Several lived in isolated areas and had the added stress of having to give complicated directions to the location, knowing that help would not arrive in time to make any difference.

In most cases, both parents were present at the time the lifeless baby was discovered. Two mothers were solo parents, one living temporarily with a cousin who provided support at the time and the other lived with the baby and an older child in close vicinity to mother's house. Interestingly, in each of the five cases where the father of the baby was at work, the mother did not call him in the first instance and the father was notified by a third party. It seems that in a state of shock and trauma the women instinctively reverted to seeking out parental attachment figures instead of turning to their spouse for help. Participant #1 called her mother-in-law (her own mother lived in the UK); Participant #4 called her mother first and then rang an aunt to ask her to contact the baby's father to come home; Participant #12 felt guilty because of the delay incurred when she called her mother's phone number first before even calling an ambulance, even though she knew her mother was on holiday overseas and her father had died some time ago; Participant 15 phoned an ambulance and then her mother; and Participant #11 called an ambulance then her own mother, asking for assistance from "Mummy" and "Daddy" in an unrecognisable child-like voice whilst her husband, who was a medical practitioner at work nearby, was not aware of the event until the ambulance and a locum from the same practice were already in attendance at the scene. In addition, Participant #10, whose husband was at home at the time, told of obtaining first-line help from the neighbours:

> P#10 And he was still warm and I picked him up and started screaming for my husband and I started doing resuscitation but I was too panicky, so I ran next door for them to work on him. I don't know why I ran out there instead of just running in to [husband] but I ran next door and they worked on him on the table until the ambulance got there and umm...

As has been described in the literature, mothers consistently spoke of the need to have their dead babies treated as if they were still real people, deserving of respect, wanting them to be to be dressed in their own clothes and kept warm, not left wrapped in a hospital towel or worst of all, zipped into a blue body bag and removed for an autopsy as if they were objects with no meaning. Once the death was confirmed some mothers (#3, #16, and #19) deliberately avoided looking at or making physical contact with the dead baby, and to varying degrees all three of these mothers continued to use avoidance of emotion as a coping strategy. Most spoke of precious family time spent cuddling the baby before having to relinquish body for autopsy or burial (#1, #2, #4, #5, #6, #7, #10, #11, #15, #17, and #18), although several had needed to insist upon the right to do. Participant #8 described her fierce refusal to hand over the baby to strangers until her parents arrived from some distance away whereupon her control broke down. A further group of mothers later regretted the lack of opportunity to have extended time and contact with the dead baby before the funeral (#9, #12, #14, #17, and #20).

Suicidal ideation.

Whilst most women spoke in some detail of the extreme emotions they experienced in the initial weeks and months following the loss, few made any mention of suicidal thoughts. Participant #4 commented that at times she had wanted to be buried next to the dead baby and Participant #1 stated that her grief would have been intolerable if the next baby had died as well. However, Participant #8 was the only one to have seriously considered suicide. She described a day in which she would have driven off a cliff to put an end to her misery had not her sense of responsibility to her older daughter prevailed.

Marital relationship.

Another common pattern that emerged in the interviews was the strain placed upon the marital relationship. Two couples (#5 and #8) moved house soon after the loss because of the mother's need to get away from the death scene but Participant #3 took comfort in staying in the same house, feeling that the dead baby would know they were still there for him. Consistent with the literature, for the most part marital problems arose from the mothers' more extreme reactions and the fact that the fathers would not talk openly of their grief (#4, #5, #12, #13, #15, and #18), though Participant #3 spoke of her husband's much greater expression of grief than her own after the loss and the fact that the subsequent child had been conceived for his sake rather than for her own.

In two families (#5 and #15) the father's suppressed emotions were expressed in volatile anger at the world in general. Several marriages deteriorated almost to breaking point because of the enormous strain experienced by both parents but survived to become stronger over time (#1, #10, #11, and #15). Others reported a strong relationship throughout, the death of the baby having drawn them closer (#6, #7, #16, and #20). Participant #8 described ongoing severe marital problems after the SIDS death, but the only marriage to have ended because of issues arising specifically from the circumstances of the baby's death was that of Participant #9.

Change in the parenting role.

Not surprisingly, a major focus of the mothers' stories was the change in their parenting role that resulted from the loss of the baby. Three of the 20 mothers had lost their first child to SIDS. One of these (Participant #19) was a teenaged solo parent who experienced a sense of relief that it had all come to an end. The two married first-time mothers (#7 and #13) had planned their families and felt the loss of the mothering role acutely. Participant #13 wanted to replace the baby immediately, commenting, "You had a baby and then suddenly you didn't. It's as though he never existed. I left work, had him for six weeks then was back at work without him". This mother felt out of place in the parents' group to which she had belonged, whereas Participant #7, who also spoke of being "a mum, and then not a mum" continued her involvement with the local parent centre group after baby died on the basis that she would "always be the first of our children, our eldest daughter".

For other families, the mother's compromised ability to continue in the parenting role for the older surviving children had far-reaching and seemingly underestimated effects on the children. Two mothers temporarily abdicated their parenting role in the aftermath of the baby's death. Participant #2 spoke of having felt such a failure after filling in a NZCDS questionnaire that she left her older son, aged three years, with her mother and went overseas where she resorted to illicit drug use to escape the pain, not returning until seven years later when she was pregnant with the subsequent child, determined to turn her life around for the better. Participant #9 initially rejected her three-year-old older son and again left him with her mother for several months, pretending he didn't exist, and even on his return avoided getting too close to him in case something were to happen to him as well.

In other families an older child assumed the role of a replacement infant for the mother. Participant #1 had two older children, a son aged 18 months and a daughter aged two and a half years at the time of the baby's death. After the loss the older daughter was perceived as "Miss Independent" not in need of the close contact with their mother that her younger brother did. Though only a year her junior, her brother slipped back into the role of the baby in family, becoming treated and perceived as vulnerable and sleeping in the parents' bed for the next eight years of his life. Participant #3 also told of how her toddler reverted to baby status after the SIDS death, commenting that she realised she babied him "because he was all I had left". Although she had another child soon afterward, she was always aware that no matter how many more children she were to have, there would still be the one that that died that was missing so that she could never make up for that loss. In another family (#12) the SIDS baby was a twin. The mother reported that the surviving twin was a constant reminder of the lost child, and that she felt angry and resentful when people thought that having a surviving twin made up for the loss of one of them.

The gap left in the mother's routine was felt acutely even by those who were grateful for to have other children to care for (#4, #6, #11, #16, #18, and #20). Participant #4 described feeling lonely and sad when the older children were at school because her days had revolved around the baby. Similar feelings were expressed by Participant #6:

> P#6 There I was, I had three kids and this nine month old baby was keeping me flat out, you know, from four o'clock on. Man, I was busy with three pre-schoolers! And of course he died and help, nothing to do! It was awful. I always remember four o'clock after he died. I had nothing to do. The kids were playing together and the housework was mounting up and nuh, I had nothing to do! So, yeah, I think after the initial losing him the hard bit for me was living without him.

Several mothers (#5, #8, #10, and #15) recounted how the demands of the older children were difficult to handle in the post-loss period. Participant #8 reported that her two-year-old daughter became the centre of her life, "her will to live" but at the same time bore the brunt of her anger. She commented that she was now unable to remember a whole year of this daughter's life, and described her as characterless and "bland, like a sheep". Participants #5, #10, and #15 were aware that their older children were deeply affected by the baby's death but the mothers were engrossed in their own grief at the time and were unavailable to help the children through their acute distress. Participant #15 described the scenario on the day of the death:

> P#15 Yes, it was quite early in the morning, about half past seven. Umm, my oldest son [name], who was two and a half at the time, he would go into her cot every morning and they would just have a wee talk and a giggle and what-not and he came down to me this morning and he said, "[Name] won't talk to me". So I just went down the hallway and he ran ahead of me and jumped in the cot and he was poking her and prodding her and all the rest of it and she was bang slap up against the side of the cot and she was blue and purple as anything but I picked her up and took her down the hallway quite calmly and tried to do CPR but that wouldn't work ... and then I just screamed....

When the baby was returned to the family after the autopsy the child reportedly sat silently holding the baby's hand for hours on end, and began to exhibit acting-out behaviours some weeks later. The mother experienced ongoing relationship difficulties with him and at the time of the interview referred to him variously as serious, difficult, and as a "nothing child" personality-wise. She had eventually sought professional help for him, apparently having trouble convincing the psychological service agency that the death of his sister several years before had anything to do with the child's current difficulties. A subsequent child, another son, was born nearly three years later but the mother felt strongly that despite his resemblance to the SIDS baby in physical appearance and personality, she would be unable to resolve her grief until she had a replacement daughter. Her preoccupation with this theme was such that the interview was given a rating of distorted-distracted on the WMCI.

Over the longer term, mothers were very aware they were missing out on the dead baby's significant milestones and, as would be expected, a common response was renewal of the intense grieving on significant anniversaries. Almost all mothers described birthdays and anniversaries of the death as particularly traumatic, all the more so for the mother whose baby was a twin. For several mothers of babies who had died more than five years ago, the day of what would have been the baby's fifth birthday was another major trigger for renewed grief and emotion (#1, #8, #10, #15, and #18), an occasion to picture mentally what Rubin (1984-85) had called the "phantom child" setting off for school for the first time with friends and siblings.

Characteristics of Resolved Interviews

Accounts of the SIDS death were coded as Resolved for the major category of the RTDCS if they were told with both clarity and realistic detail, providing clear evidence of a change in the baseline emotion over time, an assertion of moving on, and an orientation to the present and future. The description that was perhaps best illustrative of a change in baseline emotion was that of Participant #16, four and a half years after the death of her third child, her only son, to SIDS. This mother's account was given a subcategory classification of "action-oriented" because of the her conscious decision to move beyond the loss and return her focus to her husband and family:

> P#16 I felt like, you know, the lowest of the low probably for about six months after he died and then one day I decided... I thought I'm going to listen to that tape [audiotape of baby's funeral service]. .... I listened to that and I howled my eyes out the whole way through but I felt slightly better after that. I felt like I had turned that first curve on the road, or whatever you want to say. And I did feel slightly better after that but I used to go to bed at night and just cry my eyes out every night for a long time. And you know, I said to [husband] at one stage, I remember thinking it would be so much worse if it was your partner. Because at least he was there, and he, I mean, he didn't know what to do, just hold me basically and um, but I thought, imagine if the bed was empty without him there. Which and I thought it must be so much harder for people to lose their partner but

> um, yeah, no, it was probably six months when I felt really, really bad and then I did turn the corner. ...
>
> I think it would be very hard losing your first child, I think that would be very, very tough. I mean it's tough anyway, don't get me wrong, but you know, I had to, we had to focus on the [two older] girls, we had to do our best for them. And they kept us busy plus all the other things you try and keep busy with. ... My opinion about some of the people in the [SIDS support] group is they hold on too long. It's as if they are trying, that they stay with that child they've lost for too long instead of perhaps focusing more on their other living children. That might sound tough but.... I'm not like that, as you can see, I try and be matter of fact about things and look at things more logically, I don't know, whatever but um, but I feel that some of them needed to move on a bit more. And it's good that they are involved with the group but you know, if you are putting your efforts into your already dead child, you'd think they should be focusing more on the living as well. ...
>
> I think [oldest daughter] blamed me for [baby] dying, even though we tried to explain it was nobody's fault. But she may have heard me, cos in the first few weeks, I said, "It's my fault, I put him on his side, I put him too far on his side". She may have overheard me saying that to Mum or somebody and that stuck in her brain. I mean, of course you feel guilty at first when your child dies. And a lot of people can't get over that guilt but I mean it didn't take me long to realise that it wasn't my fault. ... I can remember there always seemed to be something in the paper every week for a long time afterwards about cot death and I always felt slightly resentful because there is a lot of misunderstanding out there about cot death. And I would say to [husband], "Oh, you would be pleased to know that oh, babies who are breastfed are less likely to die of cot death!" [sarcastically]. And everything that was in the paper we had done right and our baby still died. And it was quite hard and there are people, a lot of people out there but we never really came across it, who say, "Oh, they must have smoked, their little baby died of cot death, they must be smokers!". There's still quite a bit of that out there and you hear it when you meet other people who have had SIDS babies.

Even over the longer term none of the other participants in the SIDS group reported being able to shed the sense of guilt associated with the death of their baby in quite the same way and it was evident that even this mother remained attuned and sensitive to the content of media releases and public opinion about the causes of SIDS. However, all six mothers who were classified as Resolved tended to display this same matter-of-fact, primarily action-oriented approach and clearly were not overwhelmed by ongoing feelings of guilt. They continued to monitor news releases regarding any new theory of causation so the search for a cause could not be described as "suspended" yet at the same time this was not a preoccupying focus for them. Whilst they commented upon aspects of their parenting that may have contributed to the death, they had accepted that these practices were not out of the ordinary at the time and that the reason for why *their* baby had stopped breathing remained unknown. As Participant #6 commented seven years after the loss of her nine-month-old baby son to SIDS:

> P#6 [Name] was a beautiful, perfect baby and there's no reason why he could have died. In my mind it was ridiculous, stupid. ... You go through a real angry stage with theories of cot death and that, you know? I just, you know, some people are just ignorant, it's just absolute bull, you know? It is, from where we stand, it's utter rubbish, just utter rubbish. [Name] was a major kid, he was. No, he wasn't your typical cot death baby at all. That's always made me quite angry because I know that cot death parents get grouped into neglect and you know, that we haven't done this right and we've smoked and we've suffocated them and all this. ... I don't know what happened to him, you know? I don't know. And it will always be something I'll just think, "Oh, whatever." I just don't know what happened to him. You know, things are put back on you, but we have absolutely no regrets with the way we cared for him and I think that's probably why we've stayed together.

The coping style adopted by this group of women was tinged with avoidance, a quality suggestive of an underpinning dismissing-avoidant attachment style for which suppression is an effective strategy, both in the short and long term (Fraley & Shaver, 1999). For most, this was also evident in a distancing of their relationship with the subsequent child, reflected in the disengaged-suppressed ranking (three cases) and balanced-restricted ranking (two cases) allocated for the WMCI. Indeed, it appeared that a level of avoidance in these circumstances was adaptive in that it allowed the women to maximise what Solomon and George (1996) described as a mother's evolutionarily adaptive goals other than those invested in a single child. Their conscious decision not to dwell constantly on the loss experience appeared to give them a measure of control in the situation to enable them to meet their competing needs to function as in their roles as spouse, worker, and mother to other children. Whilst there were indications that the emotional impact was minimised, this was not to the extent of preventing them from being able to recall and describe the loss event without apparent major lapses in the monitoring of discourse or reasoning that would indicate mental disorganisation. Furthermore, they were able to comment reflectively on their own grieving and parenting experiences, and to point to ways in which the loss experience had led to personal growth and change within themselves. As Participant #16 later spontaneously stated:

> P#16 You are certainly not the same person after going through something like that, I think. I wouldn't say it makes you a better person but I'm much more sensitive now towards other people's grief ... because I've been through that... and I know how they feel".

Unresolved Cases in the SIDS Group

Emotionally overwhelmed (preoccupied/suppressed or neutralising).

Participants #3, #9, #15, and #19 also used suppression of emotion as a coping strategy but were classified as Unresolved on the RTDCS because of indications they were still consumed with feelings of guilt and self-blame. As shown in the excerpts below, Participants #3, #9, and #15 consciously held the full expression of their grief in abeyance because of their awareness that any attempt to face the pain of the loss would be overwhelming and would threaten their ability to hold the family together. Their accounts were given a subcategory classification of "emotionally overwhelmed" on the RTDCS because suppression was only partially effective and at odds with indicators of an otherwise preoccupied attachment style. This is seemingly the same dynamic that has been reported in laboratory studies where suppression of attachment-related feelings has been shown to be maladaptive in preoccupied adults, leading to a "rebound" or resurgence of emotions after attempts to suppress them failed (Fraley & Shaver, 1999, p. 747).

> P#3 And (husband) would cry a lot but I like tried to, not pretend it didn't happen but tried to carry on to keep things normal. Because, like I didn't know how to grieve and I still really don't - it's like if you give me the handbook and I can read it then I can do like what it says then I can carry on, you know? When I went to [SIDS group counselling] I said to [counsellors] I feel like I'm stuck. I'm kind of moving on but the world's carrying on but it's like I'm stuck back there. Cos, it's like... I remember standing at the kitchen sink and I felt this terrible pain, you know, like my brain was saying, "He's dead! He's actually dead." And I felt this terrible pain, I thought, "Oh my God!" You know I didn't know what to do with it, because it's a pain that I hadn't... And then it like went away and I said to myself in my head, "It's gone away. How long am I going to feel like this for?" And something came back in my head and said, "As long as it takes" and like, I've never felt that pain again and... Like my doctor said to me the other day I really need to go to a counsellor but it's like I've tried to go around it and carry on, you know what I mean? I know he's dead, but I haven't felt the pain of his loss. It's like this big wall of pain that I've got to go through. People say "Why don't you have a good cry?" and I say, "I'm scared that if I have a good cry I'm going to lose something." Then I tell myself that I've already lost it but what more have I got to lose? But it's still like a block there, I still can't cry that pain, you know? It's like it's still down there and I have it where what I call a safe place where I can go and

> visit him at the cemetery and not shed one tear, and just like, dunno, shut myself off from that pain. And I still haven't cried that pain. I haven't cried that pain... And I mean, it's coming up four years this May.

> P#9 [9 years after the death of her daughter] I'm suppose I'm caring and that. But you get to the stage where, I don't know, where something about grief makes you sort of lose you, don't you? Cos you've always got to be together. It's like when [baby] died I had to keep it together, keep [older son] on a roll and you had to hold people together. There's no use falling apart. ... You sort of lose you. You forget what you're like. ... You get to the stage where you don't get umm, hardened, you get to the stage where you just do it so well, you know? Just go on so well, cope so well and it's just a front.

> P#15 [5 years post-loss] I still haven't got over it. I still haven't grieved properly but umm, I think if I really did want to try to get over my grief I just don't think I could handle it. Basically I put it away, which is probably not a good thing. But I mean one day when my kids are old enough and don't need me as much maybe I'll have another try then, you know? But right now, I've got kids that need me, and I think that if I really started to get into it and tried to get it all out of my system, I think I'd just get too far into depression.

In contrast, Participant #19 was given a subcategory of "neutralising" as she appeared to have uncoupled emotion from the loss experience and unconsciously minimised the impact of the event. This mother initially denied any detailed memory of the event but her recall of the ideographic details of the loss emerged as the interview progressed. She related the events of the day of the death in some detail and went on to describe how as a traumatised teenager she had adopted a chaotic lifestyle for some time after the loss before meeting her present partner and settling down to begin a new family. At no point did she refer to the SIDS baby by name, either in the formal interview or in the preliminary conversation beforehand and as can be seen in the excerpt below, she substituted the phrase "Da-di-da" when speaking of the dead child. Repeated use of a nonsense phrase like this is a narrative feature coded as a violation of the maxim of manner, a characteristic of incoherent discourse indicative of dissociation of the loss from present experience (Main, 1995; Pianta et al., 1996).

> P#19 [8 years post-loss] And I don't think about him a lot. I mean some days I do a little, but I certainly don't think about him every day. And that's where I think I'm different to most. I sort of hear people say, you know, "I think about them every day and da-di-da-di-da" and do these little rituals and celebrate birthdays and things but I just umm, yeah, I just have a totally different way of dealing with things. So for that reason I've never got

> involved in anything. I mean, who knows? There might be other people out there like me; I don't know. So you know, life carries on, sort of thing. ... I mean it was sad but I honestly couldn't tell you what date he died on or anything like that because to me that's not important. My sister's friend whose baby died, they celebrate, well not celebrate but you know? Well, that's great if that's the way they want to do it but to me I think that's bloody morbid. And the only reason I remember his birthday really is that because a friend of mine... I don't wake up on the day and think, "This is the day the Da-di-da was born and da-di-da," you know? When I hear [date] I am always aware but whether I'd even remember that if it hadn't been my friend's birthday, I don't know. Cos those things just aren't important to me.

A dissociative quality also underpinned this mother's parenting of the subsequent child and was further evidenced in scores in the low clinical range for the VCS, PPS and ACTLT, and in her emphatic denial of any tendency toward overprotectiveness, as shown in the following excerpt:

> P#19 Oh, God, no! I'm, look I would be the slackest mother in New Zealand, I reckon. I'd be... It's amazing, it is absolutely a miracle that he hasn't had serious accidents. It really is, because I'm just... People'll say, "Oh, the baby's down the road" or [laugh]. I mean I'm terrible. I do things and I do it all the time, I do things like I'll change the baby on the washing machine and rush off to get a flannel and you know the [electric kettle] cord's over the bench and I mean honestly, I'm shocking. But having said that, we've been here, like we came here in February and I've only had him at the doctor once and that was just for a rash. I'm very fortunate but oh, look, no, I'm not overprotective at all, not at all, I'm probably the other extreme. Yeah.

Both Participants #3 and #19 had experienced an initial sense of relief when their baby had died and this had aggravated the already intense guilt they felt because of their belief that their parenting inadequacies had made the death of the baby inevitable. At the time Participant #19 was a teenaged parent recently separated from an abusive partner, and the death of the baby was associated with a sense of closure to that episode of her life. Participant #3 was a married woman in her mid-thirties who had had two sons just over a year apart and was finding it a strain to care for both infants, particularly when her husband was working evening shifts and was away from home six evenings out of seven.

> P#3 I feel I followed a recipe to his death. I put him on his tummy, cos he was the happiest settled there and I just think, "Why didn't I spend a little more time to make him settle on his back instead of just being lazy - oh well, he's happy on his stomach, I'll leave him on his tummy". And I realise I overheated him cos it was in winter and he slept in the lounge with the heater on half. Then I'd have all these clothes on him and all these

> blankets on him and yeah, overheating is another cause of SIDS. And also putting a bumper pad in around where their, you know, by their baby's head cos he was in a cane one [basinette] and he would scratch his little hands on the cane so I put a bumper pad and of course that cuts down the air circulation in around their face. And I, I'd done all those sort of things within the week of him dying, you know? It's like, oh wow! Cos, I do, I have a lot of guilt, you know, every mother does when you lose your child. And I just think well, I just have to carry that till I die, you know? I mean it's just part of being a mother, you feel guilty that your child's died, you know? I was scared when I found out that he was dead that because he was in the lounge and we had the door closed that he might have cried and cried and cried and cried for hours, that he'd like died from crying. That's all I was worried about, that he might have died and I didn't hear him calling out for me. And you see, I've been told that even just parents sleeping in the same room making noises like the father snoring or somebody coughing and that, keeps their little mind.... Not, like, I mean it would have been so peaceful in the lounge he wouldn't have had anything disturbing him. He wouldn't hear his father coughing or you know, movement of the parents, which I think, maybe he should of been in our room to you know, keep his little brain, whatever, going.

> P#19 Well, I honestly, as much as people say, "It's not your fault, don't blame yourself, don't blame yourself,' I had all the contributing factors. Statistically he was doomed. You know, I smoked during the pregnancy, he was a boy, I was a single mother, he was bottle-fed and he slept on his stomach. And not only that but probably one of the hardest things that I will always have to live with is knowing that he wasn't in the room with me. I came from a very strict family where babies as soon as they are born are put in a room and they cried and that's how you dealt with it. So he was in a back room and so, I always, and I always will have that feeling of him being cold, you know, I always have this idea that it was the cold air that killed him, you know what I mean? I just remember I continuously asked them, "Was he warm? Was he warm?" And they said that he was, cos I always put him to bed in a little bonnet and mittens and he had a wincyette gown and a woolly singlet and a woolly jumper and things and it was just.... So you know, statistically I think it wasn't surprising.

The guilt experienced by Participant #15 was partly because of the fact that the baby she had lost to SIDS was conceived when the mother was taking a course of Roacutaine, a medication prescribed to treat acne and known to cause foetal abnormalities. She had continued with the pregnancy despite strong pressure from her doctor to abort the foetus. Contrary to expectations, the baby was born an apparently normal, healthy little girl but as described above, was found dead in her cot by her two-year-old brother six months later.

Yet another particularly tragic situation was described by Participant #9 whose extreme sense of guilt arose from the fact she felt had been blamed when their baby daughter had died of SIDS when their apnoea monitor was broken. Her husband at the time had refused to allow her to get it fixed because he did not accept that the baby was at risk and believed the monitor was ruling their lives. As the mother recounted:

> P#9 Umm, well she, she wasn't so much on a monitor as I was on a monitor! And umm, my ex had... Oh, the monitor broke and I wanted to get another one and my ex said, "Oh, no. She's fine. She doesn't need to be on a monitor, it's you that's on the monitor and rah-rah-rah..." And umm, on the third night that it had been broken she had an apnoea and died. And of course that ended the relationship because if I hadn't been in a relationship where I was bullied like that she wouldn't have been off the monitor. She would have been on it until I was ready to take it off. So, of course the first couple of nights I didn't sleep at all, and um, on the third night I slept right through, just probably exhaustion. I slept right through and I woke up at six o'clock and I needed to feed her and when I went to get her up I just knew she was dead. ... I remember turning the light on and saying to my ex that she was dead. And he just laughed cos he didn't believe me and I had to actually say, you know, "Help me!" ... Oh yeah, well, he just blamed me, obviously. Yeah, I suppose it was easier for him to just blame me. He felt no guilt, he just blamed me. Yeah, and yet like the worst of it was being given the blame. I mean I just couldn't handle that.

This couple had separated soon after the death of the baby and the subsequent child was conceived during a brief period of reconciliation. The mother reported ongoing relationship difficulties with the child, describing an absence of affection and a reluctance to provide even basic physical care for him whilst at the same time perceiving him as vulnerable. This was reflected in the rating of disengaged-suppressed on the WMCI and in scores in the normal range on the VCS and ACTLT but again in the low clinical range for the PPS.

Emotionally overwhelmed (feelings-oriented/preoccupied).

The remaining ten interview transcripts classified as Unresolved were more "feelings-oriented" (though this was a valid subcategory only for Resolved cases on the RTDCS). Their accounts again indicated that the mothers remained emotionally overwhelmed by the loss experience; that they were continuing to experience the crisis in the present; and that their identity was still primarily defined by the trauma of the loss. However, access to and expression of the emotion associated with the event was an important part of the ongoing grieving for these women and memories of the baby were deliberately kept to the fore as part of the movement towards resolution. Many took comfort in creating tangible memories of the baby's life through such media as videotapes or photograph albums, needlework, a special poem about the baby's death displayed on the wall, and collections of special baby items such as clothing, bedding or toys, for example:

> P#11 We have photos everywhere and my father made a beautiful chest and we put just a few favourite things that he had in it. [SIDS baby] didn't have a lot things in his life but and I did a cross stitch for all his favourite things that I only just finished last year and the girls watched me do that off and on as I felt like it, you know, over three years.

Long-term membership of SIDS support groups provided a public forum for some, where the story of the baby's death could be told and re-told (albeit with a somewhat rehearsed style), actively keeping the memory of the baby alive:

> #2 [12 years post-loss] I talk about it all the time - it's not something hush-hush - I think that would make it harder to deal with. I published his story [in national newspaper] cos I'm part of SIDS [region], I'm very much part of [local SIDS group]. And I've published a story in our newsletter, cos I write the newsletter, you see. So, I put it out there all the time and that makes him real and part of my life.

Others spoke of a lack of closure to the event, evidenced in the unfinished story of the baby's life and death:

> #7 I sat down to finish her story and her photo album wasn't finished, her video things hadn't been finished. I have never ever been able to bring myself to put the end on the story. The words "The End", you know, they never, ever come.
>
> #12 I wrote a story about it and it was in one of the cot death magazines. It always reminded me of reading a book that the last page is missing. That's the only way that I could describe it.

As illustrated in the excerpts from Participants #1, #2, #8 and #12 below, a striking feature of these Unresolved cases was again what Miles and Demi (1983-84) had called death causation and cultural role guilt, shown in feelings of guilt and failure based on the belief that their parenting deficits had resulted in the death of the baby. For Participants #1 and #8 death causation guilt was accentuated by the belief that they should have overridden medical opinion, one for a lack of assertiveness with regard to her non-specific concerns about the baby's health that had been dismissed by doctors, and the other regarding the necessity for vaccinations. In addition, Participants #2 and #8 also experienced moral guilt, an irrational belief that the baby's death was punishment for wrongdoing, reinforced for Participant #2 by her completion of the questionnaire for the NZCDS shortly after the death:

> P#1 So, I felt, feel lots of guilt, lots of umm, questions about your ability to be a mother. I felt that that I really was inadequate and that how come I had been able to do it twice before and what was wrong this time. I didn't do it right this time. Like, why didn't I fight the doctors harder? Why didn't I push them further? Why didn't I say something, to make them do this and do that? Why didn't I take her to a private hospital? Or you know, why didn't I fight harder for her life too? That was, that was really hard. Yeah, I just felt lost, felt like I should have done more.....
>
> P#2 I thought that I must have done something pretty bad to lose my baby you know? ... And then when I got the cot death research papers, ohh, that was horrible, so horrible. And that just made me feel, it just made me feel I killed my baby. Cos it was all these things; "Did your baby sweat? Did your baby do this? Did your baby do that?" And I'm like, "Yes, yes, yes!" ... And I think that just confirmed in my brain that it was all my fault. It was horrible. Yeah, I think I'd have to say in my mind that caused me to lose it at the time. Cos the questions were really, really, really umm, things like, Did you smoke? Did your baby sweat? And quite often I would overheat him cos I was paranoid of him getting cold cos he was so tiny and it was winter. Did he sleep on his tummy? Did he have a sheepskin? Umm and all those things, and it was yes, yes, yes, yes, yes!
>
> P#8 I know he was fed properly. I know that he was kept warm and dry. I know my conscience is clear in a lot of ways but like the immunisations I just, I blame them. But also there's that niggling at me that I failed. ... You know, if I hadn't had the vaccinations done. It was my choice. I took him. I held him while they did it. You know? He didn't like it, he told me outright when it was done, he was not very impressed with me at all. ... I don't know how, but I failed. I failed as a mother, I failed him, you know? I mean he should never have been born, that's the way I look at it, I was just being punished. I was being punished because I failed. And like it sounds stupid, but that's the thought in my head.
>
> P#12 When we went to bed that night and I heard [SIDS baby, male twin] crying, grizzling, he wasn't bawling, he was just grizzling, now if I'd only got up to see what was wrong with him. Was he under the blankets and couldn't get out? Umm, yeah, all these things run through your head, did I do the mouth-to-mouth right? Umm, did I wait too long before ringing up? I go through all these guilt feelings. Even though the doctor told me that he died round about two or three o'clock in the morning, you still, yeah, I mean I'm always going to have that, "If I'd only got up and checked on him to see that he was all right...." But yeah, I'm always going to have that there. There's nothing anyone or can say or do to make me feel better about it.

Replacement Themes

Idealisation of the dead baby.

In keeping with the findings by Powell (1995) in a comparable-sized Irish sample, idealisation of the dead baby by the mother was rare in the New Zealand SIDS group of this study. In many interviews, the description of the SIDS baby was framed largely around statements about the baby's health status, conveying the mother's indignation that the baby had died despite the fact he or she had been pronounced to be a "perfectly normal, healthy infant" both by the family doctor before death and later in the post-mortem report. Several mothers (#1, #2, #6, #10, #12, and #13) described the baby as "windy" and "unsettled" (sometimes as a justification for why they had put the baby to bed in the prone sleeping position) and Participant #1 had expressed her vague concerns that "something was not right" to the doctor on several occasions. However, there was nothing in their accounts to indicate that the baby had been perceived as exceptional in other way. The majority were described as "easy" babies and were generally portrayed in positive terms, some more effusively than others, for example: "She was a perfect healthy little girl. She had a wonderful impish personality, this one" (P#7); "She was just beautiful and happy, and she was just a beamer all the time [in contrast to the serious "nothingness" of her older brother] (P#15); and, in a similar description to that given of the subsequent child, "She was beautiful, she was so cruisy, she was a wonderful child, very easy-going, very happy, content" (P#4).

Two mothers (#8 and #11) provided distinctly more detailed descriptions of the dead infant. As can be seen in the extracts below, both women appeared to be idealising the SIDS baby but the description by Participant #8 was accompanied by more direct indications of replacement pathology:

> P#11 He was really my easiest baby I had. I mean I never find the first few months of any newborn baby wonderfully easy, but he was, he was my biggest baby, the two [older] girls have been quite small. He came out at nearly 9lb and he continued to feed and feed and I was fully breast-feeding him and he grew just hugely. And he was, we always thought he seemed a lot older than his years, whether that's just because we look back and he was only here for a short while, I don't know, you know? But he always, he was very much a part of the family, very alert, he sat up at the table in his car seat arrangement and he was just very interactive and he was smiling well and truly at six weeks and very alert. ... [Name] was my first boy who I thought was just <u>fantastic</u>. He was just, you know, the most <u>wonderful</u> little baby and I was enjoying him so much. And then he was taken away [at 2.5 months] and although [subsequent child] is special, I suppose, in that he was

> the child that was never going to be born, you know, but he's never been a replacement for me, just, you know?

> P#8 He was just the most easy baby. [Older sister] was a colicky baby, at three months old she roared for twelve hours a day. You could set a watch by her, all day, all night, but he was placid, he was so content, all you ever worried about was that his stomach was full and his nappies were clean. A real male, and he was just a dream. He was my, what I would call my ideal baby. He did scream occasionally, I'm not making him out to be perfect, um but he was everything his sister wasn't as a baby. ... He was just a nice kid, he was, he was just lovely and like, he had a real habit of, you would be lying on the couch looking at the TV and he would stick his bum in the air and he would crouch up here [on mother's chest] and he would be sound asleep, all curled up. And that was just something he did. And you know, and that's what he did before he died. Like he had his ten hours sleep but then he was the ideal. Someone once said to me, and this was a friend of mine who has lost three children through car accidents, she said to me, "Children are only lent" and maybe [SIDS baby] was lent to me to show me how wonderful babies can be. ...
> *Do you have a story about him* [subsequent child, aged 47 months], *one that you have told to family or friends? A favourite story, maybe?*
> No. It was [SIDS baby, aged 3 months at time of death] who had all the funny stories, especially bedtime stories.

The decision to have another child.

In the majority of cases (12 of the 20) the decision to have another child was planned. Another three participants left it to chance (#4, #7, and #18), and for a further five mothers (#2, #5, #6, #8, #9, and #18) the subsequent pregnancy was unplanned but welcomed by all except Participants #8 and #9. Timing between the SIDS death and subsequent pregnancy varied, from immediate conception to 10 years later. Of the 20 mothers in the sample, 50% conceived again within six months of the loss, three conceived between eight and 18 months later, three at two years post-loss, and the remaining four waited more than five years. Rates of infertility and spontaneous abortion in this sample did not approximate the 35% and 30% respectively found by Mandell and Wolfe (1975) in an earlier study of subsequent pregnancies after SIDS deaths. Two mothers (10%) in the present study reported periods of infertility of one to three years in duration, and another two experienced early miscarriages before becoming pregnant with the subsequent child.

In the same pattern as reported by D. L. Davis et al. (1989) in women following perinatal loss, most commented that they had been unreceptive to advice by friends, family and health professionals regarding the optimal timing for subsequent pregnancies. They clearly resented the fact that people presumed they had the right to offer unsolicited opinions on the matter and took offence whether the recommendations were to have another child soon as if the dead child was a replaceable and forgettable commodity, or to delay having another child until the loss was resolved. As one mother stated:

> P#18 People will say, "Oh, you should wait at least twelve months," or "You should wait until you stop grieving." Like that ever happens! [sarcastically]. And there were other people who just sort of said, "Get on and have another one straightaway." I mean at the end of the day you just sort of try to switch off to what other people say but I'm not very good at doing that...

Well-meaning advice by others was construed as an intrusion upon mothers' right to make their own decision, based on criteria such as their need to have another child to cope with the pain of the loss, parental age, birth order of the dead child, the quality of the marital relationship, and the age gap between surviving and subsequent children. However, of the mothers who conceived within six months of the loss, Participants #6, #10 and #11 all commented that in retrospect they realised it was not a good thing to have done so.

Sex of the subsequent child.

One very strong theme that emerged in the stories of the pregnancy with the subsequent child was the importance to the mother of the sex of the child. This phenomenon has received relatively little attention elsewhere in the SIDS literature. Johnson (1984-85) had commented that some parents in her small mixed-loss sample had wanted immediate replacement with a baby of the same sex; D. L. Davis (1991) warned of the possible same reaction in a book of advice for bereaved parents, and two single case studies have described similar responses (Beard, 1991; Drotar & Irvin, 1979). In the present study, three mothers (#7, #8, and #20) had lost male infants and wanted a female child next time round to differentiate the SIDS baby clearly from the subsequent child, and to lower the statistical risk of SIDS. Participants #7 and #20 were informed that the child was male during routine ultrasound scans and appreciated having time to work through their disappointment and to adjust to the situation before the birth of the baby. However, Participant #8 experienced a more acute reaction with initial feelings of rejection of the child:

> P#8 [SIDS baby was male, subsequent child was male] And I rejected him from birth. I just wanted him gone and it didn't help that he looked exactly like his brother, blonde hair, fair skin, blue eyes, he was just a bigger version of [SIDS baby], he was nearer what he was at birth. And like, I couldn't handle that, if he had been a little girl, maybe it would have been different but it was a boy and I wanted nothing to do with him. You know, and also statistically boys are the weaker sex, from birth to the end...

Whilst most denied it was a replacement strategy, the remaining seventeen mothers experienced a strong desire to have a child that was the same sex as the one that had died, stating that they wanted to have what they had before the loss. When the child was the same sex their relief was evident, as seen in the typical comments below:

> P#2 I was pleased he was a boy because of [male SIDS baby], not that I thought he was replacing [SIDS baby], just that I needed another son, I guess. ...I was very pleased he was a boy."
>
> P#4 I was rapt. I was really happy. I really wanted a little girl, not to take [daughter's] place, no way that could ever happen and we knew that. But having lost a little girl we just really, really wanted another girl. We had a girl so we were ecstatic.
>
> P#11 I was thrilled. ... I felt like we were really privileged to be having another boy.
>
> P#12 I was hoping in the back of my mind that he was going to be another boy. I could stare at him for hours, I suppose, because I sit and wonder that I have another son. Yeah, I think because [subsequent child] is a boy and I lost a boy.
>
> P#13 I wasn't happy until I had another girl so (laughs). ... I didn't really think much about girls' names because I was determined that I was going to have a boy, like I talked myself into the fact that it was a boy until she was born so I wouldn't be disappointed.
>
> P#16 We were pretty sure it was a boy and if I was honest, I wanted a boy. I was really pleased it was boy. Maybe the fact that he's a wee boy and [SIDS baby] was a wee boy, there's something just makes it a little bit more special.

Mothers whose child was not the same sex as the dead baby (Participants #1, #3, #6, #9, and #15) all reported feelings of disappointment at the news. They were aware that this was a reaction that others would find unacceptable and difficult to comprehend so to deal with the situation some kept their feelings private or spoke about the child's sex as if in jest:

P#1 I felt a really strong need to know the sex of my child and had a scan while I was pregnant. I really, really wanted a little girl. I didn't want to be disappointed at the birth. If there was any disappointment to have, then I wanted it early on in my pregnancy. So, when I found out that I was having a boy - I had a friend there and she was going, "It's a boy!" It's a boy!" And I'm going, "Oh no, I knew it would be!" When he was born, I didn't want to look at him and think, "I wish you had been a girl". But I did wish it was a girl!

P#3 And of course I wanted another little boy. To have what I had. Even though I'd still lost one at least if I had another boy I had still had two boys. That's what I had before. ... Yeah, about two weeks before I had her I had to have a scan. And umm, I asked them could they tell me what it was and they said it was a girl, 90% it was a girl. And I remember walking out after having it and sort of looked up at the sky and said, "Yeah, you won't give me what I want, will you? You just have to give me, you know, something that I don't want, I want another boy, not a girl!"

P#6 I would have liked to have had a boy, I would of. Everyone was really excited and happy, nobody else cared what the sex was. I think it was just me personally who wanted a boy.

P#9 I wanted him so much to be a girl and I found out that he was a boy at six months and I was real upset. Like, you know, people would say, "Oh, you know, you can't be upset as long as he's healthy." But I was that upset. I had to sit in the car for about twenty minutes before I could drive, to get my act together. And when I went into labour, it was horrible, I hated the fact he was a boy, I wanted a little girl. And if I was going to be going through all this again I wanted it to be a girl. I didn't want a boy. Yeah, I hated it, absolutely hated it that he was a boy. And I even made a joke that if I'd been in the States I'd have swapped him - you know what they're like, "This is not my baby!" - you hear all those stories, that I had a boy baby and I'd swapped it for a girl baby. Yeah and people would say to me, "Oh, you don't mean it!" And I would say, "I do! I do mean it." And of course people just think, "Oh, you're joking". But I meant it, you know?

P#15 I think it was at about four months we had a scan and it said it was a boy and we were pretty disappointed. I suppose when you lose a certain sex I think the next time you have another child, I think you expect it to be that sex that you lost, for some reason it just helps. ... I realise now that I'm probably not going to get a daughter or it might be a long time before we manage to get one, umm, that I can't replace her, not that I'm trying to, or that I can't replace the pain, or the emptiness with, you know, with just the boys it just doesn't work. I need a daughter to help me heal, but it's not going to happen. So I think that helps the pain to keep going.

Names of the subsequent child.

Another intriguing aspect of the replacement dynamics was the sharing of names between the dead baby and the subsequent child. This appeared to be a variation of the practice reported elsewhere of naming the subsequent child with a name that started with the same letter as the dead baby's name (Johnson, 1984-85). In several families (#6, #8, #11, #12, #13, #16, #17, #18) one of the SIDS baby's names was also given to the subsequent child as a middle name and Participant #20 had decided only at the last minute not to do the same thing. In cases where the sex of the two children differed the name was altered accordingly (e.g., Daniel would become Danielle or vice versa). Mothers were aware of the fact that it was generally thought to be inadvisable to use the same name for a subsequent child and tended to be defensive about the shared middle names, most denying they were a replacement strategy. Participant #8 was again the exception, defiantly stating:

> P#8 But he still reminds me of his brother. I think he will always remind me of his brother because he's going to live his brother's life for me. Which is wrong and I broke all rules when I named him [first name, then shared middle name]. I wanted part of [SIDS baby] to go on, I couldn't give him [SIDS baby's first name], cos [SIDS baby]'s gone. But [shared middle name]'s a beautiful name and its meaning is "strength" and he was going to need some strength to get through this life. ... I don't believe in naming children after people at all but it was just very symbolic and it just felt right at the time and it still feels right.

Idealisation of the subsequent child.

Idealisation of the subsequent child was not a feature of any of the interview transcripts. Instead, the primary emphasis of most early descriptions of the subsequent child was the child's vulnerable health status and need to survive the risky period of infancy, with attention becoming more focussed on the personality of the child in the second and third years of life. When speaking about the child, most mothers framed their comments in terms of the child's resilience and "specialness", and the benefits to themselves of having had the subsequent child, for example:

> P#1 He was really robust. ... I can remember thinking that umm, I always felt like he was here to stay, from the minute I held him he was mine and that he was here to stay. I didn't have the feeling that I might have to part with this one. ... What's unique about him? Just that he's probably, umm how much he's given us without knowing. You know, he's really special. He really has given us much more than what my older children have. And I love them all dearly but he has, he has been able to give me back my faith in myself and my ability to be a parent, a good parent.

> P#2 I fell pregnant with [subsequent child] and I stopped using drugs and kept him. I knew, I knew down in my heart I was keeping him, that there was something different about him.

> P#4 I mean, having all the children had been very special but having lost [SIDS baby] made her even more special. And I'd definitely recommend people having another one. I don't think, I really do think actually, that if we hadn't have had another child, I think I would have ended up being really depressed and on drugs.

Identity as a subsequent child.

Despite the importance of the sex and names of the subsequent child for the mothers in this sample, it appeared that replacement dynamics did not extend to blurring of the identities of the SIDS baby and subsequent child. When asked in the structured section of the WMCI who the child reminded them of, 16 mothers responded by stating quite definitely that the subsequent did not remind them of the SIDS in either looks or personality, and were very much their own little person. Some of these replies may well have been socially desirable responses given the known purpose of the study. Those who indicated that the dead and subsequent children physically resembled each other (#7, #8, #9, #13, and #15) also stressed that they saw the two as individuals, not as merged identities. Even Participant #8 who stated openly that the subsequent child was going to live the idealised dead child's life for her still had the two children clearly distinguished in her mind and was aware of the dangers of confusing them.

What was very clear, however, was that for these women the subsequent child's very existence was construed as an integral part of the loss experience. Indeed, the child's identity was pre-determined as a "subsequent child". As such, he or she was not necessarily a replacement or even a "linking object" with all the pathological implications described by Volkan (1981), but by definition existed because another child in the family had died. In the role of subsequent child he or she helped to fill the gap left in the family system and represented an opportunity for mothers to reaffirm their parenting abilities. At the same time the child served as a constant reminder of the lost sibling and epitomised the vulnerability of infancy and the risk of recurrence of the loss. Indeed, it appeared that the perceived vulnerability of the child and the process of anticipatory grief had a far greater impact on the caregiving system than did issues to with misplaced identity.

Disturbance to Caregiving System

It was evident from the interview transcripts that both the post traumatic effects of the SIDS loss and the possibility (albeit remote) of an unpreventable recurrence of the event impacted on mothers' representations of themselves as effective caregivers and limited their ability to respond sensitively to the child's developmental needs. In particular, uncertainty as to whether the subsequent child would survive infancy affected the depth of engagement with the child, perceptions of the child as difficult, mothers' ability to project into the future to picture the child as an adolescent or adult, and the ways in which they managed the balance between the child's need for dependence and nurturance versus overprotection.

As has been shown, 70% of the interview transcripts were given a rating on the WMCI that was indicative of a significant degree of emotional aloofness and distancing from the child, (eleven (55%) rated as disengaged-suppressed, one (5%) rated as disengaged-impoverished, and another two (10%) as balanced-restricted). In addition, whilst transcript #15 was coded as distorted-distracted because of the mother's preoccupation with the need to have another daughter to heal her grief, her relationship with her three-year-old son was also characterised by a degree of distancing. In each of these cases, the emotional distancing appeared to be a defensive strategy against the possibility of further painful loss rather than simply indifference to the child. Transcripts #2 and #8 were coded as distorted-self-involved because in both cases it seemed the child existed primarily to meet the mothers' own needs for rehabilitation and solace. The remaining three transcripts were all coded as balanced-strained, falling short of the balanced-full classification because of the mothers' elevated levels of anxiety with the child.

Coding the fear for safety scale.

For the purposes of this study, some difficulty emerged with determining the appropriate rating on the fear for safety scale for the WMCI, again a matter of the relative importance of the formal features of the narrative, as opposed to the content. Moderate scores were to be given when the caregiver had some understandable concerns about the child's health and safety, provided these were not pervasive, did not substantially affect caregiving behaviour, and were connected to a rational source such as the death of previous child. Higher scores were to be given for more pervasive and preoccupying concerns that affected the parent's behaviour toward the child but were only allocated when there was no rational reason for the fear.

The question then arose as to how to code transcripts of interviews with mothers in the SIDS group in which the participant displayed both extreme fear for safety and the metacognitive ability to rationally connect such behaviour with its source. On the whole, these women were acutely aware of their own behaviour and its origins in the SIDS death, and many were even able to laugh at themselves at times as they coherently described their increased perceptions of vulnerability, separation difficulties, and overprotective parenting behaviours. At the same time, it was clear that their fears were exaggerated but very real and had a profound effect on the relationship with the subsequent child. Eventually, on the basis of forced choice, most transcripts were awarded scores in the moderate range for the fear for safety scale. However, in this specific context where a rational and understandable fear of loss of the child through death prevailed, scores on the affective scale for thematic anxiety were considered to a more realistic indicator of the nature of the relationship.

Muting of responsiveness to the child.

In line with their disengaged and balanced-restricted ratings on the WMCI, several women spoke of their muted reactions to the newborn subsequent child. As the extracts below illustrate, this pattern appeared to persist. At the time of the interview these mothers showed decreased sensitivity to the child's individual needs, and a poverty of detail in their responses to probes about the child's personality and feelings; features that were reflected in relatively low scores on the scales for richness of perceptions and intensity of involvement.

> P#3 *And how did you feel and react when you saw her face when she was first born?*
> Umm. I remember she was just really quiet. She just, after they'd done all their tests they laid her in the little plastic thing they put her in [perspex cot] and she just lay there looking around, she didn't cry or anything.
>
> P#3 [Part of a sparse description of subsequent child as opposed to very rich detail about older brother who resumed the role of the baby boy in the family after the SIDS death] She's just really, a really cruisy child. Yeah, that's what I tell people. I water and feed her and she's fine. ... No, I don't think that she's unique in any way. She's just another child! Special because I got to keep her.

P#6 *What was your first reaction when you saw her after she was born?* (Long pause). Pretty good. I have to say that I really couldn't be bothered going through labour again, it was something, I'd had enough and everyone else around me was excited and, "When's this baby coming, da-de-da?" I couldn't get excited, I couldn't really be bothered. It was a bit weird, a bit unusual.

P#6 [Again, a greater focus on older child] [Older daughter]'s capable, I'll give her that, though she is awkward. She's bright. And she's very social, a very social little girl. Very. Umm, bright, social, though she can be awkward and very umm, determined as well. I think she'll end up being a leader. And [subsequent child], (long pause), well, it's a bit hard to say with her because like I said, she's stroppy at the moment.

P#10 [Wanted another baby straightaway, to ease the aching feelings of loss, found it "healing" to have another baby] And when he was born, every time I put him to bed, it's like my feelings just shut completely off for him. Yeah, it just about drove me out of my head for a little while, and when he was up I was fine. Sometimes, you know, I would look at him and I would just be so scared that he was going to die. I could hardly even look at him because I just thought that, you know? I said to my doctor, "I don't feel the same about him as I did with [SIDS baby]," you know? It felt different because it was so scary but I felt a bit better after about three months [the age at which SIDS baby died]. ... I found I couldn't say a lot of things to him. I remember I walked in to the bedroom and I started to say, "Oh, you're the most beautiful little baby in the world" and then I couldn't say it. I felt guilty straight away. I couldn't say things like that to him.

P#10 [in response to question about child's personality] Loving, he's very loving. (Long pause). I don't know. (Long pause). He <u>tries</u> to please you. He can be really naughty but he can't but help do the things you tell him not to. I can't think of anything else. (Long pause). I don't feel like I'm being much help to you [interviewer]. I can't really tell you anything. I can't even <u>think</u> what his personality is like.

P#18 [Mother was currently learning some child development theory as part of her Playcentre supervisor training]. Sometimes I wonder whether I was a little bit slower to bond with [subsequent child]. And I don't really like that term, I know that's a sort of a buzz word, but kind of part of you thinks, "Oh well, they will go too, anyway". I do think that she's probably more insecure. And that I was in my grief still so I wasn't right there for her as much. And that's beating myself up a bit too, because all her needs were met but perhaps emotionally I was a little bit distanced as a self-preservation mechanism. ... And I think it's probably a subtlety. I don't think she was neglected or anything but there was that part of me that wasn't a hundred percent with her. You know, it's not that I haven't bonded with her, it's just that there's that little bit there that's sort of held back. ...

> P#18 [Elaborating on child's clinginess identified as child's most problematic behaviour. Mother consciously puts in the effort to show the child attention and affection but this is in the context of controlling her behaviour.] In some situations she's quite clingy and quite insecure. Quite slow to warm up. ... And when she's sick she's a real drama queen. She's dying and lets everyone know around her, she's a real pain. That's when she gets her mother's attention. ... I feel like pushing her away (laugh). Which is not very nice and that's when I have to stop and think, "No. You sit down and you cuddle them. That's really what they want".

Two mothers (#8 and #9) portrayed outright rejection of the subsequent child, and at her own request Participant #9 was referred to a local counselling agency specialising in attachment-related disturbances. Participant #8 displayed some openness to change for the better over time but her comments were still framed in terms of her own needs rather than the needs of the child.

> P#8 [after feelings of rejection of the baby throughout pregnancy and at birth] After a couple of days I accepted him, well not accepted him, the minute I sort of like held him, and I fed him, it was when I fed him I started to accept him. ... He ended up in hospital at 21 days of age and the following day was his brother's first anniversary and I didn't know if we were burying him too! Because he got a very bad respiratory infection and I was sitting there with this kid, and at the back of the hospital is the cemetery where [SIDS baby] is. And I just didn't know what was going to happen, I just didn't know, I just thought it was all going to repeat, totally. ... I really accepted him that night when I didn't know whether I was burying him, to be honest - that was the night it all changed for me. Like there's lots of his babyhood, I missed out on, I missed out on enjoying it, I hated it because he was sick and because I was, I was angry at myself because I rejected him. ... *How would you describe your relationship with him now?*
> He's full of hope and potential. Well, if you like, compare this time to two years ago, there's been a lot of hope. A lot of love, you know, the tables are getting turned so dramatically and also I think I appreciate him more. I've appreciated him for a while but I appreciate him a lot more than I did on his birth date.

> P#9 Well, I loved him and all that when I first saw him. But I still, you know, yeah, he was a boy. I thought he was very lovely but umm, I had to make myself respond to him. It's hard to explain it. I had to think to myself that, you know, he was my baby and he was there and he was mine. I had to sort of encourage myself to feel like that. ... We didn't bond. Like I breastfed and stuff like that but I never felt close to him. I think I felt more love for our cat than I did for [child]! But that's just self-protection too. "If I don't get too close to you then I won't get too upset when you die" sort of thing. I couldn't go and get him up, and even though he was on a monitor I used to think, "Yeah, you'll be dead soon, anyway". And umm, so I never got very close to him, and I actually don't really feel that close to him now.

> We argue a lot and he's only three and a half. And he rebels against me with everything. ...
>
> P#9 I think it's getting a problem now. I don't think we have ever really been close. I mean I do love him but I don't feel very warm towards him, does that explain it? Umm, I don't have the urge to go in and give him a cuddle and a kiss. I do go in and give him cuddles and kisses goodnight but it's because I'll be doing something and I'll think, "Oh, I'll have to go and give [him] a kiss goodnight." It should be that I want to, not that I'd better. ... You know at three and a half they are becoming their own little person but like I know the reason our relationship is like it is, is that I had all those grief issues. But at the same stage, he's over the cot death stage, but at the same time, you don't want to step over that mark of being totally engrossed in them because they could still get run over or they could still have anything happen to them at three and a half (laugh). ... And I think that's why it would be easier to deal with a second death cos you'd already be in that grief mode when it happens. And that's exactly what you do with your next child, isn't it? You're always in that mode, that mindset that it will happen.

Fear for safety: Denial of risk.

All but five mothers in the SIDS group admitted to overwhelming feelings of anxiety and overprotective behaviours with the subsequent child. Those who denied overprotective tendencies again tended to be those who used suppression of grief as a coping style. All five dismissed any suggestion that they might overreact to illnesses in the child and their comments were confined to the possibility of accidents or SIDS. A tenuous sense of control over the situation was maintained by Participants #3 and #15 by focussing on aspects of the differences between this child and the dead one. Participants #9, #18, and #19 adopted an underprotective caregiving style, their sense of helplessness to protect the child seemingly displayed in behaviours that were almost inviting of external injury to the child, in a similar way to that described by Hughes and McGauley (1997) in a case study of a dysfunctional mother-infant dyad following a previous stillbirth.

Participant #19 acknowledged that the birth of the subsequent child was a second chance to show that she could nurture and care for a baby boy, but as has been described, depicted herself as the slackest mother in the country, careless with everyday safety practices in the home, and this was reflected in scores in the low clinical range for the VCS, PPS and ACTLT. Participant #9, who scored in the normal range for the VCS but in the low clinical range for the PPS, went to great pains to describe her heightened perceptions of the child's vulnerability and the protective distancing she felt from the subsequent child, then paradoxically went on to tell of deliberately exposing both her children to high-risk activities to make sure they did not miss out on life's opportunities:

> P#9 I don't think I'm overprotective, not at all. I think I'm the opposite actually. Cos what say something else happens? At least he would have done all this stuff. If you've been overprotective and something does happen, they could get run over by a car, and you've deprived them of all that stuff that a normal three year old could have been doing. You know? ... You've ripped them off of all the living they could be doing just because you're afraid. So I get them to do as much as they can.

Participant #18 adopted a somewhat similar approach and also scored in the low clinical range on the PPS. She also spoke of having decided to overcome her fear and overprotective tendencies and deliberately exposed her children to activities that other mothers in the area would not consider reasonable for children of that age (e.g., motocross racing) and then leaving the outcome to fate.

> P#18 I've had to feel the fear but I've had to let them go. You have to trust, you know? They could be run over at the gateway waiting for the bus. They've got to learn their own lessons. We've got a high tree hut in the back garden and [subsequent child] has been up and down by herself ever since she could climb up. And it wasn't until my playgroup was here with children the same age and the mums have got their kids by the hand and they're taking them up there and they're going, "Oooh-oooh" that I think, "Oh!" But, I've had to let them go, you know?

Two mothers denied overprotective tendencies toward the subsequent child because the child was not the same sex as the one who had died as was therefore perceived to not be at risk of SIDS. Participant #15 described her specific feelings of fear and panic at the prospect of caring for any female infant, but did not perceive her son to be at risk because the older son had survived infancy but her daughter had not. Similarly, Participant #3, who had lost her second son to SIDS, did not perceive the subsequent child, a daughter, to be at risk of SIDS but at the same time maintained an extreme fear for safety of the older surviving son who was now of school age and out of her direct control for much of the day. With seemingly no insight into the fact that her children might find such a statement frightening, this mother went on to express frustration that both her children were afraid of dogs despite the fact that she told them repeatedly she was there to keep them safe and would "willingly die for them" rather than let them be hurt.

> #3 [one of several similar excerpts about older child's school experience] I didn't like [son] going to school because six hours of the day I don't have control over him, and if something should happen and I'm not there I can't stop it from happening. That's all I could think about. What if he trips over and falls into the pool and nobody sees him? Because there's so many other kids there and I'm not there to pull him out, you know? What if that happens? I have no control over losing him. So, yeah, that was the thing I found really hard was to let him go for that whole six hours without being there to make sure he's all right. He's up there by nine, and by twelve o'clock I felt I had to go and get him, just to make sure he was all right, you know? That he didn't wet himself, or that he had his lunch, or you know? Cos he's so quiet, like if he gets hurt he just goes into the corner and doesn't say anything.

Interestingly, of this subgroup of mothers, all but Participant #9 (whose previous child had died when their monitor was broken) refused the offer of an apnoea monitor for the subsequent child. Participants #3 and #15 declined to use one because of the perceived protective effects of the gender difference between the two children, and Participants #18 and #19 preferred to take their chances with fate than to wire their children up and have their lives governed by an anxiety-producing machine:

> P#19 Never had a monitor, never. That just wasn't an issue. I just thought you'd have to be bloody unlucky (laugh). I just felt that I couldn't think of anything worse than a bloody machine. Like living my life by a machine and I thought that if he was going to die then that's what's meant to be, you know?
>
> P#18 There was quite a bit of pressure to have an apnoea monitor and I didn't want one. I had four children. One had died of cot death. I had three healthy children. So why would I have another one? I suppose it was that feeling of fear, but do it anyway. And I've heard of a lot of families and their lives revolve around this thing that beeps and squeaks and goes off at the drop of a hat. And I just couldn't wire my kid up. Isn't that awful? But I just couldn't.

Fear for safety: Hypervigilance and overprotection.

The remaining fifteen mothers spoke openly of their fears for the survival of their child, both in the short and longer-term. For all but Participants #2 and #12, apnoea monitoring was an integral part of the management of the risk of recurrence of the loss. An unexpected finding was that for most of these women the period of perceived risk of SIDS for the subsequent child did not end at one year as had been anticipated from the epidemiological literature but extended as far as two years post-loss and even beyond. This belief appeared to stem from reports in the literature that SIDS deaths are rare after one year of age. For these parents whose previous child died despite the odds, this statement was far from reassuring and was interpreted as meaning that children can die at an older age so therefore their child could well be the one who would do so. Anecdotal evidence and advice received at SIDS support groups tended to reinforce this view and to point to the need for apnoea monitoring as long as was feasible.

Apnoea monitoring.

Apnoea monitoring thus became a major focus of control for most mothers. They spoke of having to go into battle with unsympathetic health professionals to have the monitor ready straight after the delivery of the baby, and of experiencing panic at the thought it might not be available, or when it might need to be returned before they were ready to relinquish it. As the extracts below illustrate, the first year or two of the child's life was a time to keep the child safe. The child was kept nearby so he or she could be readily observed for apnoea, and monitor alarms were accepted as a necessary evil, part and parcel of the parenting experience. Sleep for both mother and child was compromised by the co-sleeping arrangements, and separations of the mother and child were rare. In addition, there was a reluctance to leave the child to cry him or herself to sleep, even for a short time, lest the child should die in the process. Overall, the initial relationship between mother and child was functional and anxiety-ridden, and as several mothers stated, not a time to be enjoyed until survival became more assured. Glimmerings of the child's personality then began to emerge as the child got older.

> P#1 I had to know that I had everything in place, I knew that when my baby had its first sleep it would be with the monitor on. And, it seemed like it was such a big deal! And I just went into this panic of like, "What am I going to do? What am I going to do? I can't not have the baby now cos I'm already pregnant, you know? [laugh]. And it was really frightening that I wouldn't have a monitor. Cos that was my one, that was my one, going to be my one peace of mind, having the monitor there as soon as [he] was born. But umm, yeah, it was one of these things I had to put in place, that I had to know. I wasn't going to rely on someone else, I needed to physically see them to know that all these things were in place so that I could get on with this, relax... So, it was, a bit ritualistic, I think. That's how I'd describe it. ... He was on it for ten months. I weaned myself off it! [laugh]. Ten months! It was like a blimmin heroin addiction [laugh]. When it got to the stage that he would take it off and laugh at us or run into the room I thought that it might be time that we got rid of it. He bit through one of the blue cords, so it got to the stage where it was probably more dangerous for him to have this than it was actually doing any good. We didn't have a lot of false alarms, but they weren't a problem because for the first ten months [he] was always basically in the room with us. He was always close enough for me to put my arm out and touch. He was, yeah, he

> was never, never far away, never even in the other room. He was in the pram with us. If I went out to hang the washing out then he came out to hang the washing out as well and I had, even though I had the monitor and a intercom system it was still to me too far physically, yeah, he was with me all the time.
>
> P#11 Well, we had the monitor for about three weeks beforehand and I'd gone through it well and truly, so that I knew how to set it up. I needed to know that I knew exactly how it worked and that and umm, from the minute he was delivered I put that monitor on in the delivery suite and it never came off him. It's funny thinking back about the monitor, because you know you almost forget about how traumatic that year was. It was terrible with that monitor on, because of course it false-alarmed all the time, it false-alarmed a lot, and you never knew, "Was it just a false alarm?" I could never work out <u>why</u>, you know? I was so precise about where I put it [sensor] on. I taped it on with like nearly a roll of tape every time and I could never work out why the alarm had gone off. And we put him in another bedroom, not our bedroom, because I just wasn't sleeping at all and I had the baby-talk [intercom system] in our room and we heard the tick-tick-tick all night. I just found that tick incredibly reassuring. And consequently this little boy never left my side and I got a great big pram, a friend's old pram, and I slept him in it during the day down here and that pram was never out of whichever room I was in and it took me a long, long time to leave him.
> *And when you had all these false alarms, did you ever have any real apnoeas?*
> No, no, I don't believe so, not that I mean, only, certainly nothing that you had to intervene with. The trouble with me is as soon as the alarm went, I sort of would rush in and just shake him quickly. [Husband] is much calmer than me and he'd say "You have to wait and see if it is, you know, we have to find out if he is having apnoeas" and so I got better at sort of waiting but I was <u>terrified</u>. I don't think I ever left it very long. And umm, I didn't take it off at a year. I took it off at about 14 or 15 months. And I took it off very gradually. I can't remember what time period it was over but it wasn't a matter of days it was a matter of weeks and I took it off during the day to start with and then I would just put it back on at night. And I still was sleeping him quite close to me during the day so he was always being watched and then, it's only been, [he's] two and a half now, it's only been the last two or three months that I sleep easily at night. I would wake all the time in the night when the monitor came off, when we finally took it off. I kept it on for well past a year to make really sure before I chose to take it off, because I mean you still hear of the odd one at two years. So you know, it's a really difficult decision but there just comes a point when you think, actually the monitor is becoming a danger so it becomes a point where it has to come off you, know?

Participant #6 had read that babies do not die of SIDS in the neonatal period and so commenced her monitoring at three weeks, continuing through to when the child was 18 months of age, because her baby had died later than most:

> P#6 I didn't use it at first because I know that babies don't die from cot death until they're over three weeks old, you know? It's neonatal death otherwise, isn't it? I was too embarrassed to use it in the hospital anyway; I just got it and put it away. And then I monitored her until she was 18 months old. I thought, "No, stuff this, you know, you say what you like, I don't care!" And of course that's when the doctor said I was paranoid, and I said, "No, no, I don't think I am. I know that babies can die at two years old, round about. My baby died at nine months which was way older than a lot of the babies and I'm not giving it back until I'm ready".
> *Did she have any apnoea episodes?*
> No, the monitor went off and sometimes it would take a wee while. "Oh God, that's the monitor!" and I'd get up and get it. No, I don't think so. ... Once the monitor came off I kept her in our room for a couple more weeks and then she went back into her own room. Yeah.

Participant #4 also experienced panic reactions to the monitor alarms but believed the reassurance it gave was worth it. This mother missed out on some times of physical contact with her baby because she believed that monitoring would be ineffective if the child was being held and cuddled:

> P#4 Well, it's necessary. If anything should go wrong, at least with the machine I won't lose her. And even though that first time [false alarm occurred] I broke down and sort of freaked out, you just deal with it. You sort of look at it and think, "If it wasn't for that machine and she had of stopped breathing or yeah, she had of stopped breathing, I'd lose another baby and I just couldn't go through that again." So, I just resigned myself to the fact that it was a necessary thing and dealt with it. Because she continued to set the jolly thing off. And it was in the right place and it was doing all the right things but she just was lazy. Now she was so big too that she slept for six hours at a stretch and it drove me insane because all I wanted to do was hold her. But because she had a monitor on you can't hold them because if you're holding a baby who's on a monitor and they go to sleep, and they should pass over and when you're holding them the monitor will still register because it will register your movements.

The brittle sense of control provided by the monitor was threatened one day for Participant #1 when a minor car accident occurred and brought home to her the fragility of life and her inability to control the more general environment in which her children lived. As can be seen in the extract below, this mother's insight into her own experiences made it difficult to assign an accurate rating on the fear for safety scale of the WMCI.

> P#1 I had a car accident [laugh]. Two months old! And I just about belted this guy [laugh] that hit my car cos my baby was in there and don't you do this because he's on a monitor and I'm doing the best I can and you hit me! And here's me, you know, my focus, I was so tunnel-visioned about this baby breathing, you know, and I could hear this tick. Every time he took a

> breath, this thing ticked. And this twit hit my car and I thought, "I've got no control! [laugh]. It's gone, someone else can do this, you know, this isn't all about me because somebody else can step in and take that away. And it wasn't even a bad accident, it was just a ding, it broke my light, you know. And I came home and I was shaking and I got in and I rang my husband at work and I thought I'd got in control of how I was feeling, and I heard my husband's voice and I went, "Ooh-hoo [crying, sobbing noise] [laugh]. And you know somebody could hit the car and what if I have an accident or..." And you know there was all these millions of other ways that he could die and here was my one focus, was on this blimmin' apnoea monitor. And it was really, really scary having to admit to myself that other people, other things had some control over what was happening in my life. That you can't control that some nutter's going to drive down the road and smash into your car or... Yeah, that was a real big realisation that! And I thought, maybe I should just stay at home, we'd just stay at home, only go out when we really, really had to... But you can't live like that especially when you've got other children..."

Functional nature of the early relationship.

The functional nature of the relationship with the subsequent child was depicted particularly well by participants #11 and #16, both of whom had sons who cried excessively in the first year, and experienced feeding and sleeping difficulties that were attributed initially to a medical cause. The crying was both reassuring and frustrating for the mothers and they described a turning point for the better in their relationship when the crying decreased and provided them more opportunity to focus on the child as an individual:

> P#11 Then of course and we had [subsequent child] and he was just fine and healthy and he's been a fighter ever since. I don't know if it's fortunate or not, it was exhausting for us, but he has been a terrible, terrible baby. He had severe reflux and he was a baby that screamed and screamed and screamed. But on reflection I think that maybe he was meant to be like that so that he woke ten times a night, so that was my reassurance that he was alive, you know? … We were just exhausted; it was terrible. But it was quite reassuring, there was no question of leaving him to cry. The first year was getting him through, and I didn't enjoy that first year because he wasn't a nice baby. There was very little to enjoy. …
>
> I think, it's a year that you are just wishing away so fast, you know, you just wish you were to the end of it, it was just a getting through year and you don't actually enjoy that baby or watch their milestones because the whole you are just wanting them to grow quick, grow and be one, you know? Yeah, you just want to get that year through you know? And even the second year I felt quite like that too, because I had seen records that said that there was cot deaths up to two.

So I was very pleased when he turned two as well and we had got through that year... I remember then between one and two there were the signs of this lovely personality coming out, but he still had reflux well and truly up to eighteen months, so it would be interspersed with good nights and bad nights and how tired you are depends on how you feel about everything I've decided, you know? It really changes your perspective about how you feel but since he's started sleeping and his reflux has definitely, by two, I'd say had well and truly gone and then we went through the behaviour problem thing but since we've come through that I mean he's just a joy. I mean he's just been saying a lot the last few weeks. He's just such a joy, and I mean if you could see him at [preschool music class] today he's just, you couldn't but think he's just such a pleasure, cos he's just loving every minute of it. And around home you know he's just so much fun, you know? I cooked sausages last night out there and he runs round the park, "What you want? You want 'amburger or chips?" and there's all this grass and he's doing very normal imaginary games and he's just so interactive and he's just so lovely.

P#16 Here was this very precious baby who was supposed to be so special and he was the <u>pits</u> of a child until he was nine months old. He was shocking! Yeah. He wouldn't feed, it was living hell for nine months just about. ... He came right, um but he was colicky and we thought he had reflux. He had all the medicine for reflux but it wasn't, it was just that severe colic, um. We were like walking zombies for nine months. Although he came out of his colic in about four months, he came right but wouldn't sleep. He was one of these babies that would not sleep during the day. It was midnight before he went to bed at night, um, just real hard work and um, can't say we enjoyed him at all for that first nine months. And then [changing from medical to behavioural management] we gave him a bit of the tough treatment once he hit nine months old and he improved and we've have had a lot of pleasure out of him, after that first nine months. I could hardly function there for a while, you know? I mean you do, you sort of get on autopilot and oh, it's always in the back of our minds this slight guilt that here was this precious baby we are supposed to be enjoying so much and oh, he wasn't. He was hard work.

...Oh, he's very bright. He's very loving, he's um... He speaks so well, I just love conversations with him. He's quite outgoing, he's not shy with people, he talks to lots of people, "hello" and he talks. He seems to be doing everything he should be doing, I think, I, yeah, I don't know, I think he's just, everyone thinks he's so bright for his age and he's quite a good size for his age, but um, yeah I think he's, no, he's great. He can be quite stroppy, he's got his own little um personality, and no, he's really quite demanding at times but not too bad. He's a very appealing little boy. I think, I find him, he's very special, and goodness me, um, (long pause) he, a bit of a terror, he's a terror, no getting away from that, um, I don't know.

Ongoing perceptions of vulnerability.

As has been shown, these mothers invariably described their overriding sense of responsibility for keeping their children safe, and it was clear that they would not be easily persuaded by medical opinion that the risk of recurrence of the SIDS death was virtually non-existent. When the risk period for SIDS passed, their fears were characterised by a more generalised sense of the vulnerability in what was still perceived as an unpredictable, uncontrollable world. Concerns for their children and even potential grandchildren) were centred around the risk of accidents, serious illness, physical attacks by others, and death through other causes such as suicide, but at the same time they were aware of their own behaviours.

> P#5 I'm scared, I'm scared that I'm going to lose them all the time. And yeah, I am, I'm super-paranoid about the kids. Too paranoid, sometimes, but I'm getting better. Umm, I've got to let them be themselves, you know? I can't wrap them up in cotton wool. I've got to learn to let my kids, like, I guess get a bit grubby and not worry that things are going to happen to them all the time. I've got to make myself better in that sense. And I guess I will. And I think a frightening time for me, [interviewer], is when I have grandchildren. I'm going to be a mess. I'm going to be an absolute mess and I'm frightened of that but I'll get there.
>
> P#6 I think the big thing for me is that I've seen one of my kids <u>dead</u> and when I think about one of the kids getting a high temp and a rash I think, "Okay, meningitis, then!" I am still very careful and I'm careful with all of my kids. ... We talk about [SIDS baby] quite openly, his death. But I don't want them to think that death is okay, I would hate any of them to commit suicide, you know? Death is natural but I don't want them to think that it's okay to go there, if you know what I mean?
>
> P#7 [member of the SIDS support group] We do take extra precautions and if a parent phones me up and says, "Look, my baby's not very well, I'm concerned about it." And I say, "Would you like a monitor?" I do my best to try and get them one. You know, I just feel that parents have that right to be concerned. We have a <u>right</u> to be overanxious (laughs).
>
> P#8 That fear is still there, but never mind. I'm protective, I'm just very protective of my little unit. ... Especially the minute the word respiratory comes into it... I'm very careful about lots of things but it's just the way I am, so it's my make-up now, you know, and like oh, it's very hard to explain but it's just, you know the old story of once bitten, twice shy? Well, I was once bitten and nearly twice, and now I'm very shy.
>
> P#10 And I've become more overprotective. I want every baby in the world to have a monitor. It's almost like you have a feeling inside like you know, how fast things can happen and how easy things can happen, and it could just go like that. (Snaps fingers). You know?

> P#12 We spoilt [surviving female twin] a lot, we really did. Every time she cried we got her straight up. … Yeah, I mean we did spoil her and we were very protective of her. I kept on checking her, always listening out when she's in her bed. I mean the stupid thing is I still do it with her now with her and she's nearly nine years old. You'd think that after that amount of time and at that age you would sort of stop.

Inability to project to the future.

For several of the women this sense of their children's vulnerability was associated with an inability to project to the future to describe the subsequent child as an adolescent or adult, other than to consider the dangers that could befall him or her on the way. The focus was very much on the present and things were taken just one day at a time, for having been exposed to a trauma that changed their lives so dramatically there was ever the possibility that it could happen again:

> P#1 I don't worry about SIDS now he's older but I do for other things - oh, people running him over and I just think that there are so many things out there that can happen. …
>
> I don't ever make a lot of plans for the future any more. I don't plan things a year in advance. I don't think, well this time next year he'll be doing that, I don't do that any more. Because you just don't know what's around the corner. The day [SIDS baby] died, my husband said, "We've got everything now, you know, we've got our house, we've got three beautiful children, we've got it all. What more could we want?" And before he came home from work that day she was gone. You know, I don't ever, ever do that sort of thing any more. In fact, if this is what I've got, then I don't need to brag about it [laugh]. I don't, I umm, yeah, it's made us all completely different people, we'll never ever be that person again. I think, I feel for my kids too, like the older ones have had it taken away, a lot of that innocence that children have that they have, I see it in my kids that they have lost an amazing thing, that things go on for ever, trust, that amazing thing that everything will be all right and I don't think my kids truly had it, you know, it's not just there. My kids will have to work at having that.
>
> #4 I don't know what they'll be like. I don't want to expect anything so that I don't get disappointed. I just take each stage as it comes. My fear is that there's someone cruel out there and that I'd hate them to get used or beaten up or something like that, you know? Cos the world just seems to get wickeder and wickeder.
>
> P#7 But it makes me think that the only day I know for certain that I've got my children is the day that I spend with them. See, I don't know if I've got them tomorrow. I don't mean to say they're going to die but something can happen, you know? It just made me realise how, how quick it can happen.

> P#11 Maybe that's something I've done since I've had [baby] die as well, is that I don't hold these dreams in my head of what they will be, and I don't even like to envisage [subsequent child] as a growing boy, you know? In case I lose him, I think. And I don't want to have a picture of how he might look when he's twenty-two, in my head. "Will he look like his dad?" I don't, I just focus on him now, and I do that with the girls too. I don't have any, like some parents have these great schemes mapped out for where their children are going to be and they are enrolled at this school and that school and, but we have never done that either. My focus is very much in the present.

Age two-three transition.

At the time of the interview many women described what they were experiencing as a transitional phase in the caregiving relationship with the two-to-three-year-old child. The child was no longer perceived to be at risk of SIDS, but the well-engrained hypervigilant parenting practices adopted to ensure the child's survival through infancy were proving hard to change. As shown above, Participant #12 spoke of still checking her eight-year-old surviving twin for apnoea in the same way as she was now checking the subsequent child. Many women reported ongoing difficulties with routine separations from the subsequent child, feeling unwilling to trust the child to anyone else's care and reluctant to enrol them at preschool. Intriguingly, when asked what the most difficult time will be for the child in the future, several responded in terms of the anticipated difficulty for themselves as the child became less dependent upon them rather than showing sensitivity to the needs of the child.

> P#1 My husband said to me a couple of weeks ago, "When's [subsequent child] going to go to [preschool]?" And, "Oh, no, there's no rush, he's fine with me!" [laugh]. "He's fine." And that's it, yeah. I don't feel the need. We're just <u>together</u> all the time.
> *And as you look ahead what would be the most difficult time in [his] development?*
> Going to school cos that means I have to let go a little bit! [laugh].

> P#5 I think when she will have to be more independent it is going to be a difficult time for me. Her actual break away from me.

> P#8 *And as you look ahead what do you think will be the most difficult time in his development?*
> When he goes to school. Because I'll have got nobody at home. Nobody totally dependent upon me. And when they go to school they, they get this self-importance and this independence and I'm not the only one putting in the main bit of input. Yeah, school. I think I'll be a cot-case that day [note the metaphor used].

> P#13 *And as you look ahead what do you think will be the most difficult time in her development?*
> Oh yeah, um, yeah probably, yeah when she's a bit older. When she's nine and getting a bit more independent. I sort of just want her to stay the way she is, not move on.

Infant difficulty.

Responses to questions about aspects of the child's behaviour that caused difficulty for the mother were another indication of the transition that was taking place at the time of the interview. The usual shift in the caregiving pattern described by Solomon and George (1996), from a more immediate gratification of an infant's needs in the first year of life to increasing socialization and discipline in toddlers, appears to have been delayed in this group of subsequent children. This supports the findings in the questionnaire data that the protective tendencies of SIDS mothers are not as age-differentiated as those in the control group, and that the undisciplined externalising behaviours of toddlerhood tended to persist in the SIDS group and to be accompanied by ongoing sleep problems.

As shown in the selection of extracts below that conclude this section, mothers spoke of their awareness that the child had been "spoilt" and demanding, having been almost the sole centre of attention since birth, and commented that the problematic behaviours and sleeping patterns now needed to be changed to become more age-appropriate and socially acceptable. (Interestingly, D. Levy (1970, p. 391), wrote that attempts to make this shift after a child has been overprotected during the first two years were often unsuccessful, and that ongoing overprotective features of the relationship tended to be concealed, rather than overcome.)

> P#1 The hardest thing at the moment is like umm, he, he knows that he's been number one sort of thing, and that he's had all this attention, and he now thinks that it's his birthright to have it [laugh]. And that it has to be that way every moment of the day! He's really starting to exert his own personality at the moment. He's moving from being that baby to a little toddler [child aged 32 months] so that you can say to him. "You're doing this", or you can put him in a pram or put him in a trolley or something like that and now he's starting to hiss and roar himself [laugh]. ... Because he's had so much his own way, but that's all right because we can iron that out as we go. It was just really important as a littlie that he got basically everything he wanted. You know, he was really molly-coddled. ... I suppose it is sort of, getting towards starting to think that maybe we should be starting to normalise his life a little bit more now, bring a bit more

discipline in. Make him sleep in his own bed [laugh]. Just little things like that really we need to start changing to get him ready for later life.

P#11 ...then around, just over after two he was really naughty. I think he had just so much attention and you know he just wasn't developing how I would like him to behaviourally, yeah and I thought, "You need to just realise that these rules exist even for you". He's just learned that he sometimes has to wait, you know, and it's been very good for him. I mean he's really given us a hard time, I mean because he is so wilful, which I balance it out, that's by his enthusiasm. You can't have one side of his personality without that determinedness but that determinedness is very hard to manage. ... So he's coming through that and he's realising that there are some rules and that's only as his development's got older and he's more able to reason with. So he's learning those sorts of things and that there's rules and that there's actually reasons for those rules.

P#16 after [commenting on how she will soon need to "come down on him harder"] He wrecks everything. He trashes everything. And like, last night the table behind you, he just came in and swooshed everything off it. Um, he's just into that stage and his books, his books in his bookcase come out all the time. He has cars and things and hits things and bangs and hammers and gets pot lids out and crashes them together and that type of thing.

P#12 I seem to give in to him a bit more than I should, yeah. ... I think we are very close. I have got a lot of patience with for him. I can take a lot more from him, I think.

P#15 [described no behaviour as problematic] But no, he just gets his own way, yeah, he holds my hand and it's like me and him against everybody, sort of a thing.

P#14 ...His temper. He was a blessing in disguise in a sense but yeah he just knows he's spoilt. Well, I'm trying to cut the spoilt bit down now.

P#8 [child aged 47 months, separation difficulties, extended co-sleeping, stubbornness equated with resilience and perceived as a virtue] If I go to a meeting at night, he's just about beside himself. ... He sleeps in my bed, my husband sleeps in [child's] bed. I don't have a problem with that. Other people have a problem with that and that's probably the thing. ...
[re difficult behaviour] His stubbornness. When he wants something to happen, he wants it to happen now. Very, very strong willed and I find that hard. And he'll get more stubborn. He'll get more determined but then I think actually will be the making of him. The world will be his oyster, he will say, "I'm going to do it" and he'll do it.

P#6 The problem is getting her to bed at night. She is getting to the stage where we don't want her out of bed. She has to be in bed at a reasonable time otherwise she gets tired. We are sometimes up till 10 o'clock at night with her and I have to say she comes and hops in our bed and we're too tired to put her in her own bed so she sleeps with us. Not all the time but it's a

> terrible habit and we know that. But in actual fact we really need to clamp down on her a lot harder than what we are doing.
>
> P#10 Getting out of bed at night. When he gets put to bed, he gets up and you put him back into bed or you shut his room and next minute he's out again. ... He'll cry and he'll still get out, yeah two minutes he will be out. He just doesn't listen.
>
> P#17 He's very um, active. And sleeping. But what's happening now is I sit outside the room, I'll go read him a story but he won't go to sleep unless I am still there. He can look up and still see me just to see my presence. Unless he's very, very tired, he's just straight out again ... Yeah, sleep, we still have our troubles.

Summary.

To reiterate, the narratives of this sample of mothers showed that effects of the SIDS loss on the parent-subsequent child caregiving system were profound, affecting the mothers' ability to provide age-appropriate sensitive care for their 2-3-year-old children. Again, it remains to be seen whether the pattern of defensive distancing, heightened perceptions of vulnerability, under and overprotective tendencies, separation difficulties and infantilisation of the child is reversible or will continue beyond the preschool years.

CHAPTER SIX

Conclusion

The purpose of this study was to investigate the assumption that unresolved grief following the loss of a child to SIDS would lead to a traumatic disruption to the parent-child caregiving system in the parenting of a subsequent child, and would be evidenced in symptoms of vulnerable child and replacement child pathology. To conclude, each of these aspects of the research will be briefly reviewed.

Replacement Child Pathology

The classic picture painted by Cain and Cain (1964) of an unfortunate replacement child whose identity was smothered by idealised images of the dead sibling was not the norm in this sample. It seemed that many of the women interviewed for the study were aware of the risk of replacement pathology and consciously tried to guard against it. Replacement dynamics were seen, nevertheless, in that sharing of middle names between the two children was a common practice; and most mothers reported the desire to have another child of the same sex to fill the gap left in the family by the dead child, expressing disappointment when the subsequent child's sex was not what they had wanted. For another two mothers, a toddler in the family at the time of the SIDS death reverted to being the baby of the family. To all intents and purposes, this child became a replacement for the dead child, and continued in that role even after the birth of the subsequent child.

All but one mother in the SIDS group stated that the subsequent child was not a replacement for the previous one, and it seemed that confusion of the children's identities did not occur. In contrast, D. L. Davis et al. (1989) reported that 20 out of the 24 mothers in their sample spoke of having had trouble separating the subsequent baby from the imagined image of the one who had died in the perinatal period. This difference is likely to be because SIDS parents have real memories of a live, healthy baby to draw upon when comparing the two children.

The findings of the present study demonstrate that a *subsequent* child is not necessarily perceived by the mother as a *substitute* or replacement child. Issues to do with the blurring of the identities of the two children should therefore not be assumed to be the antecedents of heightened perceptions of vulnerability or overprotection discussed below. In the context of a previous death of a child to SIDS, the birth of a subsequent child represents a second chance for the mother to show efficacy in the parenting role, and in a sense this is a replacement of the parenting role, rather than of the child per se. Concerns about the child thus become focussed primarily on the child's physical vulnerability and need for protection at the expense of sensitivity to the child's needs as a unique individual.

Vulnerable Child Syndrome

As has been discussed, inconsistencies in the ways in which the various dimensions of the Vulnerable Child Syndrome have been defined and operationalised have led to contradictory and inconclusive findings in the literature. The present study appears to be the first to systematically address all three dimensions of the Vulnerable Child Syndrome in both a "vulnerable" group and a control group of their age group peers. Correlational data supported the contention by Thomasgard et al. (1995b) that parental perceptions of vulnerability and parental protection are separate but related constructs. However, the data suggested that protective distancing from the subsequent child occurred in some cases, rather than overprotection of him/her. Support for this interpretation was shown by the fact that some scores on the three instruments were in the low clinical range, and were accompanied by "disengaged-suppressed" ratings on the WMCI that were indicative of a disturbance in the parent-child caregiving system. Clearly, lower than average scores on such instruments warrant further investigation and should not be assumed to be more "ideal".

Overall, the findings of this study indicate that there is reason for serious concern about vulnerable child pathology in this sample of physically healthy subsequent children. Certainly, subsequent siblings of SIDS victims are doubly at risk on the basis they have been born to mothers who have experienced the traumatic and unexplained loss of a previous infant, and they are known to have a slightly increased chance in infancy of dying of SIDS themselves. When scores on all three instruments were examined in combination, it was shown that both parental perceptions of vulnerability and parental protective behaviours were significantly elevated in the SIDS group. As a group, these children were perceived as vulnerable, infantilised, and their mothers reported problems with limit-setting, and reluctance to separate from the child. Correspondingly, age-inappropriate destructive behaviours and sleep problems were ongoing difficulties for these children. In short, the profile that emerged from the data closely resembled that of the original Vulnerable Child Syndrome described by Green and Solnit (1964).

What is striking about these findings is that these effects are present so long after the death of the previous child, and when the subsequent child is healthy and well past the risk period for SIDS. Anxious and overprotective behaviours after both perinatal and SIDS losses have been reported widely in the literature but it is unclear as to how long they can be expected to persist. Some have indicated that anxiety lessens throughout the first year of the baby's life (e.g., Cornwell et al., 1977; Hunfield et al., 1997; S. Lewis, 1983; Phipps, 1985; Powell, 1995; Syzbist, 1973/2002), especially after the time when the new child passed the age at which the SIDS baby had died. Others have shown the effects to be longer-lasting and not restricted to the period of actual risk (e.g., Aadelen, 1980; Beard, 1991; Hense, 1994; Theut, Moss, et al., 1992).

Reasons for why maternal anxiety and overprotection were so protracted in this sample are open to speculation, given that the risk of recurrence of the SIDS death is known to be extremely low, all the more so if risk factors such as prone sleeping position are avoided. Mothers' accounts indicated that fears of recurrence of the loss existed irrespective of the time since the SIDS death, and this was supported by a lack of association between Resolved and Unresolved status on the RTDCS with scores on the VCS and PPS. An unexpected finding had been that many mothers perceived the risk period for SIDS to extend as long as two years after the child's birth, and at the time of the interview, some children were not long out of this age range. Despite the limitations of the technology and numerous false alarms, home apnoea monitoring was continued well into the second year by several mothers, further contributing to the perceived vulnerability of the infants.

Interestingly, mothers' perceptions of their own personal vulnerability seemed to be confined to fears of repeated failure in the parenting role; that of failing to ensure the safety and survival of their children. As the illustrative excerpts in the previous chapter showed, many women were still plagued by strong feelings of cultural guilt for their perceived shortcomings in the care of the previous infant; guilt that would seemingly be assuaged only by successful parenting of the next infant. Moreover, beneath the discourse of "no-blame" for SIDS deaths, it appeared that a certain stigma is becoming attached to the deaths, breaking down the mystery of the syndrome, and linking it with particular risky parenting practices. In most interviews, mothers listed prone sleeping position as just one item in the list of possibilities for why the death occurred, and many attributed blame to vaccinations or other factors for which others would share responsibility for the death. If they were then to accept that the supine sleeping position would remove the risk for the next baby, then by implication, the sleeping position was at least a major factor in the death of the previous baby and this could well result in even higher feelings of guilt.

As has been noted, follow-up studies are needed to determine whether these observed "vulnerable child" effects will diminish as the child approaches school age. Supplementary direct measures of the child's behaviours and attachment patterns would be advantageous, for as Perrin et al. (1989) pointed out, when only the caregivers' perceptions are taken into account, it is possible that those who view their child as vulnerable may also distort the level of the child's behavioural difficulties.

Assessment of Grief Resolution.

With the use of the slightly modified version of the RTDCS to classify the interview transcripts, only 30% of mothers who participated in the study were rated as Resolved with respect to the loss of the previous child to SIDS. The relatively low number of resolved cases was not unexpected, for as has been noted, a number of studies have shown that women who have experienced the death of a baby to SIDS tend to have comparatively higher and more enduring levels of distress than those who have suffered other types of losses (e.g., Boyle, 1997; Dyregrov & Mattheson, 1991, Nicholas & Lewin, 1986).

In this sample, none of the participants reported an absence of grief initially, although the intensity lessened for some sooner than for others. In keeping with the findings of Pianta et al. (1996), those who were classified as Resolved tended to adopt a more cognitive, "thinking-oriented" approach and in this regard, a tinge of avoidance appeared to be advantageous in making the decision to move on from the loss experience. Those who were rated as Unresolved had either attempted unsuccessfully to suppress their emotions whilst remaining preoccupied with feelings of guilt and victimisation, or were frankly still overwhelmed by the pain of the loss.

Several features of the mothers' retrospective accounts of the loss illustrated the particularly traumatic nature of the SIDS deaths. Years after the event they recalled the events of the day graphically; their feelings of shock, horror and anguish at the death conveyed in sometimes chilling detail. However, the focus of their accounts tended to be the death scene and their immediate responses at the time rather than current feelings of sadness and yearning for the dead baby. The depth of the trauma was evident too, in that (a) those whose partners were not there at the time of the baby's death instinctively reverted to seeking out parental attachment figures in the first instance, and (b) guilt reactions and counterfactuals were present in most, as long as 12 years after the loss in one case. Overall, the indications were that this was not a "simple bereavement" in the way portrayed in DSM-IV (1994) but a more complicated loss, accompanied by traumatic stress effects.

In the present study, no significant relationship was found between Resolved versus Unresolved status with demographic data, ratings on the WMCI, scores on the VCS, PPS, CBCL/2-3; or length of time since the SIDS death. This unanticipated finding raises questions as to adequacy of any or all of the instruments used for the purpose with the SIDS group, and points to the need for further systematic evaluation of attachment patterns in subsequent siblings of SIDS victims. Heller and Zeanah (1999) seem to have confronted a similar issue when considering possible reasons for why mothers' lack of resolution of mourning as measured by the Resolution of Loss scale was not related in their study to disorganised attachment in subsequent infants. They commented that interview characteristics other than clarity, coherence and emotional integration perhaps needed further exploration to explain this negative finding; the implication being that features other than the formal characteristics of the narrative warranted more attention. Certainly, in the present study, mothers' capacity to reflect on their experiences and point to changes was not necessarily a good indicator of caregiving sensitivity as measured in the WMCI.

A lack of association between the passage of time and resolution of the loss has been reported in other contexts as well (e.g., Pianta et al., 1996; Bakermans-Kranenburg et al., 1999) and suggests that advice regarding the timing of subsequent pregnancies following perinatal or infant death should not be based solely on the timing since the loss. Nevertheless, it could be argued that resolution of grief is not something that can be adequately measured, for if one accepts the contention that grief is a process, not a state, leading to the attainment of a new identity (Parkes, 1986; Weiss, 1993; Worden, 1991), then the endpoint of mourning is a rather nebulous concept. Following Bowlby (1980), Heller and Zeanah (1999) stated that healthy mourning moves from relatively unresolved to relatively resolved, and is characterised by the ability to engage in other relationships unimpeded by the loss. However, when the new relationship is between a mother and a subsequent child after a SIDS death in the family, the loss experience and new relationship became part and parcel of the same thing. The birth of the child places the mother back into the very situation where recurrence of the previous traumatic loss is most likely, but at the same time provides an opportunity for successful parenting outcomes next-time-round to be a healing experience. It may well be that measurement of grief resolution was a year or so too soon for the women in the current study, considering many of them still perceived the 2-3-year-old child to be not long past the risk period for SIDS.

Furthermore, the notion that a change in one's identity to become no longer defined by the trauma of the event, as an indicator of resolution (Pianta et al., 1996) is something that warrants reconsideration in particular cultural settings, and in cases of infant death as opposed to pregnancy loss or diagnosis of disability. Schmidt (1987) had commented that the lack of a generic term to describe bereaved parents implied a lack of validation of their experience in modern society. The interview data in the present study indicated the reverse was true: that upon the death of an infant or child, one's identity as a bereaved parent was established for once and for all, that in effect, one gained lifelong membership to a very special club from which one could not resign. As Weiss (1993) had suggested, it appeared that to seek to step back from this role would be construed as evidence of disloyalty to the child, and by implication, further failure in the motherhood domain. Formal and informal support networks for SIDS parents thus helped to keep the memory of the dead child alive, gave some mothers a sense of comfort and belonging to a select group in society, and provided a forum where their stories could be repeatedly told and legitimated.

Disturbance to the Caregiving System

Considering that Vulnerable Child and Replacement Child Syndromes are themselves evidence of disturbance at the representational level of the caregiving system, it is again surprising that there was no significant relationship found between VCS, PPS and ACTLT scores and balanced or non-balanced ratings of the interview transcripts as measured on the WMCI. This finding further highlights the need for additional independent appraisal of the mother-subsequent child attachment relationship, such as assessment in the Strange Situation Procedure. SSP classifications would provide useful supplementary data for the mother's reports, and perhaps identify insecure/disorganised attachment patterns such as those found in subsequent children with unresolved parental loss and trauma following perinatal losses (e.g., Bakermans-Kranenburg et al., 1999).

In the present study, disturbance to the caregiving system was evident in the relatively high number of interviews with mothers in the SIDS group that were classified as non-balanced (75%), and the high proportion overall that were characterised by defensive distancing from the child. Many mothers described muted reactions and less than full engrossment with the child at birth, and this pattern tended to persist and be evident in unelaborated, glib descriptions of the 2-3-year-old child in the WMCI. Some women were aware of the distancing that was happening and spoke of forced interactions with the child, and in two cases this was more extreme, with actual rejection of the child reported.

Consistent with the literature, anxiety and fears for the safety of the child were pervasive in most interviews, arising from both specific fear of recurrence of the loss and more generalised fears for the safety of the children in other situations. In the context of a previous SIDS death in the family, the coding criteria for the "fear for safety" of the WMCI was shown to be problematic in that both a rational reason for the fears, and high levels of anxiety about the child's well-being were present. For many mothers, the first two years of the child's life were experienced as a time to "just get through" and a functional parenting style was adopted to meet the enormous responsibility to keep the child alive and prove themselves in the parenting role. Clearly, mothers' fears for the safety of their subsequent children affected their ability to respond sensitively to the child's developmental needs. This was particularly evident in the way they managed the interplay between "relatedness versus autonomy" (Eagle, 1995), either exposing the child to unnecessary risk situations, or more commonly, delaying the child's move towards independence until survival was more assured. The age two-three transition was a significant turning-point and was a time at difficulties were currently being experienced in changing established patterns of behaviour.

Indeed, the attachment literature suggests that both the under and overprotective parenting strategies identified in this study are cause for concern. In the same way that Pianta et al. (1996) had described with parents of disabled children, a specific threat to the caregiving system was posed by the parent's sense of helplessness to perform the basic function of a parent: to nurture and protect the child from harm. Lyons-Ruth and Block (1996) pointed out that the infant's experience of the protective function of the attachment relationship is tied to the quality of maternal responsiveness to the child in the affective domain, rather than to any objective ability to protect the infant from danger. Hence, when the effects of unresolved previous trauma hamper the caregiver's responsiveness to infant communication, especially at times when the attachment system is activated, "profound disruption in the affective discourse between mother and infant" occurs, placing the child at risk of serious clinical disturbances of attachment (p. 273). Fearful, "frightened" parental behaviour becomes fear-provoking for the infant, particularly when the self is perceived as the source of the fear and places the infant at risk of disorganised attachment, in itself a major risk factor for long-term maladaptive behaviour (Hughes et al., 2001; Schuengel et al., 1999).

Implications of the Findings

The findings of this study demonstrate that the path to recovery from the death of a child to SIDS is a long and complex one, with the effects still experienced years after the event. Because of the particularly traumatic nature of the loss, it is important for clinicians to attend carefully to parents' subjective experiences with the subsequent child. Specifically, enquiries should be made about concerns that parents may have about their child in relation to the loss experience. Intervention may be needed with parents to help them place the relative risk of the child into perspective, and to engage in warm and sensitive age-appropriate parenting behaviours with the child.

Suggestions for Further Research

Findings from the present study suggest several directions for future research. Obviously, there is a need to track these children (and for that matter, those born after types of infant losses) over a longer time period to school age and beyond to see if the observed effects diminish over time, especially with the birth of further children in the family. Further studies would benefit from the inclusion of (a) other attachment-based assessments such as the SSP to measure the child's representations of the attachment relationships, particularly disorganised attachment patterns, (b) some form of more objective measurement of behaviour problems in the child, to complement parental reports of the difficulties, and (c) a control group of New Zealand parents for the WMCI interview data. In addition, specific measures of PTSD-complicated bereavement may shed light more light on the grieving experiences of SIDS parents.

Whilst the present study addressed only mothers' perceptions of their caregiving experiences with their subsequent children, this was not a deliberate strategy and reflects the reality that few fathers of young children volunteer for bereavement research. Broader-based studies of the effects of the loss on the wider family system are needed, incorporating measures of between-parent differences in parenting of the same child, and examining the effects of the loss on attachment patterns and outcomes for older surviving children in the family. Moreover, it is recognized that the sample for the present study was small and not representative of the cultural diversity in the country. In light of the changing demographics for the incidence of SIDS in New Zealand, further studies are needed looking at the phenomenon of subsequent children following SIDS deaths in Maori families.

Finally, in keeping with the transactional model of development adopted, it is noted that the primary level of analysis of the present study was the caregiving relationship between parent and subsequent child in the context of a previous SIDS loss in the family. There is, however, scope for further investigation of the phenomenon at the more distal levels of the ecological system, particularly a critical examination of the sociocultural contexts that influence and prescribe the ways in which families manage risk situations to ensure the survival of their young and successfully inculcate them into society.

Appendix A

[Massey University letterhead]

LOSS OF AN INFANT TO SUDDEN INFANT DEATH SYNDROME AND PARENTING OF A SUBSEQUENT CHILD

INFORMATION SHEET

My name is Barbara Maclean and I am a lecturer in Human Development and PhD student at Massey University College of Education, Palmerston North. One of my special areas of interest is Sudden Infant Death Syndrome (SIDS), sometimes known as cot death. Parents who have lost a child to SIDS have suffered what some authors call the hardest loss to bear. There have been several research studies that have followed bereaved parents' immediate grief reactions after a SIDS loss but the longer term effects of the loss on families are not as well understood. In particular, little is known about how the loss affects the parent-child relationship and development of a subsequent child. I would like to find out more about this and I would like to invite parents who have lost a previous baby to Sudden Infant Death Syndrome (SIDS) and who have a subsequent child, now 2-3 years' of age, to be involved in a research project which I am conducting as part of my doctoral studies.

The purpose of the study is to investigate the parent-child relationship and development of a subsequent child who was born to parents who have lost a previous baby to Sudden Infant Death Syndrome (SIDS). The main focus of the research would be the caregiver's account of the relationship with the subsequent child, but it is important to realise that parents may find that this child's story may be intertwined with the story of the baby lost to SIDS. Some parents welcome the opportunity to share in a supportive environment their experiences of the loss and decision to parent another child. Those parents who would find memories of the lost baby too distressing to talk about should not feel under any pressure at all to participate in the study.

Participation in this study would involve a single audiotaped interview which would take just over an hour to complete. There would also be three questionnaires to complete relating to parents' caretaking activities and the usual behaviour patterns in the 2-3 year old child. Participants would need to be able to speak English well and should be the primary caregiver of a 2-3 year old subsequent child. Interviews would be audiotaped and later transcribed into typewritten form by the researcher or a professional typist for analysis.

Steps would be taken to protect the confidentiality of participants. Tapes and transcriptions of tapes would be confidential only to the researcher, typist and project supervisors. The typist employed to assist with tape transcription will sign a confidentiality agreement to this effect. Transcripts will have identifying details of participants omitted, and numbers or code names used in place of names. Tapes would be erased or returned to the participant at the completion of the study. For the duration of the study, both tapes and transcripts would be securely stored in a locked filing cabinet at the university.

The questionnaires would take up to an additional twenty minutes to complete and these could either be completed immediately after the interview or at another time negotiated with the participant. Again, questionnaires would have numbers or code names used in place of real names.

Information from the interviews and questionnaires would be analysed and used for the writing of the researcher's doctoral thesis. A summary sheet of the research findings will be made available to participants should they want it. Findings may later be published in academic journals or papers but no identifying characteristics of participants would be revealed. The information would be supplied by participants to the researcher on the understanding that it would be used only for this research project and publications arising from it.

Please take the time to read this information sheet and the accompanying consent form carefully and to feel free to discuss the project with family members before consenting to participation. There is no pressure or obligation to participate and the researcher is not a member of any organisation that could have a vested interest in the outcome of the study.

If you do agree to participate you have certain rights:

- to decline to answer any particular questions
- to ask for the audiotape to be turned off at any time during the interviews
- to withdraw from the study at any time
- to ask any further questions about the study at any time during participation
- to provide information on the understanding that your name will not be used unless you give permission to the researcher
- to be given access to a summary of the findings of the study when it is concluded.

If you would like to involved in the study or have any questions please feel free to contact the researcher or project supervisors at the contact addresses listed below:

Name of Researcher:
Ms Barbara Maclean
Doctoral candidate
Department of Health & Human Development
Massey University College of Education.
Telephone: (06) 356 9099 extension 8956

Project Supervisors:
Professor Gary Hermansson,
Department of Health & Human Development
Massey University College of Education.
Telephone: (06) 356 9099 extension 8970

Professor Joy Cullen
Department of Learning and Teaching
Massey University College of Education.
Telephone: (06) 356 9099 extension 8955

Appendix B

[Massey University letterhead]

LOSS OF AN INFANT TO SUDDEN INFANT DEATH SYNDROME AND PARENTING OF A SUBSEQUENT CHILD

CONSENT FORM

- I have read the Information Sheet and have had details of the study explained to me. My questions have been answered to my satisfaction and I understand that I may ask further questions at any time.

- I agree to participate and I understand I have the right to withdraw from the study at any time and to decline to answer any particular questions.

- I agree to provide information to the researcher on the understanding that my name will not be used without my permission.

(The information will be used only for this research and publications arising from this research project.)

- I agree/do not agree to the interview being audiotaped.

- I also understand that I have the right to ask for the audiotape/ to be turned off at any time during the interview.

- I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: ....

Name: ....

Date: ....

Appendix C

[Massey University letterhead]

LOSS OF AN INFANT TO SUDDEN INFANT DEATH SYNDROME AND PARENTING OF A SUBSEQUENT CHILD

INFORMATION SHEET FOR CONTROL GROUP

My name is Barbara Maclean and I am a Lecturer in Human Development and PhD student at Massey University College of Education, Palmerston North. As part of my PhD studies I am presently carrying out a research project which investigates the parenting and development of children now aged two or three years who were born to parents who have lost a previous child to cot death.

I would like to invite parents who have not lost a child nor suffered any major loss or trauma in the last ten years, to be involved in the study as part of the control group. For the control group I am looking for parents who are aged between 25 to 45 years, are primary caregivers of healthy two or three year old children and who also have at least one older child in the family.

Participation in this study would involve completion of three questionnaires relating to parents' caretaking activities and the usual behaviour patterns in the 2-3 year old child. The questionnaires usually take about 15 minutes to complete. Questionnaires would have numbers or code names used in place of real names but do ask for information about the child's date of birth, number of children in the family and their ages, parents' ages, occupations, and ethnic group.

Information from the questionnaires would be analysed and used for the writing of the researcher's doctoral thesis and findings may later be published in academic journals or papers. The information would be supplied by participants to the researcher on the understanding that it would be used only for this research project and publications arising from it.

If you agree to participate then completion of the questionnaires implies consent to use the information as specified above. You have the right to decline to answer any particular question and to ask any further questions about the study at any time during participation.

If you would like to be involved in the study or have any questions please feel free to contact the researcher or project supervisors at Massey University College of Education, Private Bag 11-222, Palmerston North or by phone at the numbers below:

Name of Researcher:

Ms Barbara Maclean
Doctoral candidate
Department of Health & Human Development
Massey University College of Education.
Telephone: (06) 356 9099 extension 8956

Project Supervisors:

Professor Gary Hermansson,
Department of Health & Human Development
Massey University College of Education.
Telephone: (06) 356 9099 extension 8970

Professor Joy Cullen
Department of Learning and Teaching
Massey University College of Education.
Telephone: (06) 356 9099 extension 8955

Group = SIDS

Correlations[a]

			VCS	PPS	ACTLT	ACH1T	ACH2T	ACH3T	ACH4T	ACH5T	ACH6T
Spearman's rho	VCS	Correlation Coefficient	1.000	-.454*	-.660**	-.530*	-.289	-.285	-.508*	-.491*	-.272
		Sig. (2-tailed)	.	.044	.002	.016	.216	.223	.022	.028	.245
		N	20	20	20	20	20	20	20	20	20
	PPS	Correlation Coefficient	-.454*	1.000	.228	-.050	.048	.014	.228	.152	.062
		Sig. (2-tailed)	.044	.	.333	.834	.841	.953	.334	.524	.797
		N	20	20	20	20	20	20	20	20	20
	ACTLT	Correlation Coefficient	-.660**	.228	1.000	.623**	.749**	.185	.760**	.813**	.671**
		Sig. (2-tailed)	.002	.333	.	.003	.000	.434	.000	.000	.001
		N	20	20	20	20	20	20	20	20	20
	ACH1T	Correlation Coefficient	-.530*	-.050	.623**	1.000	.369	.198	.435	.497*	.258
		Sig. (2-tailed)	.016	.834	.003	.	.110	.404	.055	.026	.273
		N	20	20	20	20	20	20	20	20	20
	ACH2T	Correlation Coefficient	-.289	.048	.749**	.369	1.000	.030	.484*	.659**	.511*
		Sig. (2-tailed)	.216	.841	.000	.110	.	.900	.031	.002	.021
		N	20	20	20	20	20	20	20	20	20
	ACH3T	Correlation Coefficient	-.285	.014	.185	.198	.030	1.000	.072	-.183	-.088
		Sig. (2-tailed)	.223	.953	.434	.404	.900	.	.764	.439	.711
		N	20	20	20	20	20	20	20	20	20
	ACH4T	Correlation Coefficient	-.508*	.228	.760**	.435	.484*	.072	1.000	.546*	.194
		Sig. (2-tailed)	.022	.334	.000	.055	.031	.764	.	.013	.411
		N	20	20	20	20	20	20	20	20	20
	ACH5T	Correlation Coefficient	-.491*	.152	.813**	.497*	.659**	-.183	.546*	1.000	.799**
		Sig. (2-tailed)	.028	.524	.000	.026	.002	.439	.013	.	.000
		N	20	20	20	20	20	20	20	20	20
	ACH6T	Correlation Coefficient	-.272	.062	.671**	.258	.511*	-.088	.194	.799**	1.000
		Sig. (2-tailed)	.245	.797	.001	.273	.021	.711	.411	.000	.
		N	20	20	20	20	20	20	20	20	20
	ACHOTHER	Correlation Coefficient	-.642**	.142	.860**	.713**	.562**	.069	.672**	.648**	.485*
		Sig. (2-tailed)	.002	.550	.000	.000	.010	.772	.001	.002	.030
		N	20	20	20	20	20	20	20	20	20
	ACHINT	Correlation Coefficient	-.633**	.109	.898**	.646**	.813**	.219	.667**	.686**	.471*
		Sig. (2-tailed)	.003	.646	.000	.002	.000	.353	.001	.001	.036
		N	20	20	20	20	20	20	20	20	20

Correlations[a]

			VCS	PPS	ACTLT	ACH1T	ACH2T	ACH3T	ACH4T	ACH5T	ACH6T
Spearman's rho	ACHEXT	Correlation Coefficient	-.445*	.251	.834**	.406	.681**	-.051	.498*	.897**	.843**
		Sig. (2-tailed)	.050	.285	.000	.075	.001	.831	.025	.000	.000
		N	20	20	20	20	20	20	20	20	20
	EIINDEX	Correlation Coefficient	.055	-.083	.266	.090	.414	-.198	.639**	.308	-.111
		Sig. (2-tailed)	.817	.726	.257	.707	.070	.403	.002	.187	.641
		N	20	20	20	20	20	20	20	20	20
	AGEMOTHE	Correlation Coefficient	.101	-.104	.244	-.221	.212	.068	.227	-.018	.235
		Sig. (2-tailed)	.672	.663	.301	.349	.369	.774	.336	.940	.318
		N	20	20	20	20	20	20	20	20	20
	NUMCHN	Correlation Coefficient	.105	-.236	-.120	-.108	.087	-.389	.049	.024	-.089
		Sig. (2-tailed)	.658	.317	.614	.651	.715	.090	.839	.919	.710
		N	20	20	20	20	20	20	20	20	20
	BIRTHORD	Correlation Coefficient	-.050	-.135	-.080	-.183	.018	-.293	.093	-.030	-.091
		Sig. (2-tailed)	.835	.570	.738	.440	.939	.210	.697	.900	.704
		N	20	20	20	20	20	20	20	20	20
	time since SIDS death	Correlation Coefficient	-.132	-.032	.429	.236	.461*	-.538*	.548*	.643**	.319
		Sig. (2-tailed)	.580	.894	.059	.316	.041	.014	.012	.002	.171
		N	20	20	20	20	20	20	20	20	20
	AGE_MTHS	Correlation Coefficient	.033	-.339	.109	.452*	.249	.135	-.110	.096	.003
		Sig. (2-tailed)	.890	.144	.647	.045	.289	.569	.644	.688	.988
		N	20	20	20	20	20	20	20	20	20

Correlations^{a}

			ACHOTHER	ACHINT	ACHEXT	EIINDEX	AGEMOTHE	NUMCHN	BIRTHORD	time since SIDS death	AGE_MTHS
Spearman's rho	VCS	Correlation Coefficient	-.642**	-.633**	-.445*	.055	.101	.105	-.050	-.132	.033
		Sig. (2-tailed)	.002	.003	.050	.817	.672	.658	.835	.580	.890
		N	20	20	20	20	20	20	20	20	20
	PPS	Correlation Coefficient	.142	.109	.251	-.083	-.104	-.236	-.135	-.032	-.339
		Sig. (2-tailed)	.550	.646	.285	.726	.663	.317	.570	.894	.144
		N	20	20	20	20	20	20	20	20	20
	ACTLT	Correlation Coefficient	.860**	.898**	.834**	.266	.244	-.120	-.080	.429	.109
		Sig. (2-tailed)	.000	.000	.000	.257	.301	.614	.738	.059	.647
		N	20	20	20	20	20	20	20	20	20
	ACH1T	Correlation Coefficient	.713**	.646**	.406	.090	-.221	-.108	-.183	.236	.452*
		Sig. (2-tailed)	.000	.002	.075	.707	.349	.651	.440	.316	.045
		N	20	20	20	20	20	20	20	20	20
	ACH2T	Correlation Coefficient	.562**	.813**	.681**	.414	.212	.087	.018	.461*	.249
		Sig. (2-tailed)	.010	.000	.001	.070	.369	.715	.939	.041	.289
		N	20	20	20	20	20	20	20	20	20
	ACH3T	Correlation Coefficient	.069	.219	-.051	-.198	.068	-.389	-.293	-.538*	.135
		Sig. (2-tailed)	.772	.353	.831	.403	.774	.090	.210	.014	.569
		N	20	20	20	20	20	20	20	20	20
	ACH4T	Correlation Coefficient	.672**	.667**	.498*	.639**	.227	.049	.093	.548*	-.110
		Sig. (2-tailed)	.001	.001	.025	.002	.336	.839	.697	.012	.644
		N	20	20	20	20	20	20	20	20	20
	ACH5T	Correlation Coefficient	.648**	.686**	.897**	.308	-.018	.024	-.030	.643**	.096
		Sig. (2-tailed)	.002	.001	.000	.187	.940	.919	.900	.002	.688
		N	20	20	20	20	20	20	20	20	20
	ACH6T	Correlation Coefficient	.485*	.471*	.843**	-.111	.235	-.089	-.091	.319	.003
		Sig. (2-tailed)	.030	.036	.000	.641	.318	.710	.704	.171	.988
		N	20	20	20	20	20	20	20	20	20
	ACHOTHER	Correlation Coefficient	1.000	.800**	.577**	.195	.195	-.064	-.085	.323	.199
		Sig. (2-tailed)	.	.000	.008	.409	.411	.788	.722	.164	.401
		N	20	20	20	20	20	20	20	20	20
	ACHINT	Correlation Coefficient	.800**	1.000	.646**	.267	.260	-.025	-.043	.365	.354
		Sig. (2-tailed)	.000	.	.002	.255	.268	.917	.858	.113	.126
		N	20	20	20	20	20	20	20	20	20

Correlations[a]

			ACHOTHER	ACHINT	ACHEXT	EIINDEX	AGEMOTHE	NUMCHN	BIRTHORD	time since SIDS death	AGE_MTHS
Spearman's rho	ACHEXT	Correlation Coefficient	.577**	.646**	1.000	.201	.076	-.033	-.024	.425	.021
		Sig. (2-tailed)	.008	.002	.	.395	.751	.891	.920	.062	.929
		N	20	20	20	20	20	20	20	20	20
	EIINDEX	Correlation Coefficient	.195	.267	.201	1.000	.051	.420	.314	.649**	.008
		Sig. (2-tailed)	.409	.255	.395	.	.830	.065	.178	.002	.973
		N	20	20	20	20	20	20	20	20	20
	AGEMOTHE	Correlation Coefficient	.195	.260	.076	.051	1.000	.105	.218	.049	-.084
		Sig. (2-tailed)	.411	.268	.751	.830	.	.658	.355	.839	.726
		N	20	20	20	20	20	20	20	20	20
	NUMCHN	Correlation Coefficient	-.064	-.025	-.033	.420	.105	1.000	.860**	.313	.152
		Sig. (2-tailed)	.788	.917	.891	.065	.658	.	.000	.179	.523
		N	20	20	20	20	20	20	20	20	20
	BIRTHORD	Correlation Coefficient	-.085	-.043	-.024	.314	.218	.860**	1.000	.244	-.205
		Sig. (2-tailed)	.722	.858	.920	.178	.355	.000	.	.300	.387
		N	20	20	20	20	20	20	20	20	20
	time since SIDS death	Correlation Coefficient	.323	.365	.425	.649**	.049	.313	.244	1.000	.030
		Sig. (2-tailed)	.164	.113	.062	.002	.839	.179	.300	.	.901
		N	20	20	20	20	20	20	20	20	20
	AGE_MTHS	Correlation Coefficient	.199	.354	.021	.008	-.084	.152	-.205	.030	1.000
		Sig. (2-tailed)	.401	.126	.929	.973	.726	.523	.387	.901	.
		N	20	20	20	20	20	20	20	20	20

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

a. Group = SIDS

Group = CONTROL

Correlations[a]

			VCS	PPS	ACTLT	ACH1T	ACH2T	ACH3T	ACH4T	ACH5T	ACH6T
Spearman's rho	VCS	Correlation Coefficient	1.000	-.236*	-.419**	-.296**	-.132	-.191	-.247*	-.255*	-.208*
		Sig. (2-tailed)	.	.018	.000	.003	.191	.057	.013	.011	.038
		N	100	100	100	100	100	100	100	100	100
	PPS	Correlation Coefficient	-.236*	1.000	.334**	.150	.059	.114	.228*	.141	.267**
		Sig. (2-tailed)	.018	.	.001	.137	.558	.259	.022	.161	.007
		N	100	100	100	100	100	100	100	100	100
	ACTLT	Correlation Coefficient	-.419**	.334**	1.000	.528**	.605**	.284**	.457**	.627**	.553**
		Sig. (2-tailed)	.000	.001	.	.000	.000	.004	.000	.000	.000
		N	100	100	100	100	100	100	100	100	100
	ACH1T	Correlation Coefficient	-.296**	.150	.528**	1.000	.312**	.345**	.324**	.176	.083
		Sig. (2-tailed)	.003	.137	.000	.	.002	.000	.001	.080	.411
		N	100	100	100	100	100	100	100	100	100
	ACH2T	Correlation Coefficient	-.132	.059	.605**	.312**	1.000	.285**	.163	.338**	.252*
		Sig. (2-tailed)	.191	.558	.000	.002	.	.004	.106	.001	.012
		N	100	100	100	100	100	100	100	100	100
	ACH3T	Correlation Coefficient	-.191	.114	.284**	.345**	.285**	1.000	.198*	.086	-.073
		Sig. (2-tailed)	.057	.259	.004	.000	.004	.	.048	.395	.469
		N	100	100	100	100	100	100	100	100	100
	ACH4T	Correlation Coefficient	-.247*	.228*	.457**	.324**	.163	.198*	1.000	.127	.074
		Sig. (2-tailed)	.013	.022	.000	.001	.106	.048	.	.209	.464
		N	100	100	100	100	100	100	100	100	100
	ACH5T	Correlation Coefficient	-.255*	.141	.627**	.176	.338**	.086	.127	1.000	.408**
		Sig. (2-tailed)	.011	.161	.000	.080	.001	.395	.209	.	.000
		N	100	100	100	100	100	100	100	100	100
	ACH6T	Correlation Coefficient	-.208*	.267**	.553**	.083	.252*	-.073	.074	.408**	1.000
		Sig. (2-tailed)	.038	.007	.000	.411	.012	.469	.464	.000	.
		N	100	100	100	100	100	100	100	100	100
	ACHOTHER	Correlation Coefficient	-.400**	.194	.841**	.467**	.495**	.124	.324**	.491**	.441**
		Sig. (2-tailed)	.000	.053	.000	.000	.000	.220	.001	.000	.000
		N	100	100	100	100	100	100	100	100	100
	ACHINT	Correlation Coefficient	-.336**	.161	.794**	.633**	.689**	.310**	.271**	.375**	.282**
		Sig. (2-tailed)	.001	.109	.000	.000	.000	.002	.006	.000	.004
		N	100	100	100	100	100	100	100	100	100

Correlations[a]

			VCS	PPS	ACTLT	ACH1T	ACH2T	ACH3T	ACH4T	ACH5T	ACH6T
Spearman's rho	ACHEXT	Correlation Coefficient	-.291**	.251*	.778**	.175	.455**	.045	.192	.700**	.691**
		Sig. (2-tailed)	.003	.012	.000	.082	.000	.657	.056	.000	.000
		N	100	100	100	100	100	100	100	100	100
	EIINDEX	Correlation Coefficient	.000	.039	.013	.102	.041	.130	.011	-.053	.011
		Sig. (2-tailed)	.997	.699	.900	.311	.683	.199	.913	.602	.916
		N	100	100	100	100	100	100	100	100	100
	AGEMOTHE	Correlation Coefficient	.033	-.006	-.079	-.149	-.120	-.056	-.160	.031	.005
		Sig. (2-tailed)	.743	.951	.434	.139	.236	.577	.112	.756	.963
		N	100	100	100	100	100	100	100	100	100
	NUMCHN	Correlation Coefficient	-.132	.014	-.016	.079	.013	.161	-.219*	.042	-.039
		Sig. (2-tailed)	.191	.889	.873	.436	.895	.111	.028	.678	.697
		N	100	100	100	100	100	100	100	100	100
	BIRTHORD	Correlation Coefficient	-.139	.019	-.046	.035	-.022	.162	-.206*	-.022	-.041
		Sig. (2-tailed)	.167	.854	.651	.728	.832	.108	.040	.825	.684
		N	100	100	100	100	100	100	100	100	100
	time since SIDS death	Correlation Coefficient	.	.	.	.	.	.	.	.	.
		Sig. (2-tailed)	.	.	.	.	.	.	.	.	.
		N	0	0	0	0	0	0	0	0	0
	AGE_MTHS	Correlation Coefficient	.100	-.308**	-.149	.056	.000	.120	-.037	-.142	-.322**
		Sig. (2-tailed)	.325	.002	.139	.581	.999	.236	.714	.159	.001
		N	100	100	100	100	100	100	100	100	100

Correlations[a]

			ACHOTHER	ACHINT	ACHEXT	EIINDEX	AGEMOTHE	NUMCHN	BIRTHORD	time since SIDS death	AGE_MTHS
Spearman's rho	VCS	Correlation Coefficient	-.400**	-.336**	-.291**	.000	.033	-.132	-.139	.	.100
		Sig. (2-tailed)	.000	.001	.003	.997	.743	.191	.167	.	.325
		N	100	100	100	100	100	100	100	0	100
	PPS	Correlation Coefficient	.194	.161	.251*	.039	-.006	.014	.019	.	-.308**
		Sig. (2-tailed)	.053	.109	.012	.699	.951	.889	.854	.	.002
		N	100	100	100	100	100	100	100	0	100
	ACTLT	Correlation Coefficient	.841**	.794**	.778**	.013	-.079	-.016	-.046	.	-.149
		Sig. (2-tailed)	.000	.000	.000	.900	.434	.873	.651	.	.139
		N	100	100	100	100	100	100	100	0	100
	ACH1T	Correlation Coefficient	.467**	.633**	.175	.102	-.149	.079	.035	.	.056
		Sig. (2-tailed)	.000	.000	.082	.311	.139	.436	.728	.	.581
		N	100	100	100	100	100	100	100	0	100
	ACH2T	Correlation Coefficient	.495**	.689**	.455**	.041	-.120	.013	-.022	.	.000
		Sig. (2-tailed)	.000	.000	.000	.683	.236	.895	.832	.	.999
		N	100	100	100	100	100	100	100	0	100
	ACH3T	Correlation Coefficient	.124	.310**	.045	.130	-.056	.161	.162	.	.120
		Sig. (2-tailed)	.220	.002	.657	.199	.577	.111	.108	.	.236
		N	100	100	100	100	100	100	100	0	100
	ACH4T	Correlation Coefficient	.324**	.271**	.192	.011	-.160	-.219*	-.206*	.	-.037
		Sig. (2-tailed)	.001	.006	.056	.913	.112	.028	.040	.	.714
		N	100	100	100	100	100	100	100	0	100
	ACH5T	Correlation Coefficient	.491**	.375**	.700**	-.053	.031	.042	-.022	.	-.142
		Sig. (2-tailed)	.000	.000	.000	.602	.756	.678	.825	.	.159
		N	100	100	100	100	100	100	100	0	100
	ACH6T	Correlation Coefficient	.441**	.282**	.691**	.011	.005	-.039	-.041	.	-.322**
		Sig. (2-tailed)	.000	.004	.000	.916	.963	.697	.684	.	.001
		N	100	100	100	100	100	100	100	0	100
	ACHOTHER	Correlation Coefficient	1.000	.700**	.570**	.021	-.069	.025	-.031	.	-.093
		Sig. (2-tailed)	.	.000	.000	.840	.494	.802	.763	.	.355
		N	100	100	100	100	100	100	100	0	100
	ACHINT	Correlation Coefficient	.700**	1.000	.448**	.044	-.096	.132	.098	.	-.002
		Sig. (2-tailed)	.000	.	.000	.667	.344	.189	.330	.	.985
		N	100	100	100	100	100	100	100	0	100

Correlations[a]

			ACHOTHER	ACHINT	ACHEXT	EIINDEX	AGEMOTHE	NUMCHN	BIRTHORD	time since SIDS death	AGE_MTHS
Spearman's rho	ACHEXT	Correlation Coefficient	.570**	.448**	1.000	-.075	.002	-.065	-.106	.	-.201*
		Sig. (2-tailed)	.000	.000	.	.458	.987	.522	.294	.	.045
		N	100	100	100	100	100	100	100	0	100
	EIINDEX	Correlation Coefficient	.021	.044	-.075	1.000	-.291**	-.022	.051	.	-.020
		Sig. (2-tailed)	.840	.667	.458	.	.003	.825	.614	.	.847
		N	100	100	100	100	100	100	100	0	100
	AGEMOTHE	Correlation Coefficient	-.069	-.096	.002	-.291**	1.000	.175	.260**	.	.127
		Sig. (2-tailed)	.494	.344	.987	.003	.	.082	.009	.	.209
		N	100	100	100	100	100	100	100	0	100
	NUMCHN	Correlation Coefficient	.025	.132	-.065	-.022	.175	1.000	.777**	.	.242*
		Sig. (2-tailed)	.802	.189	.522	.825	.082	.	.000	.	.015
		N	100	100	100	100	100	100	100	0	100
	BIRTHORD	Correlation Coefficient	-.031	.098	-.106	.051	.260**	.777**	1.000	.	.198*
		Sig. (2-tailed)	.763	.330	.294	.614	.009	.000	.	.	.049
		N	100	100	100	100	100	100	100	0	100
	time since SIDS death	Correlation Coefficient	.	.	.	.	.	.	.	.	.
		Sig. (2-tailed)	.	.	.	.	.	.	.	.	.
		N	0	0	0	0	0	0	0	0	0
	AGE_MTHS	Correlation Coefficient	-.093	-.002	-.201*	-.020	.127	.242*	.198*	.	1.000
		Sig. (2-tailed)	.355	.985	.045	.847	.209	.015	.049	.	.
		N	100	100	100	100	100	100	100	0	100

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

a. Group = CONTROL

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