1981

The Child's Adjustment and Development Following the Death of a Parent: A Critical Analysis of the Research and its Implications

Ellen B. Berlinsky
University of Rhode Island

Follow this and additional works at: https://digitalcommons.uri.edu/oa_diss

Recommended Citation

Berlinsky, Ellen B., "The Child's Adjustment and Development Following the Death of a Parent: A Critical Analysis of the Research and its Implications" (1981). *Open Access Dissertations*. Paper 1056.
https://digitalcommons.uri.edu/oa_diss/1056

This Dissertation is brought to you for free and open access by DigitalCommons@URI. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu.

The Child's Adjustment and Development
Following the Death of a Parent

A Critical Analysis of the Research
and its Implications

by

Ellen B. Berlinsky

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of

Doctor of Philosophy

in

Psychology

University of Rhode Island

1981

Abstract

A model for evaluating studies was developed, based on standards for methodological adequacy of empirical investigations and critiques of reviewers of the parental bereavement literature, in order to determine whether or not there are immediate or long term differences between individuals who experience the death of a parent during childhood and those who do not.* The assessment model which included a five point scale for rating studies, was applied to research conducted primarily from 1960-1980. Much of the research was found to be methodologically flawed, with fewer than half the studies judged to be minimally acceptable. The methodologically adequate studies did yield credible evidence indicating the existence of differences between subjects who were parentally bereaved and those from other family backgrounds. Research on emotional adjustment, including behavior disorders, delinquency and sex role behavior; personality, and cognitive performance indicated that these areas of functioning may be most susceptible to change after a parent's death. Consistent data were found linking constricted, non-assertive, traditionally feminine behavior with parental bereavement. Less consistent associations with death of a parent were also found for general emotional maladjustment, suicidal behavior, psychosis, rates of delinquency and criminal

activity and deficits or superior performance in academic, cognitive, and creative pursuits. Simple causal relationships between death of a parent and the child's subsequent adjustment and development were not demonstrated, however. Characteristics of the deceased parent, the loss process, the family and the environment, and child-specific variables were shown to be involved in the child's behavior. Prediction of a child's vulnerability to the potentially adverse consequences of parental bereavement would therefore depend on consideration of many different factors. The possibility that a parent's death could benefit a child under certain circumstances was also considered. The implications of the findings for further research, prevention, and treatment were explored.

Acknowledgement

A number of people deserve thanks for their assistance in the completion of this dissertation. Each of my committee members, Marge Bumpus, Ira Gross, and Peter Merenda made distinct contributions to the conceptualization and implementation of this project and provided guidance and support through all phases of my graduate school career. My major professor, Henry Biller lent time, creative energy, and expertise. His overwhelming enthusiasm helped me to maintain mine. Lynne and Josh Bell met an unreasonable deadline in producing a high quality final manuscript. Finally, I am ever grateful to my husband, Gary for his help, patience, understanding and continuing inspiration.

EBB

TABLE OF CONTENTS

Chapter	page
Abstract	
Acknowledgement	iv
List of Figures and Tables	
Part I. Introduction	1
Part II. Methodology	14
1. Methodological issues	14
2. Procedures for data assessment	36
Part III. Analysis of the literature	37
3. Behaviors observed subsequent to the death of a parent	
Immediate reactions of children to the death of a parent	37
Emotional Disturbance	50
Personality	75
Sex role, sexual, and related interpersonal functioning	83
Conscience development, juvenile delinquency, and criminal behavior	95
Cognitive, academic, scientific, and creative achievement	104
Summary of research of behaviors observed subsequent to the death of a parent	112

TABLE OF CONTENTS (continued)

	page
4. Family and situational variables	
related to the death of a parent	118
Sex of the deceased parent	119
Death of the father	119
Death of the mother	137
Reason for the parent's absence	146
Differences in the experience of the child with death and divorce	146
Reason for death	157
Other family and situational variables	162
Summary of research on family and situational variables related to the death of a parent	175
5. Characteristics of the child related to behavior subsequent to parental bereavement	177
Development of conceptions of death	178
Child's age at the time of parental bereavement	185

TABLE OF CONTENTS (continued)

	page
Sex of the child	192
Females	192
Males	200
Summary of research on character- istics of the child related to behavior following a parent's death	206
6. Summary of the literature analysis	207
Part IV. Implications of the Analysis of the literature	212
7. Research considerations	212
8. Treatment and Prevention	217
Part V. References	222

List of figures and tables

	page
Figure 1: Preliminary general model of factors influencing development and adjustment subsequent to a parent's death	5
Figure 2: Predictive model of factors influencing a child's adjustment and development subsequent to a parent's death.	213
Table 1: Research on behaviors and conditions occurring subsequent to a parent's death, by topic.	7
Table 2: Journals searched in the literature review.	28
Table 3: Model for evaluating the research.	32
Table 4: Summary of literature on immediate reactions to a parent's death.	42
Table 5: Methodological data and adequacy ratings on empirical studies on emotional disturbance and parent death in childhood.	54

	page
Table 6: Ratings of studies on emotional disturbance by outcome.	63
Table 7: Ratings of studies on emotional disturbance by disorder and outcome.	68
Table 8: Methodological data and adequacy ratings of empirical studies on personality variable and parent death during childhood.	77
Table 9: Methodological data and adequacy ratings on empirical studies of sexual identity, behavior and relationships and parent death during childhood.	84
Table 10: Ratings of studies on sexual, sex role, and heterosexual interpersonal functioning by topic and outcome.	88
Table 11: Methodological data and adequacy ratings on empirical studies of associations between early parent death and consequent development, juvenile delinquency, and criminal behavior.	97

Table 12: Methodological data and adequacy ratings of research relating to childhood parental bereavement to cognitive, academic, scientific and creative achievement.	105
Table 13: Ratings and outcomes of studies on behaviors observed subsequent to the death of a parent.	113
Table 14: Ratings and outcomes of studies on behaviors observed subsequent to the death of a parent, corrected for duplications.	114
Table 15: Methodological data and ratings on studies of father loss.	121
Table 16: Ratings of studies on father death by topic and outcome.	129
Table 17: Methodological data and ratings on studies of death of the mother.	138
Table 18: Ratings of studies of maternal bereavement by topic and outcome.	144

Table 19: Methodological data and ratings of research comparing children of divorce and bereavement.	150
Table 20: Methodological and outcome data on research on the development of the conception of death.	180
Table 21: Ratings and outcomes on studies specifying age at parent loss.	187
Table 22: Ratings and outcomes on studies on females.	192
Table 23: Ratings and outcome data on studies of parentally bereaved males.	201

PART I. INTRODUCTION

The loss of a parent through death is an experience which has touched and will continue to touch the lives of thousands of children in this country. In 1978, three and one half percent of the under eighteen year old population had, at some point during childhood, lost a father through death. In the same year, one and four tenths of the child population had been affected by the death of a mother.

(U.S. Social Security Administration Statistics, 1979).

What this experience means in terms of the affected children's future lives has been the source of a great deal of speculation and research. It has been the concern of parents who anticipate or have undergone the loss of a spouse, and of professionals who deal with children having had that experience. Such concerned adults wonder how best to treat parentally bereaved children and how to minimize the anticipated negative consequences of having had a parent die. For researchers, the general question has been: How does the death of a parent affect a child's future adjustment and development; do these children in fact differ from those families in which a parent has not died? Preliminary answers to these concerns, derived from

popular wisdom as well as research, have influenced beliefs about and treatment of children who have lost a parent through death.

There is an assumption among mental health practitioners as well as the general public that experiencing the death of a parent during childhood inevitably influences an individual's future adjustment and development, and that the effects are negative (Herzog and Sudia, 1973). Attempts have been made to test this assumption but the validity of research efforts is in question. A survey of the varied literature on the subject has not revealed the existence of a source which systematically summarizes and critiques the research. There has been no comprehensive review which establishes whether in fact, those who have lost a parent do differ from those who have not had this experience. The implications of the prevalence of this unverified assumption are extensive. Accepted views on the consequences of early parent death may well influence the expectations and behaviors of others with regard to bereaved children. Decisions about educational and therapeutic programs may be made on the basis of such expectations. It is possible that these changes in the treatment of children who have lost a parent through death and not the actual parent loss, may affect behavior. Long or short term depression might be expected, for example, and concerned adults could conse-

quently insist on the expression of emotions consistent with depression. Children who are not depressed but are treated in this way could well develop feelings of guilt and negative self worth which are in fact symptoms of depression.

A preliminary step in exploring the adjustment and development of children subsequent to a parent's death is to examine the characteristics of such an experience. Loss of a parent occurs within a personal, family, and social context, and differences in variables at each level would be expected to affect the way in which an individual reacts. Such factors as the way in which the death occurs (sudden or prolonged illness, suicide, homicide, war-related, or accident), the parent's attitude towards his/her death, age, sex, and relationship with the child, the child's preparation for, and involvement in the mourning process, and changes in the behavior and expectations of others, in family structure, income level and residence need to be considered in any analysis of a child's subsequent behaviors. Family characteristics before and after the death, such as family relationships and adjustments, family structure (number, sexes and ordinal position of children, presence of extended family members), socioeconomic status, cultural background and ethnicity, and religious and ethical belief system also need to be taken into account. Finally, consideration

must be given to prior and subsequent child-specific variables such as age, sex, temperament, cognitive state of development, understanding of the concept of death, academic achievement, and status, creativity and special abilities or disabilities, physical development and health, personality, affective adjustment and social behavior. A schematic representation of this process is shown in Figure 1.

In studying the conditions and behaviors which follow a parent's death, it would seem important to consider these antecedent and process variables. To treat persons having lost a parent as a homogeneous group is to ignore complexities of the experience which have been shown to influence outcome (Herzog and Sudia, 1973; Biller, 1981; Hamilton, 1977; Gregory, 1958). One example of a study which demonstrates the involvement of multiple variables on children's behavior subsequent to a parent's death is that of Shepherd and Barraclough (1976). These investigators, using a longitudinal format, showed that reactions of children to a parent's suicide varied widely although, as a group, they functioned less adequately in socio-emotional behavior than did controls. Those whose behavior was judged to be disturbed were more likely to have had parents who had had marital problems, involvement in criminal activity, and/or emotional difficulties. The disturbed children were also more likely to have changed

Figure 1: Preliminary general model of factors
influencing development and adjustment
subsequent to a parent's death

residences after their parent's death. Clearly, had the researchers examined the subsequent behavior of the bereaved subjects without investigating background data and later changes in the environment, the resulting information -- that children of suicide victims displayed disturbed behavior -- would have been misleading. Unfortunately, the studies which have been conducted in this area have varied widely with respect to the degree to which they account for and attempt to analyze the significance of variables specific to the child and his/her environment beyond the absence of a parent due to death.

Studies on the conditions and behaviors following the death of a parent have been numerous and diverse in content and scope. Differences between persons who have had a parent die during childhood and those whose childhoods have not been marked by such an experience have been found with respect to psychopathology, personality, juvenile delinquency, criminal behavior, sex role and sexual behavior, marital adjustment, academic and cognitive performance, creativity and genius. A list of studies, theoretical articles, and literature reviews on behaviors and conditions occurring subsequent to a parent's death differentiated by topic, is presented in Table 1.

[Most of these studies have investigated the extent to which problems or deficiencies are associated with the death of a parent.] It can be speculated that the emphasis

TABLE 1: Research on behaviors and conditions
occurring subsequent to a parent's death, by topic.

A) Emotional Disturbance

Abrahams and Whitlock, 1969
Adam, 1973
Archibald, et al., 1962
Barry and Lindemann, 1960
Beck et al., 1963
Bendickson and Fulton, 1975
Birtchnell, 1966
Birtchnell, 1970a
Birtchnell, 1970b
Birtchnell, 1972
Birtchnell, 1975
Brill and Liston, 1966
Brown, 1961
Brown, 1966
Brown and Harris, 1978
Brown et al., 1977
Cain and Fast, 1965
Caplan and Douglas, 1969
Crook and Eliot, 1980
Crook and Raskin, 1975
Dennehy, 1966
Dietrich, 1979
Dorpat, 1972
Earle and Earle, 1959
Epstein et al., 1975
Felner et al., 1975
Forest et al., 1965
Gay and Tongue, 1967
Granville-Grossman, 1966
Greer, 1964
Greer, 1966
Gregory, 1958
Gregory, 1966
Heckel, 1963
Herzog and Sudia, 1973
Hilgard and Newman, 1963
Hill, 1969
Hill and Price, 1967
Hopkinson and Reed, 1966
Huttunen and Niskonen, 1978
Ilan, 1973
Jacobson et al., 1975
Kirkpatrick et al., 1965
Krupp, 1972
Lester and Beck, 1976

TABLE 1 continued

Martindale, 1972
Monarty, 1967
Munro, 1966
Munro and Griffiths, 1968
Nagaraja, 1977
Pitts et al., 1965
Roy, 1978
Roy, 1979
Seligman and Gleser, 1974
Sethi, 1964
Trunnell, 1968
Tuckman and Regan, 1966
Walton, 1958
Warren
Wilson et al., 1967

B) Personality

Baggett, 1967
Biller, 1971
Biller, 1972
Birtchnell, 1975
Blueskin, 1978
Haworth, 1964
Hetherington, 1972
Hetherington and Parke, 1979
Illsley and Thompson, 1961
Parish and Copeland, 1980
Santrock and Wohlford, 1970

C) Immediate Reactions

Cain and Fast, 1965
Freud, 1957
Freud, 1959
Freud, 1961
Furman, 1964
Furman, 1973
Goldberg, 1973
Kirkpatrick et al., 1965
Krupp, 1972
Lindemann, 1944
Moss and Moss, 1973
Nagaraja, 1977
Paul and Grosser, 1965
Rudestam, 1977
Silverman and Englander, 1975

TABLE 1 continued

E) Juvenile Delinquency and Criminal Behavior

Brown, 1961
Brown and Eppos, 1966
Earle and Earle, 1959
Epstein et al., 1975
Fulton and Markusen, 1971
Glueck and Glueck, 1950
Herzog and Sudia, 1973
Huttenan and Niskanen, 1978
Koller, 1970
Monahan, 1957

F) Sex Role and Sexual Behavior

Archibald et al., 1962
Biller, 1971
Clarke, 1961
Herzog and Sudia, 1973
Hetherington, 1972
Hetherington and Deur, 1971
Lamb and Lamb, 1976
Martindale, 1972
Moran and Abe, 1969

G) Marital Adjustment

Biller, 1971
Earle and Earle, 1959
Fulton and Markusen, 1971
Gay and Tongue, 1967
Jacobson and Ryder, 1969

H) Creativity and Genius

Albert, 1971
Cox, 1926
Eisenstadt, 1978
Hilgard et al., 1960
Martindale, 1972
Roe, 1953

TABLE 1 continued

I) Academic and Cognitive Performance

Biller, 1971
Herzog and Sudia, 1973
Hetherington and Deur, 1971
Kirkpatrick et al., 1965
Lifshitz, 1976
Santrock, 1972
Shinn, 1976

on research exploring the extent of negative outcomes is due primarily to the expectations of researchers in this regard. Consideration of the possibility that losing a parent through death during childhood may be associated with positive consequences is not a popular notion. Such a finding would seem to deny much of what is now believed about child development. [Research into family relationships might well produce data showing that a child is better off after the death of a physically or sexually abusive parent, for example.] *not likely*

A conceptualization different from that held by many researchers in the field would allow for the possibility that a parent's death could be related to either favorable or adverse consequences. A parent's death could, for example, lead a child to feel deprived and to search throughout his/her life for someone to take responsibility for and care for him or her. The sympathetic behaviors and expectations of others towards the child could well encourage such behaviors and attitudes which, in their most serious form, would be associated with chronic depression. On the other hand, a child who has lost a parent may have the same feelings of affective deprivation and yet channel them differently. S/he may come to feel that s/he must be self reliant and that s/he can expect from life nothing for which s/he does not work. Such an individual could become an energetic achiever whose

attitudes and behaviors differ significantly from those of the person who becomes chronically depressed after a parent's death.

Background and process variables specific to the child and his/her environment would be associated with the differences in outcome hypothetically described above. Also needing investigation are areas of functioning which have been neglected by researchers in the field and which could substantiate or cast doubt upon the proposed conceptualization. Some studies have been conducted to examine the possible association between death of a parent and creativity (Eisenstadt, 1978; Cos, 1926; Roe, 1953; Albert, 1971; Hilgard et al., 1960; and Martindale, 1972). Other areas of interest would be career choices and patterns, parenting behavior, the development of special skills and talents as well as the more positive or neutral aspects of affective issues which have not been fully explored. Maturity, assertiveness, and extroversion/introversion are examples of the latter.

The purpose of the present project is to organize the existing literature on the child's adjustment and development following the death of a parent in order: (1) to determine whether or not there are immediate or long term differences between individuals who experience the death of a parent during childhood and those who do not, and, if differences exist, utilizing a multidimensional framework,

to identify the nature and sources of these differences, and (2) to develop a conceptual model for studying and understanding individuals undergoing or having undergone the experience. Primary emphasis will be on work relating to children who lose one parent and who are raised within a family context. (Studies of orphans and children raised in institutions will not be a major focus). Material on the correlates of parent death and related subjects such as the development of the concept of death in children and prevention and treatment programs will be gathered, and analyzed. Empirical studies will be evaluated as to their methodological adequacy and findings from acceptable studies will be examined in relation to explanations proposed by theorists. An attempt will be made to synthesize relevant information and to identify problems and gaps in the literature. Finally, there will be a discussion of findings with respect to their implications for further research, prevention, and treatment.

PART II. METHODOLOGY

A major task involved in analyzing the literature on the child's adjustment and development following the death of a parent is to evaluate the methodological adequacy of the studies which have been conducted. Clearly, conclusions about the correlates and consequences of experiencing the early loss of a parent through death can be drawn only from studies meeting certain minimum procedural and statistical standards. The purpose of this section is:

(1) to identify and describe the methodological flaws characteristic of some of the research in the field and
(2) to present the model for evaluating this research constructed for use in the critical analysis currently being undertaken. The model will be utilized in critically analyzing the research. Other procedural aspects of this project will also be explained.

1. Methodological Issues

The numerous reviewers of literature in the area of early parental bereavement have identified a number of aspects of the research which lead to questions about the validity and generalizability of results of the data gathered. At the most general level, Epstein et al.

(1975) noted that much of the literature is 'case historical and theoretical in nature and scope.' While research in any area of inquiry begins with observations on limited samples, and with explanations hypothesized in order to understand what has been observed, such work is limited in its generalizability. Other than studies concerned with immediate reactions to death, researchers appear to have recognized the need to progress beyond these limitations and a great deal of empirical research has been conducted, particularly over the last twenty years. Unfortunately, this empirical orientation has led to research which in some cases, due to flawed methodology, is as limited in its generalizability as has been work based on case studies.

A major problem characteristic of many studies has been the tendency to treat those who have lost a parent through death during childhood as if they were a homogeneous group (Biller, 1981; Gregory, 1958; Hamilton, 1977, Herzog and Sudia, 1973). Samples have tended to be poorly defined, without consideration of socioeconomic status, temperament, family structure, sex or age at the time of the parental loss and at assessment (Biller, 1981; Epstein et al., 1975; Hilgard and Newman, 1963; Shinn, 1976). All of these variables are related to differences in behavior, and therefore they need to be accounted for in any interpretation of results. In view of the body of

theoretical literature related to age specific-affective needs of children in their relationships with parents (as for example, Bowlby, 1960), the failure to account for age at the time of a parent's death, which may result in the grouping of individuals having lost a parent in infancy and in adolescence is particularly surprising. Similarly, the research showing the differential behavior towards and effects of parents on their sons and daughters (Johnson, 1963) would point to the importance of specifying and accounting for the sex of both the subject and his/her deceased parent. Nevertheless, numerous studies not only fail to match subjects on age, sex and other relevant variables mentioned above, but also fail to provide information on them for use in interpreting results.

Individuals who have lost a parent also differ with respect to the characteristics of the loss experience and the changes that take place in their lives subsequent to the loss. The difficulty in interpreting data resulting from research in which subjects who have experienced various types of parental losses and separations has been pointed out by numerous reviewers (Biller, 1981; Herzog and Sudia, 1963; Hilgard and Newman, 1963; Shinn, 1976; Wootton, 1959). As Shinn has noted, different types of parent loss can represent quite dissimilar affective experiences. Loss through death may be traumatic but is usually not socially stigmatized while a child who loses a

parent through divorce, separation, illegitimacy, or desertion, may face both personal and family trauma and the negative reactions of others due to social stigma. The way in which a parent's death occurred: suicide, homicide, war related, accidental, or sudden or prolonged illness, may also have quite disparate effects on surviving children. The reactions of other family members also may be expected to differ by reason for loss. The attitude and behavior of the remaining parent towards his/her former spouse and children is apt to vary significantly according to the reason for the loss. These reactions, in turn, would undoubtedly affect their children's behavior. Thus, to consider childhood loss of a parent a single dimension by which to group subjects is a practice which could affect research outcomes to a considerable extent.

Characteristics of the deceased parent may also be related to the subsequent adjustment and development of their children. Sex of the parent who dies may affect the type and degree of behavior change seen in children. As mothers and fathers typically play different roles and fill different needs in the lives of their children, loss of a mother or a father would not be expected to have identical outcomes. Many studies ignore this probability, however, and treat children of deceased parents as a homogeneous group (Hilgard and Newman, 1963).

Even less frequently accounted for has been the nature of the relationship the child and parent have had. While an inherent assumption of much research has been that loss of a parent will be a negative experience to be worked through, Hetherington and Deur (1971) have suggested that a parent's absence could be positive if he/she was a major source of conflict in the family. Accounting for the prior relationship to the child and his/her now deceased parent therefore would be important to any interpretations made of research in the field.

Changes in the family living situation occurring after the death of a parent have great potential for contributing to the child's future adjustment and development. These changes may be directly or indirectly related to the loss, or related only in time sequence. It is the view of many researchers that these changes have as much if not more relevance to the child's subsequent behavior as the parent's death does. (Biller, 1981; Hamilton, 1977; Herzog and Sudia, 1973; Hetherington and Deur, 1971; Pedersen, 1976, Shill, 1976). Among the family circumstances which may be altered following a parent's death are socioeconomic status, emotional and physical availability of the remaining parent due to increased responsibilities, stress level within the family, employment status of the remaining parent, functional roles played by other family members (siblings, grandparents, other

extended family), and the introduction of parent substitutes either as new spouse for the remaining parent or paid caretaker for the children and/or home. Research in which there is matching on or accounting for these variables shows that they do indeed make a difference to the child's subsequent functioning, as will be shown. It is therefore unfortunate that most studies ignore differences in subjects on these variables.

Other aspects of sample selection have also been criticized by researchers in the field. Epstein et al. (1975), Hilgard and Newman (1963), and Shinn (1976) argued that samples in many studies are too small and/or too restricted to lead to meaningful conclusions. They presented the overuse of clinic, psychiatric hospital, and other emotionally disturbed or behaviorally disordered populations, with subsequent generalizations to wider groups as a major problem in the research accumulated to date. As Illsley and Thompson (1961) have stated, "Most of our knowledge... derives from the experience of pathological groups and their controls. Closely matched controls for a series of delinquent, promiscuous, or psychotic individuals are unlikely to be a true cross section of the population." Findings from such samples would be naturally biased towards results showing some form of maladjustment in subjects, whether "normal" or disturbed subjects are used as comparison groups. The

problem becomes methodological when unwarranted generalizations to other groups are made. Even if researchers had refrained from such practices, studies of more representative populations would be called for so that a more balanced view of individuals whose childhood experiences have included the death of a parent would be reflected. In order to fully understand the effects of a parent's death, the reactions of subjects showing a variety of characteristics prior to the death (superior, average, and deficient intelligence, and academic performance, emotional disturbance and adequate adjustment) must be assessed.

Closely related to the issue of sample selection and makeup is the presence and characteristics of comparison groups. The use of comparison groups is basic to scientific research as a means of putting findings into perspective. Outcomes become much more meaningful when differences between a group having undergone a specific treatment or possessing specific characteristics (as having lost a parent during childhood) and groups similar except on these variables can be shown. If matching on all variables but the ones being examined is carried out, and significant differences between the groups can be demonstrated, attribution of the differences to the treatment or special group characteristic can be made with a fair degree of certainty.

Much of the more recent research on the correlates of parent death during childhood do utilize comparison groups of some sort. Those which do not, some of which are case histories rather than empirically oriented studies, must be viewed as descriptive accounts providing hypotheses for further investigation. Where generalizations beyond the sample being examined are made, without the benefit of a group for comparison, conclusions must be questioned.

A more prevalent problem in the literature is the failure to equate groups on significant variables so that valid comparisons can be made. Ideally, matching of groups should be done on all of the variables discussed above other than parent death during childhood. If matching is not carried out, differences between groups would be expected on several variables. In a sample of children, for example, those whose parents have died would be expected to be older than others, as their parents would be older (Granville-Grossman, 1968; Hilgard and Newman, 1963). (Older people are more likely to die). As other changes in behavior are related to age, matching would prove important. Similarly, those who have lost a parent, particularly a father, are more likely to be of low socioeconomic status and to be a minority group member before the death. Decreases in family income level also frequently follow a parent's death. These characteristics, too, are related to differences in functioning in a

number of areas, and therefore need to be considered in selection of subjects for comparison groups (Hilgard and Newman, 1963; Hetherington and Deur, 1971; Biller, 1981; Pitts et al., 1965; Gregory, 1958; Gregory, 1965; Epstein et al., 1975; Shinn, 1976).

Some researchers have utilized census or life insurance table statistics on normal bereavement rates rather than selecting actual subjects as controls. Two difficulties have been characteristic of this procedure. One has been the failure to adjust for secular trends in bereavement. The proportion of children experiencing the death of a parent has decreased since 1910 (Hilgard and Epstein, 1963), and, at least with fathers, especially since 1940 (Herzog and Sudia, 1973). Comparisons made have often not reflected these changes. The other problem has been the practice of comparing subjects with groups which are dissimilar on some of the demographic data discussed above.

A problem specific to research on emotionally disturbed populations has been in identifying appropriate groups with which to compare these subjects. A number of studies have compared psychiatric inpatients assigned different diagnoses with one another. Such a procedure presents major difficulties in interpretation due to the lack of specificity regarding diagnostic criteria. If it were assumed that one of the major psychiatric classifica-

tion systems were used, the validity and reliability of the distinctions made (Quay, 1979) could be affected to a large extent. Also, knowledge of a childhood marked by the death of a parent could well affect assignment of the diagnosis, as depression is often expected of individuals with such histories. Since gathering of family background data is a typical prerequisite to psychiatric diagnosis, classification of persons having lost a parent during childhood could be affected to a large extent. Therefore it would be difficult to determine in what ways the groups being compared are similar and different. Also, if no differences in rates of childhood bereavement of parents were found between groups, the possible association between emotional disturbance and parent loss could not be determined. Utilizing 'normal' subjects would not resolve the problem, however, as major differences in the environments of those who are hospitalized and those who are not would exist. Such factors as restriction of mobility and the ability to determine the course of one's day, lack of privacy assumption or the 'patient' role, and anxiety about treatment procedures and the outcome of one's illness could all affect an individual's attitudes and behaviors, and therefore research outcomes.

Studies comparing medical hospital patients with psychiatric inpatients would seem to come closer to meeting the requirements for adequate controls. Both

groups of subjects would be similar on environmental variables which might affect responses. However, this procedure has been criticized by Dennehy (1966) who asserted that general hospital patients are not adequate controls as studies have shown that a large proportion of such individuals have non-organic psychiatric disorders.

There would appear to be several reasonable methods of addressing problems in matching emotionally disturbed subjects with controls. If the characteristics of the emotional disturbances of inpatients were operationally defined, different groups of patients could be distinguished and compared. Self report or psychometrist-administered diagnostic instruments or observation and rating systems of proven reliability could be utilized to assess patients' characteristics. The same instruments could be used to screen medical hospital patients to determine whether they show signs of emotional disturbance and therefore would be inadequate controls. Munro's procedure (1966) of screening medical hospital controls on the basis of reported histories of affective disorders was one attempt to select appropriate controls for psychiatric patients. Use of a well-tested assessment tool would have improved upon his technique. Whether psychiatric or medical hospital patients are employed as controls, the additional use of a non-hospital control group or comparison of findings with normal bereavement rates obtained

from census findings would be useful. In this way, differences between the two special groups and the general population could be determined, enabling appropriate generalizations to be made.

Were subject and control issues adequately addressed in the literature, a major problem would still remain regarding measurement tools that have been utilized. Two basic procedures have been adopted in studies of the factors associated with death of a parent during childhood. One has been to match subjects who have lost a parent early with controls, and to assess the two groups on such factors as intelligence, academic achievement, personality, social skills, and emotional disturbance. The other technique has been to examine the family backgrounds of subjects who have already been identified as special in some way. Studies of geniuses and psychiatric patients have been conducted using this method of investigation. With both procedures, the use of inadequate or untested measurement tools to assess performance or identify characteristics such as emotional disturbance have led to doubts as to the meaning of the research. Basic to any scientific research is the use of instruments for evaluation which meet minimum standards of reliability and validity. Yet, as will be seen in the critical analysis to be conducted, many studies in this field have utilized informal means of assessment. Other studies have

relied on psychiatric diagnoses as a way of differentiating among subjects. The question which can be raised about the reliability and validity of the latter technique have been presented in the discussion of appropriate controls for emotionally disturbed populations. The determination of adequacy in measurement tools has been a difficult task in the behavioral sciences. Certainly untested instruments or those whose reliability or validity has been shown to be questionable should not be utilized, and on these counts a number of studies on the correlates of early parent death can be faulted.

A final general criticism must be directed at the fallacies in deduction made in many studies. Much of the research in this area is correlational, examining the variables which are associated with the experience of having a parent die during childhood. Unfortunately, researchers have gone beyond the data by asserting etiology based on findings of association, thereby ignoring possible intervening variables (Gregory, 1958; Epstein et al., 1975; Crook and Eliot, 1980). The use of inferential statistics and of longitudinal approaches to research which come closer to suggesting cause and effect relationships have not been used to any large extent. Thus, the numerous generalizations which have been made and are often logical from an intuitive perspective, can not be accepted without question based on the empirical data offered as substantiation for them.

2. Procedures for Data Assessment

In the current critical analysis of the research on the child's adjustment and development following the death of a parent, an attempt will be made to incorporate the criticisms of the literature described above. A literature search of journals and books published in English within the disciplines of psychology, sociology, education, and medicine was conducted, utilizing relevant abstracts and research retrieval systems. Forty-two journals, twenty-four texts, and five papers presented at professional conferences were located. Table 2 contains a list of journals utilized. Over two hundred sources are included in the review. Approximately one half are empirical studies examining the relationship between death of a parent during childhood and an individual's subsequent adjustment and development. The other sources include literature reviews on some aspect of this topic, studies on outcomes of preventative mental health programs, research on the way in which the concept of death is acquired in children, and other scientific investigations relevant to the topics discussed. In addition, works which are not empirically oriented such as case studies, theoretical papers, and program descriptions will be included in the analysis. Primarily research conducted over the past twenty years was reviewed, as the more recent emphasis on methodological issues in the behavioral

TABLE 2: Journals searched in the literature review

American Journal of Orthopsychiatry
 American Journal of Psychiatry
 American Journal of Psychology
 American Journal of Public Health
 American Psychologist
 Annual Review of Psychology
 Archives of General Psychiatry
 Archives of the Foundation of Thanatology
 British Journal of Medical Psychology
 British Journal of Psychiatry
 British Journal of Social Work
 Child Development
 Child Psychiatry and Human Development
 Child Psychiatry Quarterly
 Community Mental Health Journal
 Comprehensive Psychiatry
 Contemporary Psychoanalysis
 Death Education
 Developmental Psychology
 Family Coordinator
 Journal of Child Psychology and Psychiatry
 Journal of Child Psychology, Psychiatry and Allied
 Disciplines
 Journal of Consulting and Clerical Psychology
 Journal of Genetic Psychology
 Journal of Genetics and Psychology
 Journal of Mental Science
 Journal of Nervous and Mental Disease
 Journal of Projective Techniques
 Journal of School Health
 Journal of School Psychology
 Journal of the American Psychoanalytic Association
 Marriage and Family Living
 Mental Hygiene
 Omega
 Pediatrics
 Psychological Bulletin
 Psychological Medicine
 Psychological Reports
 Psychology in the Schools
 Psychosomatic Medicine
 Social Casework
 Social Forces
 Social Psychiatry
 Sociological Review
 Young Children

sciences was expected to yield more statistically sound and reliable studies. Selected earlier studies were also chosen due to their unique approach or content.

An attempt has been made to evaluate the methodological adequacy of the research. The two main bodies of empirical research, which deal with the development of the concept of death in children, and the correlates of experiencing death of a parent during childhood, are assessed. Criteria for evaluation are based on Maher's (1978) guidelines and on the critiques by the authors discussed above.

The research on development of the concept of death which makes up a small proportion of the studies to be analyzed (fourteen of one hundred) and is somewhat peripheral to the major thrust of this review, has been rated on the following dimensions:

1. Were subjects matched or stratified on age, sex, and SES?
2. How was "development" of the concept determined? Did the study use a cross sectional or longitudinal approach? If a cross sectional approach was used, were subjects in different age groups matched on sex and SES?
3. What measurement instruments were utilized? Were these tools documented as valid and reliable?

4. Were the data statistically analyzed? If so, were the techniques used appropriate to the data?

As these studies are less complex, and require analysis on fewer dimensions than do the parent death studies, and the criteria on which they are to be judged are all essential to their methodological integrity, the studies have been rated as either adequate or inadequate. Finer distinctions were necessary for the remaining studies.

The research on the correlates of experiencing death of a parent during childhood has been judged in accordance with the following questions:

1. Was the type of parental loss specified?
2. Was a comparison group specified?
3. Were subjects and controls matched on age, sex, and SES?
4. Was the subject group homogeneous on dimensions such as age, age at time of loss, SES, or if not, were these variables accounted for in the interpretation of results?
5. Were characteristics of the deceased parent specified?
6. What measurement instruments were utilized? Have these tools been documented as valid and reliable?
7. Were the data statistically analyzed? If so, were the techniques used appropriate to the data?

8. Were characteristics of family structure and living situations prior to and subsequent to the parent loss detailed?
9. Was information provided regarding the time at which subjects were assessed for research purposes relative to the time of the parent's death? Was this information considered in the analysis of the data?

Each study was then assigned to a category based on its relative level of methodological adequacy. Both the number and type of methodological strengths and weaknesses were considered in determining the characteristics of each level. Those procedures which are inconsistent with standard methods of scientific investigation were considered most important, while techniques or omissions which tended to cloud interpretation were judged as of relatively less importance. The model of evaluation is presented in Table 3.

Studies were grouped by subject matter on independent, dependent, and process variables. Thus, many studies were analyzed and rated a number of times. Findings from these analyses were compared with conclusions drawn in reviews of the literature by other researchers. Comparisons were also made with published case studies and theoretical material on each subject.

TABLE 3: Model for evaluating the research.

Level I*	- Comparison group is present (or nonparametrics used). - Type of parent loss is specified. - Data is statistically analyzed, using appropriate techniques. - Sample is homogeneous on age, age at time of loss, SES, sex or these variables are accounted for. - Comparison group is matched with sample on age, SES, sex. - Methods of assessment are documented as reliable and valid for use made of them. - Characteristics of deceased parent are detailed and accounted for in interpretation of results. - Time of assessment relative to when loss occurred is considered. - Characteristics of family structure and living situation before and after the loss are presented and either controlled for or analyzed in interpretation of study outcome.
Level II	- Comparison group is present (or nonparametrics used). - Type of parent loss is specified. - Data is statistically analyzed, using appropriate techniques. - Sample is homogeneous on age, SES, sex or these variables are accounted for. - Comparison group is matched with sample on age, SES, sex. - Methods of assessment are documented as reliable, valid.
Level III	- Comparison group is present (or nonparametrics used). - Type of parent loss is specified. - Data is statistically analyzed, using appropriate techniques, or could be determined from data provided. - Sample is homogeneous on age, SES, sex or these variables are accounted for. - Comparison group is matched with sample on 2 of the following: age, SES, sex. - Standard psychiatric diagnosis may be used as form of measurement. Less well-established diagnostic methods are not used.

*Level I indicates highest standards of methodological adequacy.

TABLE 3 continued: Model for evaluating the research.

Level IV	- Comparison group is present (or nonparametrics used).- Type of parent loss is specified.- Data is statistically analyzed, using appropriate techniques, or could be determined from data provided.- Less well established methods of measuring outcome or differentiating among groups, including nontraditional psychiatric diagnoses are used.- None of the other criteria listed above are necessarily included.
Level V	- Comparison group lacking and/or type or loss is not specified.

Interaction effects of different independent and dependent variables, identified through a multidimensional analysis of individual, family and cultural issues, were to be evaluated. This approach was suggested by Shinn in her 1976 review of father absence and children's cognitive development. Shinn differentially related three general outcome measures: IQ, achievement test scores, and school performance, to various independent variables involved in different spheres of influence on children's development: cause, duration, and onset of father's absence, child's age, sex, and SES, and mother's ability to compensate for the loss. In the current project, the extent to which these variables are accounted for in each study was determined and, in the final analysis of findings, only research in which certain minimal levels of methodological adequacy were achieved was considered.

Studies were assessed also as to whether outcomes are in line with the author's hypotheses. 'Positive outcome' is the term used to indicate that the results supported the hypotheses while 'negative outcome' refers to data in which no differences were found between groups. In most cases, it was not possible to determine whether outcome was in another direction from the hypothesis that was postulated. For example, in studies in which the contention that parental disturbance was not supported, the possibility that indications of adaptive mental health were present could not be determined.

Following the topic by topic assessment of methodological adequacy of research and the determination of outcomes and of interaction effects of different variables, the findings of these analyses were organized and integrated. Again, comparisons were made with literature reviews, case studies, and theoretical discussions. In this way, an attempt has been made to provide an overview of conclusions which can be drawn about differences which may, in fact, exist between those who have lost a parent during childhood and those who have not, and about the magnitude and sources of these possible differences.

PART III. ANALYSIS OF THE LITERATURE

The literature was analyzed in accordance with the procedures outlined in the previous chapter. This evaluation has been divided into three sections: 1) behaviors observed subsequent to the death of a parent; 2) relevant factors specific to the family situation and the circumstances surrounding the death, and 3) characteristics of the child which may influence the way in which s/he reacts to the death of a parent. Clearly many studies will include information pertaining to all three of these categories, and therefore there are multiple analyses of a number of research reports. Following the evaluations of studies on each group of factors, an attempt has been made to integrate the analyses and to summarize the research results with regard to the relative levels of methodological adequacy of each study.

3. Behaviors observed subsequent to the death of a parent.

In this section, what are generally regarded as dependent measures of outcome variables are discussed. As much of the research is correlational and in many studies potential intervening variables are not considered, these behaviors should not be regarded as being caused by the death of a parent. Related process or mediating variables are mentioned in this section and are analyzed in more detail in future discussions. The topics to be addressed include: a) immediate reactions, b) emotional disturbance, c) personality, d) sex role, sexual and related interpersonal functioning, e) conscience development, juvenile delinquency and criminal behavior, and f) cognitive, academic, scientific, and creative achievement.

Immediate reactions of children to the death of a parent.

The literature focusing on the immediate reactions of children to the death of a parent has consisted primarily of theoretical papers attempting to explain the mechanisms underlying symptoms recorded in case studies, or comparing the intrapsychic similarities among responses to various forms of parent-child separations. A few descriptive studies have been conducted, recording patterns of behavior displayed by groups of children observed a short time (presumably within a year) after a parent's death.

None of this research is empirically oriented, and therefore could not be appropriately rated in accordance with the system described earlier. (If this procedure were followed, no study would be rated above Level V). However, this literature has been evaluated with respect to the methodological issues which have been raised. This section is devoted to an analysis of the descriptive research followed by a comparison of the results of this work with the positions of major theorists concerned with the immediate reactions of children to the death of a parent.

The descriptive studies on children's immediate reactions to a parent's death can be faulted on many of the standards for methodological adequacy which have been discussed. This research has addressed loss through death as differentiated from other forms of loss. In only one study (Cain and Fast, 1965) has the type of death been specified, however. Statistical analyses have been completely omitted, and few studies have included presentation of data regarding proportions of subjects showing different behaviors, or even of sample sizes. Also lacking has been information on the ways in which data has been gathered. It must be assumed, therefore, that methods of demonstrated reliability and validity have not been utilized. In the absence of the use of such techniques, a full description of the ways in which data

has been gathered, as type of interview, conditions under which observations were done and sources of information available in records, would have been useful in interpreting the material presented.

The deficit which most seriously hinders the ability of the reader of research on immediate reactions to a parent's death in drawing conclusions from the data has been the failure to adequately describe the samples employed. Such information as sex, age, and socioeconomic status of subjects is essential in determining the meaning and generalizability of research results. Such factors as temperament of the child, family structure, sex of the parent, and his/her relationship with the child as well as changes in the living situation occurring immediately after the death have also been ignored, except in individual case studies.

Comparison groups have not been included in any of this research. It can be understood that the one-time comparison of recently bereaved and non-bereaved children would be of limited utility in providing an objective perspective on the subjects. Potentially more useful would be a longitudinal approach in which those with a critically ill parent are followed for some time before and after the death with a matched comparison group assessed over the same time period. Comparison groups would then be helpful in determining whether change has

actually occurred and could be attributed to the bereavement.

Another way in which comparison groups might be utilized would be in exploring differences between children of different ages as to their immediate reactions to the death of a parent. It would be speculated that differences would be seen, especially in individuals of different levels of understanding of the concept of death, as age-related phenomenon.

In light of the criticisms of the research noted above, these studies must be considered preliminary explorations, to be utilized in hypothesis generation for future investigations. Nevertheless, findings from these studies have been remarkable consistent with methodologically superior research on immediate reactions of adults to the deaths of significant others. Such symptoms as overt denial of the reality of the death, anxiety, depression, anger, guilt, somatic complaints, and disturbances in eating and sleeping have been found in studies of children (Cain and Fast, 1965; Kirkpatrick et al., 1965, Nagaraja, 1977; Silverman and Englander, 1975), as well as research on adults (for example, Lindermann, 1944; Rudestam, 1977). Of interest is the fact that the researchers of children seemed to consider these behaviors psychopathological while the authors of studies on adults appeared to view them as normal. This perspective may

result from the views of theorists (summarized by Miller, 1971) that children do not have the ability to mourn. Therefore, all symptoms are regarded as abnormal. Other reactions observed in children have included reduced academic achievement, social withdrawal, rebellion, phobias, running away, accident proneness, and enuresis. Fear that the remaining parent would die and an excessive sense of responsibility for oneself and other family members were also responses seen in some children (Silverman and Englander, 1975). A summary of these descriptive studies as well as the more theoretically oriented works is presented in Table 4.

As was mentioned previously, most of the literature* concerned with children's immediate reactions to a parent's death has been theoretical in nature, attempting to explain the dynamics underlying grief reactions. These discussions have been largely psychoanalytically oriented, drawing heavily on the early works of Freud. The behaviors and attitudes which have been examined have been consistent with those observed in larger group studies: denial, depression, guilt, anger, and somatic complaints.

The stages involved in the bereavement process have been delineated in similar terms by a number of authors.* Bowlby (1960), for example, has described bereavement as beginning with 1) protest and denial, progressing to 2) despair and personal disorganization and finally

TABLE 4: Summary of literature
on immediate reactions to a parent's death.

<u>Reference</u>	<u>Procedures</u>	<u>Results/Conclusions</u>
Bowlby (1960)	Theory based on case study material	Delineated 3 stages of mourning: 1. protest & denial 2. despair & disorganization 3. reorganization
Bowlby (1963)	Theory based on observations and case studies	Described process of mourning in childhood
Bowlby (1968)	Theory based on observations of institutionalized children	Likened reaction to separation to mourning process
Cain and Fast (1965)	Observation and interpretation of behaviors of children with a parent who committed suicide; sample selected from coroner report data	Indications of disturbed reactions: depression, reality distortion, relationship problems
Freud (reprinted in 1950)	Theoretical discussion based on case study material	The 'work of mourning' seen as extricating libidinal investment in the deceased
Freud (reprinted in 1957)	Theory based on case study material	Related intrapsychic development to mourning process
Freud (reprinted in 1961)	Theory based on case study material	Linked identification with the deceased as necessary condition for completion of mourning process
Furman (1964)	Theory based on child therapy case studies	The childhood mourning process was explained

TABLE 4 continued

Furman (1973)	Theory based on child therapy case studies	Described developmental prerequisites for mourning in childhood
Goldberg (1973)	Theory based on family therapy case studies	Presented pattern of family tasks and reorganization after a death
Kirkpatrick et al. (1965)	Survey of school records	Disturbed behavior at home and school
Krupp (1972)	Review of theoretical and empirical material	Viewed extended family system & ritual as minimizing the disruptiveness of a death
Miller (1971)	Review of psychoanalytic literature	Found agreement among theorists that a pattern of reactions of children is universal and can be differentiated from that of adults
Moss & Moss	Theory presumably based on case material	Compared grief and separation experiences
Nagaraja (1977)	Case studies of 4 under-7 year olds	Interpreted observations of denial, depression and 'neurotic' behavior as pathological mourning
Rochlin (1967)	Review of theoretical and empirical material	Connected separation experiences with reactions to death
Silverman and Englander (1975)	Interviews with mothers of paternally bereaved children	Depression, denial anxiety/withdrawal, fears, vegetative signs observed

3) reorganization, which involves the transfer of affective attachment to new relationships. Moss and Moss (1973) and Freud (1950, 1957, 1961) have organized their observations of the bereavement process in like fashion. Moss and Moss (1973) have observed that this process is quite similar to that experienced by individuals who must come to terms with their own imminent death. Kubler-Ross, in her classic study of 1969, presented the stages of dying as including: 1. denial, 2. rage and anger, 3. bargaining, 4. depression, 5. acceptance. Only the resolution of the affective experiences of the dying and the bereaved, acceptance vs. investment in new relationships differs, in accordance with the contrasting situations of the two groups.

All later psychoanalytic interpretations of the 'work of mourning' appear to have been based on Freud's 'Mourning and Melancholia' (reprinted in 1950). In it, he proposes that:

the mourner clings to the loved object... Reality passes its verdict -- that the object no longer exists -- upon each single one of the memories and hopes through which the libido was attached to the lost object and the ego, confronted as it were, over a decision whether it will share this fate, is persuaded by the sum of its narcissistic satisfactions in being alive, to sever its attachment to the non-existent object.

Freud termed this gradual withdrawal of affective energy 'decathexis of the internal representation of the lost love object.'

Most writers, including Freud, have hypothesized that the quality of the mourning experience is different for the child and the adult.* Freud, in "On Narcissism" (reprinted in 1957), questioned the child's ability to comprehend death and therefore to mourn in an appropriate and useful manner. He stated that such "cardinal" characteristics of children as the belief in the omnipotence of wishes, the sense of helplessness and dread of abandonment, preoccupation with causality, and egocentrism prevent children from completing the work of mourning, causing them instead to turn to magical thinking: death can be defied. Similar processes have been observed in empirical studies based on the work of Piaget. This material will be discussed in the section on the development of the concept of death.

Miller, in her 1971 review of psychoanalytic works of such authors as Abraham, Deutsch, Freud, Mahler, and Neubaur, concluded that there was a consensus that children do not experience true mourning, which she defined as "the gradual and painful emotional detachment from the inner representation of the person who has died." Instead, children, specifically those who have lost a parent through death, respond with such manifestations of denial as unconscious or conscious denial of the reality of the parent's death, increased identification with and idealization of the parent who has died, avoid-

ance of expressing affective responses with respect to the death, fantasies about an on-going relationship, and decreased self esteem.

There is not total agreement about the inability to mourn, however. Both Furman (1964, 1973) and Bowlby (1960, 1963, 1968) have posited that children can and do go through the process. According to Furman, the presence of the following skills and characteristics are necessary before mourning can take place: 1. understanding of the concept of death, 2. object constancy, 3. a "healthy availability of feeling not being excessively defended against", 4. a flexible personality structure, 5. knowledge that one's physical and emotional survival needs will be met and 6. acceptance of expressions of feeling by others in the child's environment. Furman has ventured that these conditions might be met in a four year old, a contention with which researchers on the development of the concept of death would disagree, as will be seen.

Furman's conceptualization suggests that utilization of a developmental perspective might be more appropriate than artificially differentiating between the responses of adults and children to death. The development of the concept of death, one of Furman's prerequisites to the capacity for mourning, may begin in infancy with the gradual process of coming to understand and accept separations. Bowlby (1968) and Moss and Moss (1973) have

conceived of separation as a "death-like" experience, involving similar physical, environmental, emotional and social characteristics. The infant's response to separations, anger, protest, despair, are not unlike the responses of the child and the adult to death. Investigation of the difficulty and degree to which early separation issues were resolved in children with varying responses to a parent's death might be one way of exploring the relationship between reactions to death and separation. Longitudinal research on other aspects of Furman's model would be helpful in determining the course of development of the capacity for mourning.

Some attention has been given to factors outside of the individual by theorists seeking to explain immediate responses to death. Goldberg (1973), for example, has viewed death as a family crisis, an infrequent and final event for which new problem solving skills must be developed. The tasks of the bereaved family, according to Goldberg, include discontinuation of the use of the memory of the deceased as a functional force in family activities, reassignment of roles within the family, and assumption of new roles outside of the family. Both positive and negative options, such as role reorganization, increased family cohesiveness, establishment of new relationships, and scapegoating as a way of displacing anger about the death, may be available to the family,

depending on their history and currently available resources.

Krupp (1972) has suggested that the presence of the extended family is important in decreasing the trauma of death due to their continued collective identity, their shared sense of responsibility, and their provision of alternative sources of affection in lessening the pain of separation. He has maintained that the demise of the extended family has made accepting death more difficult. He has also pointed out the importance of ritual in facilitating appropriate mourning by "channeling and legitimizing the normal expression of grief, rallying friends, and establishing new roles."

At this point in the accumulation of literature on children's immediate reactions to the death of a parent, there exist only hypotheses about what typically occurs in such a situation. It would seem that the descriptive research suggests that children do go through a process of mourning, and that this process is quite similar to that experienced by adults. It would be expected that differences with respect to age would be seen, in light of research showing that children do not fully understand the concept of death until middle childhood (for example, Kane, 1979), as will be demonstrated in a future discussion. Cross sectional research on children of different ages would clarify this notion.

It is clear that both research and theory of children's immediate reactions to the death of a parent are in need of further refinement. It appears that there has been more emphasis on theory so that elaborate explanations as to processes and causes are available for reactions which may occur seldom if at all. Further empirical research, ideally from a developmental perspective, which would examine the reactions of individuals within personal, family, and social context, would help to balance the literature in this area. Suggestions for the nature of this research can come from previously conducted descriptive studies which would benefit from validation through use of more methodologically rigorous procedures, and from hypotheses of theorists. Revision of theoretical notions may become more appropriate following the accumulation of empirical data.

Emotional Disturbance

Among the studies, theoretical works, and literature reviews on behaviors observed subsequent to a parent's death, the highest number (sixty-one) have dealt with some form of emotional disturbance manifested either in childhood or when the bereaved child reaches adulthood. There can be speculation on two possible reasons for this emphasis in the literature. One explanation might be that those who have lost a parent through death during childhood are overrepresented in emotionally disturbed populations. Ideas for such studies may have come from informal observations of bereaved children in schools or clinical situations. The other possibility is that the expectation that early death of a parent is associated with emotional disturbance has influenced the researchers' choices of topic. Support for the latter line of research comes from the typical way in which this research has been conducted. Rather than following randomly selected bereaved and non-bereaved subjects and assessing their development, the family backgrounds of those already identified as emotionally disturbed have been examined.

Depression and suicidal behavior have been the most frequently investigated topics within the area of emotional disturbance. Nearly one half of the studies on emotional disorders have dealt with depression and/or suicidal behavior. Again, expectations of researchers may

have played a part in the emphasis on these forms of psychopathology. It is interesting, for example, that there are few studies examining the relationship between parental death and anxiety disorders. In clinical situations, it is recognized that many of the symptoms of anxiety and depression (sleeping and eating disturbances, somatic complaints, social withdrawal) are often similarly manifested. Traditional expectations have been for depression to follow a death, although a case could be made for the same to be true of anxiety. Reactions to the death of a parent might be expected to include uncertainty about the death of the surviving parent or the child him/herself, for example.

The comments above are meant to indicate two ways in which expectations of researchers may influence the literature in this field. Expectations can affect the interpretations of outcomes as an anxious patient being seen as one who is depressed. In addition, assumptions may work to limit the range of topics explored, as, for example, exploration of the backgrounds of patients diagnosed as depressed but not of those diagnosed as anxious. There may in fact be major gaps in the research investigating the relationship between parent death during childhood and emotional disturbance. Published material, in addition to that on depression and suicidal behavior, was located on schizophrenia, paranoid psychoses, and

general maladjustment, as determined by referral or admission to a mental health facility, observations, or ratings on a scale of psychological adjustment. Studies on difficulties usually not considered or treated as emotional disturbance such as delinquency and marital maladjustment will be discussed in future sections. The forms of emotional disturbance to be considered here are diverse in symptomatology but far from inclusive in terms of the range of possible psychological disorders. Again the literature may be reflecting the actual pattern of disorders found in individuals bereaved rather than lack of research on other forms of disturbance. Studies yielding negative results on noncontroversial subjects are infrequently published. Thus there may be numerous pieces of research showing that parental bereavement during childhood is not associated with the development of phobias or obsessive compulsive disorders.

The remainder of this chapter is devoted to presentation and discussion of the results of the systematic evaluation of the research on death of a parent during childhood and subsequent emotional disturbance in bereaved children. The observations of other authors are incorporated as are implications for future work in the area.

Forty-seven empirical studies dealing with psychopathology were reviewed and rated in accordance with the

system of evaluation of research presented in Chapter 2. Detailed results of this analysis are presented in Table 5. A miscalculation was found by the author of one of the studies (Roy, 1978), and a revised study was published the next year (Roy, 1979). The original study has therefore been excluded from further interpretations of the data.

General results of the analysis along with a breakdown of ratings by outcome are shown in Table 6. As can be seen, only one study, Shepherd and Barraclough, 1976, could be included in category I. This study was methodologically adequate and descriptively complete on all of the criteria examined. A comparison group was utilized, and subjects and controls were matched for age, sex, marital status, and geographical area. Subjects and controls were randomly selected from families of one hundred consecutively reported suicides and two physician's medical practices. The study was restricted to children of suicide victims, a fine distinction within the general condition of parent loss, seldom made in the literature. Observations were made over a five to seven year period following the suicide, and consideration was given to the child's age at the time of the death in interpretations of the results. Measurement took the form of structured interviews with the remaining parent which were subsequently coded. Reliability was assessed by nine interviews involving two interviewers with one presenting

TABLE 5: Methodological data and adequacy ratings on empirical studies on emotional disturbance and parent death in childhood.

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Abrahams and Whitlock, 1969	1. Depression 2. Psychiatric Hospitalization	X	Inpatient depressives compared with general hospital outpatients. Matched on age, SES, sex, marital status	X	X	Diagnosis of different levels of depression Found ND between depressives and others	X	Not	NI*	NI	III
Adam, 1973	Suicidal ideation and behavior	X	University clinic clients. 3 groups: 1) parent death 2) parents divorced 3) intact family Age, SES matching	X	X	Clinical interviews scored for presence/absence of suicidal ideation. Higher ideation in Groups #1 & 2	X	Assessment at 17-27; Loss = prior to 16	NI	NI	II
Archibald et al., 1962	Emotional disturbance: Depression Psychosis Hypochondriosis Hysteria Sex role disturbance	X	Compared VA clinic patients with normative estimates of bereavement by Life Insurance Company. Demographic differences accounted for.	X	X	MMPI, psychiatric diagnosis Overrepresentation of parentally bereaved in clinic population Symptoms: neurotic, psychotic, psychophysiology	X	Specifies age at admission	sex specified	NI	II
Barry and Lindemann, 1960	General Maladaptation	X	Psychiatric inpatients compared with normative estimates of bereavement from life insurance tables. Demographic matching.	X	X	Psychiatric diagnosis, Clinical interview Parent death x Parent sex x child sex x age at loss interactions; Overrepresentation of bereaved patients	X	Differentiated by time of loss	sex specified	NI	III

*NI = no information provided

*2 - In studies where traditional psychiatric diagnoses were utilized, this item is checked affirmatively although reliability and validity is questionable.

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Beck et al., 1963	Depression	X	Inpatients at psychiatric hospital compared on rating scale. Demographic data accounted for.	X	X	Psychiatric diagnosis Standardized depression self rating scale More parentally bereaved among the depressed as identified by psychiatric diagnosis <u>only</u> .	X	Differentiated by time of loss	NI	NI	III
Bendiksen and Fulton, 1975	General Maladaptation	X	General bereaved population followed longitudinally; demographically matched	X	X	Behavioral observations and ratings Some differences (depression) seen in middle age, fewer than in childhood	X	Both accounted for	sex specified	NI	II
Birtchnell, 1966	Depression	X	Depressed and non-depressed state hospital inpatients matched for age initially, not after 2nd division	X	X	Psychiatric diagnosis ND between groups Differences between severely and moderately depressed found - More mother death in severely depressed	X	Differentiated by age at loss	sex	NI	III
Birtchnell, 1970-a	Depression Suicidal behavior	X	Suicidal psychiatric inpatients compared with nonsuicidal inpatients Matched age, sex accounted for	X	X	Overt behavioral observations Overrepresentation of bereaved and illegitimate among suicidal patients	X	Age at loss specified	NI	NI	II

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Birtchnell, 1970-b	General psychiatric disturbance	X	Psychiatric inpatients compared with outpatient medical patients Age, sex matching, SES accounted for	X	X	Psychiatric hospital admission Some differences - age x age at loss - found	X	Both Specified	Sex specified	NI	II
Birtchnell, 1972	Depression	X	Psychiatric inpatients compared with outpatient medical patients Age matching, Sex, SES accounted for	X	X	Psychiatric diagnosis Higher % depressed inpatients were parentally bereaved	X	Both Specified	Sex specified	NI	III
Birtchnell, 1975	Characteristics of psychiatric inpatients	X	Psychiatric inpatients of various psychiatric diagnoses compared Age, sex matching	X	X	MMPI and case histories Sex x parent sex difference on dependency score	X	Age at death	Sex specified	NI	II
Brill and Liston, 1966	Psychiatric hospitalization	X	Psychiatric inpatients compared, age and sex matched	X	X	Inpatient admission Only father loss for reasons other than death significant	X	NI	Sex specified	NI	II
F. Brown, 1961	Depression	X	Psychiatric inpatients compared with insurance table norms, sex matched	X	X	Psychiatric diagnosis higher % parental death in depressed	X	NI	NI	NI	III
G. Brown et al., 1977	Depression	X	Depresses and non-depresses inpatients neurotic nonpatients, and normals compared all women, no SES matching	X	X	Psychiatric diagnosis Age at loss x sex of patient differences in depresses found	X	Both specified	Sex specified	NI	III

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Cain and Fast, 1965	Behavior of clinic patients	X	Bereaved vs. non-bereaved child: clinic clients compared Age and sex matched	X	%'s only (Figured for this analysis)	Intake data, psychiatric diagnosis ND in parental bereavement except in psychosis (more bereaved)	X	Both specified as well as time in between	Sex specified	NI	II
Capland and Douglas, 1969	Depression	X	Depressed vs. non-depressed psychiatric inpatients, No matching	X	X	Psychiatric diagnosis Significant differences only for those institutionalized early	X	Both specified	NI	NI	IV
Crook and Raskin, 1975	Depression Suicide attempts	X	Depressed inpatients with suicidal attempts vs. nonsuicidal depressed vs. normals Matched on sex and age	X	X	Psychiatric diagnoses Case history of attempts More parent loss among suicidal except for loss through death	X	Age at loss	NI	NI	III
Dennehy, 1966	Depression	X	Depressed psychiatric inpatients compared with 1921 census figures	X	X	Psychiatric diagnosis Sex x sex of parent x age at loss differences - higher bereavement rates in depressives	X	Age at loss	Sex specified	NI	III
Dietrich, 1979	Psychopathic personality Death fear	X	College students from intact, parent absent families - matched on demographics	X	X	MMPI, TAT, Rosenweig Picture Frustration Test, Lester & Templer Death Fear Scale Parent death x child's sex x age at loss differences on Pd, Mf, Pt, Sc MMPI scales	X	Age at loss	NI	NI	II

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Earle and Earle, 1959	Depression	X	Psychiatric inpatients from intact and mother absent families age and sex matched	X	X	Psychiatric diagnosis Depression more common in maternally deprived	X	Age at loss	Sex specified	NI	III
Felner et al., 1975	Childhood maladjustment	X	Normal vs. school referred maladapted children matched on age & sex, SES expected equivalent	X	X	AML checklist, teacher referral form Bereaved group - more anxious, depressed, withdrawn	X	Both specified	NI	NI	II
Forrestal et al., 1965	Depression	X	Psychiatric v. general hospital patients - Age & sex differences accounted for	X	X	Psychiatric diagnosis Early parent death higher among the depressed	X	Age at loss	Sex specified	NI	III
Ray & Tongue 1967	Depression	X	Inpatients of various psychiatric diagnoses no matching	X	X	Psychiatric diagnosis, case record Reactive depression associated with early death of opposite sex depression, other neuroses associated with death of same sex parent	Not easily	Age at loss	Sex specified	NI	IV
Granville-Grossman, 1966	Schizophrenia	X	Siblings compared	X	X	Psychiatric diagnosis ND	X	Age at loss	NI	NI	III
Greer, 1964	Suicide attempt	X	Suicidal vs. non-suicidal inpatients, matched on age, SES, sex	X	X	Suicide Attempt more suicidal had experienced parent loss in general, ND as to cause of loss	X	Both specified	NI	NI	II

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Greer, 1966	Suicide attempt	X	Suicidal vs. non-suicidal inpatients, matched on age, SES, sex	X	X	<u>Suicide Attempt</u> more suicidal had lost both parents, ND as to cause of loss	Not with equivalent distribution as to type loss	Both specified	NI	NI	II
Gregory, 1966	General Emotional disturbance	X	Psychiatric inpatients of various diagnoses matched on age & sex	X	X	<u>Psychiatric Diagnoses</u> ND among psychiatric diagnoses	X	NI	NI	NI	III
Hilgard and Newman, 1963	Schizophrenia	X	3 groups: schizophrenic inpatients, alcoholic inpatients, and SES, sex age, matched controls	X	X	<u>Psychiatric Diagnosis</u> significant differences for schizophrenics	X	Age at admission	Sex specified	NI	III
Hill, 1969	Depression, suicide	X	2 groups of depressed, inpatients, one suicidal age controlled	X	X	<u>Suicide attempt, psychiatric diagnosis</u> Suicide attempts more common in depressed women who lost fathers	X	Age at loss	Sex specified	NI	III
Hill & Prices 1967	Depression	X	Endogenous & reactive depressed inpatients compared, controlled for age	X	X	<u>Psychiatric diagnoses of endogenous v. reactive depression</u> Age at loss x sex differences found	Diagnosis would be difficult to replicate?	Age at loss	Sex specified	NI	IV
Hopkinson & Reed, 1966	Depression	X	Groups of psychiatric inpatients of various diagnoses, age, SES, no controls	X	X	<u>Psychiatric diagnoses</u> ND	X	Age at loss	Type death, psychiatric diagnosis	NI	IV

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Huttermen & Niskanea, 1978	Schizophrenia	X	Ss who lost father prenatally compared with Ss who lost a father during 1st year, SES & Age matched	X	X	<u>Psychiatric diagnosis</u> Higher % schizophrenics lost father prenatally	X	Both specified	Sex specified	NI	III
Jacobson et al., 1975	Depression	X	Normal controls vs depressed inpatients vs depressed outpatients Sex, age matched	X	X	<u>Psychiatric diagnosis</u> ND	X	NI	NI	NI	III
Kirkpatrick et al., 1965	School adjustment	No		X	No	<u>School records</u> Changes in level of adjustment following parent death	Not easily	Age at loss	Sex specified	NI	V
Lester & Beck 1976	Suicide Attempt	No		X	X	<u>Suicide Attempt</u> A recent death & death of both parents before associated with a suicide attempt	X	Age at loss	NI	NI	V
Martindale, 1972	General Emotional Disturbance	No		Yes-but death & others indiscriminately grouped	No %'s	<u>Listing in Oxford Anthology of Verse, life histories</u> <u>Relationship between psychopathology & father loss unclear</u>	X	NI	Sex specified	NI	V
Munro, 1966	Depression	X	Depressed inpatients and age and sex matched general hospital controls compared	X	X	<u>Psychiatric diagnosis</u> severe v. moderate depression ND between groups re: different types of loss	Not easy	NI	Quality of relationship with deceased parent, parent's sex	NI	IV

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure; Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Muniot & Griffiths 1968	Depression	X	Psychiatric inpatients, outpatients, & general hospital patients - Age, geographic location matched	X	X	<u>Psychiatric Diagnosis</u> Inpatient depressives showed excess of maternal bereavement	X	NI	Sex specified	NI	III
Pitts et al. 1965	General emotional disturbance	X	Affectively disordered inpatients matched on age, sex, SES & marital status with medical patients	X	X	<u>Psychiatric diagnosis</u> ND on family background	X	NI	Sex specified	NI	III
*Roy, 1978 (Not counted in future tabulations)	Depression	X	Depressed v gyn patients matched on age, SES, m.d.	X	X	<u>Psychiatric diagnosis</u> More depressed had had a parent die - figures in error	X (and was)	NI	NI	NI	V
Roy, 1979	Depression	X	Same as above	X	X	<u>Psychiatric diagnosis</u> *Corrected parental bereavement above, ND Roy, 1978	X	NI	NI	NI	III
Seligman & Glesser, 1974	Clinic referral	X	Clinic referral compared with Gen. school population & other medical referrals, no matching	X	No %'s	<u>Clinic referral</u> Higher % (more than 2x) of parent death in clinic group	X	NI	Sex specified	NI	IV
Sethi, 1964	Depression	X	Psychiatric inpatients compared with each other No matching	X	X	<u>Depression Inventory</u> ND among depressives	Not with regard to sample	NI	NI	NI	IV

TABLE 5 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Shepherd and Barracough 1976	Psychological maladjustment	X	Families of suicide victims matched with families randomly selected from general practice of MD's, matched for age, sex, m.s. and geographic area	X	X	Long term observations strangers, interviews with high reliability <u>Prior & subsequent family conditions x loss differences</u>	X	Followed 5-7 years after suicide	Detailed	Prior, subsequent family situation detailed	I
Trunnell 1968	Psychological maladjustment	X	Father present, absent clinic subjects, matched on age, SES	No	X	Psychiatric diagnosis case record <u>Environmental factors x parent characteristics x individual characteristics intragroup differences</u>	X	Age at loss	Detailed	Prior, subsequent family situation detailed	III
Tuckman & Regan, 1966	Clinic referral	X	Age matching of children in homes with separation divorce and parent death	X	X	Clinic referral <u>More clinic referral problems in homes with separation and divorce</u>	X	NI	Sex specified	Speculation concerning	II
Waltow, 1958	Suicide attempt	X	Suicidal v non-suicidal depressed clinic clients No matching	No	X	Reports of attempts or threats of suicide <u>Psychiatric diagnosis</u> <u>More suicidal had been parentally deprived</u>	No	NI	NI	NI	IV
Wilson et al., 1967	Variations in depressive profile	X	Consecutively admitted depressed inpatients who were from intact or parent death families	X	X	Psychiatric diag. MMPI <u>Parentally bereaved had higher scores on the psychotic tetrad</u>	X	NI	Sex specified	NI	III

TABLE 6: Ratings of studies on
emotional disturbance by outcome.

<u>Rating</u>	<u>Total #</u>	<u>Positive Outcome</u>	<u>Negative* Outcome</u>
I	1	1	0
II	12	10	2
III	23	15	8
IV	8	4	4
V	<u>3</u>	<u>3</u>	<u>0</u>
Totals	47	33	14

*Under this category are included studies in which differences are not associated with parent death, or when this relationship is unclear even when methodological errors are overlooked.

the questions and both independently coding the responses. A reliability level of .94 was obtained. Referral rates for mental health services were also considered.

Characteristics of the deceased parent and prior and subsequent family structure and living situation were presented in detail and related differentially to the results. The deceased parent's sex, mental health, presence of a criminal record, marital relationship and marital status, and the circumstances surrounding any communication concerning the suicide were considered. Information about and determination of the significance of family size, birth order, changes in family makeup including siblings leaving the home and the addition of a step-parent, changes in residence and socioeconomic status as well as changes in parent-child relationships were included. Two omissions were data concerning the child's relationship with the deceased parent and information about the child's previous level of functioning. This flaw included, Shepherd and Barraclough's study significantly surpassed all others reviewed. Results of this investigation will be described in the section on general maladjustment. It should be noted at this point that it was shown that children of a parent who committed suicide differed from those who had not lost a parent.

Twelve of the forty-eight studies met the criteria for a level II rating. These studies were flawed primar-

ily as a result of the failure to include descriptions of and therefore to account for characteristics of the family and the child's age at the time of the parent's death. Most included the sex of the deceased parent, which was not necessary for a rating at this level. The studies were all concerned with either general maladjustment indications (primarily admission to a mental health facility) and suicidal behavior. None of the research on psychosis and general depression (without suicidal behavior considered) was rated above level III. Eighty-two percent of the level II studies yielded positive outcomes. Outcomes were considered negative if differences were not associated specifically with parent death or when this relationship remained unclear even when methodological errors were overlooked.

The modal rating among these studies was level III. Twenty-two of the studies met the criteria for this level, including research on all areas of emotional disturbance. In general, the studies looked much like those of level II except for the methods used for assessing difference among groups. Studies in this category frequently used standard psychiatric diagnoses as a means of differentiating among subjects and controls, or in evaluating outcome. The studies varied with regard to inclusion of information on the subject's age at the time of the loss and the time of assessment, characteristics of the deceased parent, and on

family structure and living situation. Fifteen of the twenty-two studies showed differences between those who were parentally bereaved during childhood and those in comparison groups.

Level IV included nine studies, four of which yielded positive results. These studies were distinguished from those at level III due to inadequacies in the makeup of comparison groups or in measurement instruments. Matching on factors such as age, sex, and socioeconomic status was not documented in some of the studies. In others, differences between groups were assessed by means of methods which were not well described and therefore could not be replicated. Unorthodox psychiatric diagnoses were among these techniques. Studies on suicidal behavior, depression, and general maladjustment were included in this categorization.

The three level V studies (apart from Roy, 1978) were concerned with general maladjustment, depression, and suicidal behavior, and all showed differences between those who had lost a parent through death and those who had not. All three were lacking control groups, and two were not analyzed statistically. These studies did specify the type of loss the child experienced but it should be noted that most of those which did not differentiate among subjects on this basis were eliminated as the literature search for this project was being conducted.

Therefore, there would have been many more studies in this category.

In general, the higher level studies yielded a higher proportion of positive results than did the lower level studies. When levels I through IV are considered (level V is excluded as the total number of studies which would be so rated is artificially low due to prescreening of studies that did not differentiate among causes of loss), positive to negative study ratios are 11:2 for the higher level studies and 4.7:3 for lower level studies. Thus eighty-four percent of the levels I and II studies had positive outcomes compared with sixty-one percent of the levels II and IV studies.

Ratings of studies on emotional disturbance by specific disorder and outcome are presented in Table 7. As can be seen, five of the nine studies on suicidal behavior are rated at level II, with three having positive outcomes and two yielding negative outcomes. The remaining, less methodologically adequate studies are comprised of three with positive results and one with negative results.

The four level II studies linking suicidal behavior with loss of a parent during childhood include those by Adam (1973), Birtchnell (1970(a)), and Greer (1964, 1966). Three of the four studies used as outcome measures actual suicide attempts or completed suicides while Adam

Table 7: Ratings of studies on emotional disturbance by disorder and outcome.

Rating Outcome	I			II			III			IV			V			Totals by disorder		
	+	-	Total	+	-	Total	+	-	Total	+	-	Total	+	-	Total	+	-	Total
Suicidal Behavior				4		4	1	1	2	1		1	1		1	7	1	8
Depression (in studies where suicidal behavior is not considered)							8	4	12	2	4	6				10	8	18
General mal- adjustment, Admission to mental health facility	1		1	5	2	7	3	2	5	1	0	1	2	0	2	12	4	16
Psychosis				1		1	3	1	4							4	1	5
Totals by rating	1	0	1	10	2	12	15	8	23	4	4	8	3	0	3	33	14	47

made use of structured clinical interviews scored for the presence or absence of suicidal ideation. In two of the studies, a higher frequency of those who had experienced the loss of a parent in general was found, but those experiencing a parent's death did not differ from those who had lost a parent for other reasons. Thus parent death as well as other forms of parent loss was associated with subsequent suicidal behavior or ideation. The studies therefore showed a higher incidence of parent death among adult psychiatric inpatients who had experienced death of a parent over those from intact families.

Of the eighteen studies on depression which do not consider the presence or absence of suicidal behavior, twelve were categorized as level III and six as level IV. These investigations were for the most part concerned with examining the family backgrounds of psychiatric patients diagnosed as depressed. It was the use of psychiatric diagnoses as the primary means of assessment or differentiation which resulted in relatively low ratings for the research. As was discussed previously, psychiatric diagnoses have been shown to have poor reliability in differentiating among specific categories of disorders. In the case of associations between aspects of an individual's background and psychiatric diagnosis, the problem would be confounded, as psychiatric diagnoses are usually based, at least in part, on case histories.

Even were the methodological flaws overlooked, the results of the studies remain equivocal. Ten of the studies associate parental bereavement with the development of depression in adulthood, but eight of the studies could show no such association. These results differ from those of Crook and Eliot (1980). They concur that the relationship between depression and childhood bereavement has not been established but assert that studies supporting this association have been methodologically flawed while those showing no such relationship have been well controlled. These contrasting conclusions can be accounted for by differences in the specific studies reviewed and variance in the criteria on which the research was evaluated. Crook and Eliot accepted psychiatric diagnosis as a valid measurement tool, for example.

Sixteen studies have been categorized under the heading 'general maladjustment' including one at level I and seven at level II. This category is less homogeneous than those described above as it is comprised of studies associating parent death with children's referral to programs for maladjustment in school, admission to clinics and psychiatric hospitals, and scores indicating problems in mental health on standardized rating scales. The results of these relatively sound studies (six positive outcomes, two negative) must therefore be examined individually.

The procedures used in the one level I study, Shepherd and Barraclough (1976) were described above, and the results were mentioned in the general methodology section (Chapter 2). Children were assessed on whether treatment was being received for psychological problems, regularity of school attendance and school related difficulty, quality of relationship with the surviving parent and other family members, and other information obtained from structured interviews with the parent. Of the thirty-one children on whom there were sufficient data (the five on whom data were insufficient were described but not rated), fifteen children were assessed as functioning adequately and sixteen as not. Differences between children of different adjustment levels were not found on age, sex, socioeconomic status, sex of the parent lost, or characteristics of the suicide. Only children were judged to be functioning more adequately. Very significant were differences in family life before the suicide. Those whose parents had been separated, had criminal records or mental health problems adjusted less well after the parent's death. Also important was stability of life after the suicide. Those who attended more than two schools (which is presumed to represent either changes in residence or economic status or both) were shown to have more problems. This study thus indicates the importance of consideration of multiple factors related to the family

situation before and after a parent's death in any interpretation of subsequent functioning of a child.

The level II studies differed from the level I study in neglecting to consider family characteristics. Two of the studies (Brill and Liston, 1966, and Birtchnell, 1970b) looked at the representation of the parentally bereaved among psychiatric inpatients, with differing results. Brill and Liston found that only individuals who had lost a father for reasons other than death were overrepresented among inpatients. In contrast, Birtchnell found recent (in the last five years) father death in patients in their early twenties to have occurred at a rate greater than would have been expected. Neither study found that death of a mother or of either parent was more frequent among subjects than among controls.

Level II research utilizing adjustment scales was concerned with identification of characteristics or tendencies, for the most part, among clinic or psychiatric hospital patients, rather than global patterns of behavior. They showed that among the parentally bereaved were individuals who were prone towards dependency, withdrawal, anxiety, and acting out. Those studies which were concerned with these characteristics will be examined again in the section on personality, in which studies on non-psychiatric patient subjects are to be reviewed, in order to determine whether any consistent pattern emerges.

Four of the five studies dealing with psychosis were rated at level III. All of the research on this general disorder utilized psychiatric diagnoses for differentiating between groups. One of the studies, Cain and Fast (1965) utilized broad categorizations, distinguishing psychoses from other disorders, and thus yielding a higher degree of reliability (Quay, 1979). Thus, this study, which met all of the other criteria for level II, could be rated higher than could the other studies which differentiated among psychotic disorders. Cain and Fast found that children who had had a parent who committed suicide were over represented among those diagnosed as psychotic in a clinic population. Investigation into the prior mental health of these children would aid in determining whether the parents' suicides contributed to the children's maladjustment or whether the children's problems may have been among the stresses that led vulnerable parents to suicide. The level III studies found a higher proportion of schizophrenics had lost a mother (Hilgard and Newman, 1963) or a father (Huttunen and Niskanen, 1978) and that psychiatrically diagnosed depressives who were parentally bereaved had higher scores on the psychotic indicators of the MMPI (Wilson et al., 1967). Granville-Grossman (1966) looked at schizophrenics and their non-schizophrenic siblings and found no relationship between the child's age at the death of the parent and the development of schizophrenia.

Positive outcomes have thus been obtained for just over half of the studies on emotional disturbance which meet minimal standards for methodological adequacy (levels I and II). Remaining, however, are a number of satisfactory studies with negative results as well as the flawed research which makes up the largest portion of work in this area. Herzog and Sudia (1973) have taken the position that the evidence must be considered ambiguous because of both the conflicting data and the poor quality of the research. Brown (1966) concludes that, despite the problems, there has been shown to be some association between various forms of emotional disturbance and parental bereavement in childhood. This interpretation seems reasonable in light of the positive outcomes emerging from some of the better studies. Invariably the latter have shown that complex relationships exist among various environmental and child-specific factors and the major independent and dependent variables, parental bereavement and manifestations of emotional disturbance. A unidimensional cause-and-effect association is unlikely to be uncovered nor would such a finding be expected on a logical basis. Thus, in order to determine further the relationship between death of a parent during childhood and subsequent emotional disorders, research must consider multiple variables in a systematic manner.

Personality

Research on personality variables, as differentiated from manifestations of emotional disturbance requiring professional treatment, has made up a relatively small proportion of the literature on the correlates of parental bereavement during childhood. The aspects of functioning to be examined under this category represent traits which, although usually assessed in only one restricted setting, are presumed to be characteristic of individuals across situations. Behaviors specific to the individual's relationships, such as marriage, as well as those related to sexual and sex role functioning, will be discussed in the next section. Where studies have dealt with more than one type of psychosocial characteristic, only those aspects of functioning relevant to the present definition of personality will be explored at this point. The literature on personality has been primarily empirical in orientation. Thus the following presentation will include discussion of the relative adequacy of the studies, their results, and speculation as to reasons for these findings.

Studies on personality have addressed such behavioral and attitudinal tendencies as dependence-independence, introversion-extroversion, aggressiveness-submissiveness, ability to delay gratification, locus of control, and preoccupation with loss. As can be seen in Table 8, nine of the ten studies were found to be of relatively high

methodological adequacy: two studies met criteria for level I, seven studies were rated at level II, and one study was assigned to level V. The level I study conducted by Baggett (1967) utilized three matched groups of subjects differing on parent variables. Two measurement instruments of proven reliability and validity for the study's purposes were employed, and characteristics of both the deceased parent and the family structure following the death were specified. The level II studies were similar except for the omission of details about the deceased parent and the family. The other level I study carried out by Hetherington in 1972 provided even more detail about the current family functioning of adolescent girls who had lost a father through death or divorce or were living in intact families. The author interviewed the girls' mothers to determine their level of functioning and, if they were widowed or divorced, their attitude towards their former husbands. In contrast to the literature previously reviewed, there were no studies rated at levels III and IV, largely because of the relative adequacy of the outcome measures used. Only in the one level V study (Jacobson and Ryder, 1969), which was so rated because of the lack of a comparison group, was the method of measurement of undemonstrated validity and reliability. It should be noted that this piece of research, which found men who were parentally bereaved

TABLE 8: Methodological data and adequacy ratings of empirical studies on personality variables and parent death during childhood.

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure, Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Baggett, 1967	home adjustment submissiveness	X	3 groups of matched college students: father present, deceased father, father separation for other reasons	X	X	Sentence completion and self report inventory Sex x personality characteristic differences	X	Both specified	Sex specified	No father substitute	I
Birtchnell, 1975	dependency	X	Age and Sex matched inpatients	X	X	MMPI age x characteristic differences found	X	Age at loss	NI	NI	II
Bluestein, 1978	Preoccupation with loss	X	School children matched on age and sex, SEX & race	X	X	Interpretation of tree drawings Bereaved children more often perceive part of the tree as dead	X	NI	NI	NI	II
Felner, et al., 1975	Anxiety, withdrawal	X	'Normal' v. school services referred children, matched on age, sex accounted for some school = SES match	X	X	AML checklist teacher referral form Parent death group = more anxious, withdrawn	X	NI	NI	NI	II
Hainline and Feig, 1978	Dependency, shyness	X	College age women with intact families, divorced parents, deceased father, sex, age matched	X	X	Structured observations and interview ND	X	Age at assessment	Sex specified	NI	II
Haworth, 1964	Preoccupation with loss	X	2 clinic groups with an absent parent v. non-clinic institutionalized v. children from intact families, age & sex matched	X	X	Rorschach, TAT - high reliability obtained Higher 'loss' scores & themes	X	Both specified	sex, # parents deceased	NI	II

TABLE 8 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Hetherington, 1972	Dependency, shyness	X	Compared adolescent girls from intact v. divorced v. father deceased families, matched on age, sex, SES	X	X	Structured Observations & interviews Daughters of widows = more shy, timid with males, dependent	X	Age at assessment	Sex specified	Information about mother's behavior	I
Jacobson & Ryder, 1969	Immaturity	No	--	X	No	Interview Immaturity, lacking interpersonal competence	Not easily	Age at loss	Sex specified	NI	V
Parish & Copeland, 1980	Locus of control	X	Undergraduate college students, sex accounted for	X	X	Rotter internality-externality scale Sex x loss differences on externality	X	Age at assessment	Sex specified	NI	II
Santrock & Wohlford, 1970	Aggression delay of gratification	X	5th grade boys from same school	X	X	Gratification delay task Doll play interview Differences on aggressiveness and delay of gratification	X	Both specified	Sex specified	NI	II

early in life to be immature and devoid of intimacy, was meant to be exploratory, conducted in order to determine future directions for investigation.

All of the research in this area was consistent in finding differences between those who had survived a parent's death during childhood and control subjects who had not had this experience. The number of studies on each topic has been relatively small, thus limiting the extent to which generalizations can be made to other groups. However, where there have been multiple studies on a topic, results have been generally congruent.

Six of the nine level I and II studies have been concerned with behavior that can be described at the most general level as lack of assertiveness. In two of the studies, Birtchnell (1975) and Hetherington (1972), females who had lost a parent through death during childhood were found to be more dependent than those from intact families. In Hetherington's study, in which dependency behaviors were directed towards females, daughters of widows did not differ from daughters of divorcees on this variable. Birtchnell's study looked at adult psychiatric patients who had lost their mothers before age ten while Hetherington assessed lower middle class adolescents. Hetherington's findings may have been age and/or social class specific as, using older, higher socioeconomic status subjects, Hainline and Feig (1978)

were unable to replicate these results. The latter researchers found no differences between subjects of different family backgrounds.

Related to the findings of these studies, has been the work of Baggett (1967), Felner et al. (1975), and Santrock and Wohlford (1970). Baggett, in his detailed study showed that male college students who had lost a father through death were more submissive than those with a father who was present during childhood. Felner et al. found five to ten year old boys and girls to be more withdrawn and anxious than controls. In Santrock and Wohlford's study, fifth grade father absent boys were found to be less aggressive as well as better able to delay gratification if the reason for absence was death rather than divorce.

Related to the findings on lack of aggressiveness or assertiveness as coping styles would seem to be the results of Parish and Copeland's (1980) study. These researchers found male college students whose father had died to be more externally oriented in terms of locus of control than were males and females from divorced families, males and females from intact families and females who had lost a parent through death. The bereaved males thus perceived the course of their lives as not being contingent upon their own behavior. This development would make intuitive sense, as certainly these individuals have

witnessed and been affected by the ultimate expression of lack of control over one's destiny, death. While it is difficult to account for the sex difference on this variable, the external locus of control of males would appear to be consistent with the rather passive tendencies seen in males and females in the studies cited above. Those who do not feel in control of their lives would tend to behave accordingly: to depend on others and to lack initiative in their interactions. The suggestion of studies in the previous section, that bereaved children become suicidally depressed adults would also be consistent with both the presence of external locus of control and passivity. A major dynamic of depression is a feeling of helplessness, a belief that nothing one can do will positively affect one's situation.

The two remaining level II studies (Bluestein, 1978, Haworth, 1964) deal with the preoccupation with loss and death among those who have experienced the death of a parent during childhood. Both of the studies, which assessed young children, showed that subjects did more often offer responses indicative of a concern with loss and death than did controls. One might speculate that these children might still be undergoing the mourning process as the death must have been within a few years of assessment. Differential interpretation of results by the authors with respect to time of loss and time of assess-

ment would be necessary in order to more fully understand the meaning of these findings.

In view of the fairly consistent positive results which have been obtained in relating personality variables and childhood bereavement of a parent, researchers should be encouraged to explore this area further. More research on such variables as locus of control and delay of gratification would further clarify the findings of the studies that have been conducted. Longitudinal research on these and other topics would also expand understanding of the consequences of this childhood experience. A followup on Hetherington's 1972 study, for example, showed that the behavioral tendencies observed in adolescence were consistent with the types of marital relationships these subjects developed (cited in Hetherington and Parke, 1979). Finally, as in research on other topics in the field, future studies need to better account for the particulars on the subjects' experiences relative to characteristics of their family situations. When such information is provided, interaction among variables is often found. Specific information of this kind is necessary before appropriate generalizations of practical significance can be made.

Sex role, sexual, and related interpersonal functioning

Interest in sex role, sexual, and related interpersonal functioning as they relate to parent, and in particular father absence has been strong, as can be concluded from the large number of studies on these related topics (reviewed by Biller, 1971, 1974, Fulton and Markusen, 1971, Herzog and Sudia, 1973). Both on the basis of intuitive reasoning and generalizations from research showing that parents serve as strong sex role models for their children (for example, Bandura and Walters, 1963), it has been assumed that absence of the parent of same sex or of two parents in a stable marital relationship, will be associated with problems in heterosexual functioning. Much of this research has dealt with children of divorced parents or with undifferentiated parent absence. The twelve studies which are concerned specifically with death of a parent will be critically reviewed in this section, and results will be compared with conclusions drawn by reviewers who examined the relationship between heterosexual functioning and general parent absence.

Research in this area has focused on sex role identification and behavior, marital relationships, heterosexual interpersonal behavior, and sexual behavior. Table 9 summarizes methodological data and adequacy

TABLE 9: Methodological data and adequacy ratings on empirical studies of sexual identity, behavior and relationships and parent death during childhood.

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
*Archibald et al., 1962	Marital discord, sex role disturbance	X	Compared VA clinic patients with normative estimates of life insurance table. Demographics accounted for	X	X	Case history Difficulties in masculine identification with father loss, Dependency & hostility in marriage with mother loss	X	NI	NI	NI	III
Baggett, 1967	Sex role identification	X	3 groups of matched college students: father present, deceased father, father separation for other reasons	X	X	Sentence completion and self report inventory Sex x age at loss differences in sex role identification	X	Both specified	Sex specified	No father substitution	I
Clarke, 1961	Sex role identification	X	Age matched boys separated from fathers for various reasons	X	X	It scale less masculinity for all father separated boys but more extreme for completely separated (death or other)	X	Age at assessment	Sex specified	NI	II
Earle & Earle, 1959	Marital discord	X	Age and sex matched psychiatric inpatients	NI	X	Interview data (divorce v. intact marriage) more broken marriages	X	Age at loss	NI	NI	III
Gay & Tongue, 1967	Marital discord	X	Psychiatric inpatients No controls or accounting for age, sex, SES	X	No	Case history ND with parent loss due to death (except both)	No	Age at loss	Sex specified	NI	IV

*These 2 studies were rated differently in this section as the measurement methods relevant to this topic differed as to adequacy.

TABLE 9 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Hainline & Feig, 1978	Interpersonal behavior with males	X	College age women with intact families, divorced parents, deceased father, age & sex matched	X	X	Structured observations & interview ND	X	Age at assessment	Sex specified	NI	II
Hetherington 1972,	Interpersonal behavior with males	X	Compared adolescent girls from intact v. divorced v. father deceased families, matched on age, sex, SES	X	X	Structured observations & interview Anxiety and shyness in interacting with males	X	Age at assessment	Sex specified	De-tailed	I
Hetherington & Parke, 1979	Marital adjustment	X	Followup on 1972 study	X	X	Structured interview Married vocationally successful & ambitious men who were overly controlled & inhibited	X	Age at assessment	Sex specified	De-tailed	I
Iiloley & Thompson, 1961	Marital adjustment	X	Normally distributed sample of maternity hospital patients, hospitalized for birth of 1st child	X	No %'s signif. figures for this project	Structured interview, self report scales Type loss x family structure differences	X	Both specified	Detailed	De-tailed	I
Jacobson & Ryder, 1969	Marital adjustment	No	--	X	No	Interview Sex x age at loss differences	NI	Age at loss	Sex specified	NI	V

TABLE 9 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Martindale, 1972	Cross sexual identification	No	--	Yes, but not differentially related to findings	No	Listing in Oxford Anthology of Verse, life history higher cross-sex identification	Not easily	NI	Sex specified	N	V
Moran & Abe, 1969	Homosexuality	X	Age matched male psychiatric inpatients	X	X	Psychiatric diagnosis ND	X	NI	NI	NI	III

ratings on the empirical studies reviewed. As can be seen in this table and Table 10, in which ratings of research by topic and outcome are presented, seven of the studies are relatively adequate in terms of methodology (levels I and II) while the remaining studies were rated lower due to procedural flaws. One level III study was counted more than once as it addressed both marital relationships and sex role behavior. Differences between subjects who were parentally bereaved during childhood and those from other family backgrounds were found in eleven of the studies, including the study counted twice. All six of the relatively satisfactory studies resulted in positive outcomes. The four level I studies were distributed among all of the topics but sexual behavior.

Sex role identification and behavior were addressed in four studies, all of which yielded positive outcomes (Archibald et al., 1962, Baggett, 1967, Clarke, 1961, Martindale, 1972). The procedures utilized in the one level I study conducted by Baggett were described in the section on personality. Relevant to this section was his finding that college women who had lost their father through death before the age of eight were more traditionally feminine on a masculinity-femininity measure than those women who had grown up with their fathers in the home and those who had lost their fathers before age eight for other reasons.

Table 10: Ratings* of studies on sexual, sex role, and heterosexual interpersonal functioning by topic and outcome.

Rating Outcome	I			II			III			IV			V			Totals by disorder		
	+	-	Total	+	-	Total	+	-	Total	+	-	Total	+	-	Total	+	-	Total
Sex role	1		1	1		1	1		1				1		1	4		4
Marital relationships	2		2				2		2	1	1	1			1	6		6
Heterosexual interpersonal relationships	1		1	1		1										2	0	2
Sexual Behavior							1	1									1	1
Totals by rating	4		4	2		2	3	1	4	1	1	2			2	12	1	13

*1 level III study was counted more than once as it addressed 2 topics (marital and general sex role).

The other highly rated study was Clarke's, which was assigned to level II because data about age at the time of loss and family structure was omitted. Clarke (1961) found that all father separated third grade boys showed less traditional masculinity on the It scale than those from intact families. Boys who had lost their fathers through death or who had experienced another form of complete separation scored lower in masculinity than did boys who experienced intermittent father absence because of separation or divorce. The other two lower rated studies (levels III and V) also showed that father absent males showed less masculine behavior or identification than did controls.

Both the finding that father absent girls show more traditional femininity and boys less traditional masculinity may be consistent with the findings of the previous two sections. Depression, passivity, dependency, and external locus of control, found to be characteristic of individuals who had lost a parent through death would also be consistent with what has been considered feminine and therefore less masculine behavior. Comparisons of the instruments used to measure each of these behavior patterns would be necessary in order to further speculate on this connection. Also useful would be studies looking at mother loss and sex role identification in order to determine whether the latter is influenced primarily by

the father. Findings from the research reviewed above and those on father absence and the father's roles and their effects reviewed by Biller, (1971 and 1974) and Lamb and Lamb, (1972), do not necessarily exclude the mother's influence as children who had lost mothers were not considered.

Two of the seven studies concerned with marital relationships were assigned a rating of level I. These studies revealed differences in characteristics of marital interactions involving those who were parentally bereaved early in life and marital patterns of non-bereaved controls. Three of the five remaining studies also had positive outcomes.

The followup on Hetherington's research of 1972 [cited in Hetherington and Parke (1979)] was described in detail in the personality section. In this study structured interviews on marital choices and marital success of the now post-adolescent subjects were conducted. The researchers found that daughters of widows who, it will be recalled, were shy and dependent on females during adolescence, tended to marry vocationally successful and ambitious men who were socially inhibited and constricted. These paternally bereaved women contrasted with daughters of divorcees who were more likely to be young and pregnant at marriage and to divorce or separate from their husbands, who had lower educational and vocational

attainments and a higher rate of criminal activity than husbands of other subjects. Women from intact families were reported to have made the most realistic marital choices.

The other level I study, carried out by Illsley and Thompson (1961), was an exhaustive investigation into the characteristics and consequences of 'broken homes.' Illsley and Thompson assessed women delivering their first child in a maternity hospital who had been separated from a parent during childhood. Age at separation, ordinal position, family size, sex of parent, type of separation and circumstances after the separation such as economic changes and the presence of substitute parents were considered in closely matching controls and subjects. Structured interviews emphasizing verifiable behaviors such as school attendance and time of pregnancy and a validated adjustment scale were used to measure differences among groups. It was found that women who had lost a parent for reasons other than death had lower level jobs than bereaved women, as did their husbands, and were more likely to have conceived and/or delivered a child in their teens or before marriage. Those parentally bereaved subjects who were raised by their mother and a stepfather were more similar to those who were parent separated for other reasons, while parentally bereaved subjects raised within different family structures were most like controls

raised in intact families. On the average women who experienced any form of parent loss appeared less disturbed on a measure of adjustment to pregnancy and marriage than women from intact families, although their scores tended to more extreme.

Two of the remaining studies found the parentally bereaved to have experienced marital problems [Earle and Earle (1959), Jacobson and Ryder (1969)] while Gay and Tonge (1967) found differences only in those who had lost both parents to death.

Related to functioning within marriage is behavior specific to heterosexual relationships. Two studies, by Hetherington (1972) and Hainline and Feig (1978), rated at levels I and II respectively, were concerned with female's social functioning in the presence of males. Both of these studies have been described previously. Hetherington found adolescent girls to be shy with males and to avoid eye contact and physical proximity with them. This behavior contrasted with that of subjects from families in which there was a divorce and from intact families. This behavior can again be considered consistent with the passivity and related patterns observed in other studies of bereaved children. Hainline and Feig, however, failed to obtain similar results in their study of college women. Their subjects were older and of higher socioeconomic status, and may have differed on variables related to their families as the latter were not described.

Only one study dealt with sexual behavior and sexual identification. This study, by Moran and Abe (1969) was rated at level III as psychiatric diagnoses were used to differentiate among subjects. No difference was found in the rate of homosexuality of parentally bereaved and other subjects.

Credible evidence thus exists for an association between parent bereavement in childhood and variations in the individual's later sex role behavior, heterosexual social functioning and characteristics of marital relationships. Due to the small amount of research and the focus on groups of subjects and aspects of behavior which have been narrowly defined, broad generalizations cannot be made with confidence. Work on sex roles has tended to focus on young male subjects while the literature on heterosexual social and intimate behavior, including marriage has been concerned with females from adolescence on. Future research might look at the reverse, or at both sexes simultaneously in order to assess possible sex differences. Providing information about the sex of the deceased parent is especially important when researching this topic, as some of the investigators have recognized. Knowledge about the relationship between parent and child and about the personality characteristics of the deceased and surviving parent would also be necessary in attempting to support hypotheses about modeling. These variables

will affect the extent to which children will imitate one parent or another. Age at which the loss takes place would also seem to affect sex role identity and ease in relating to members of the other sex. Longitudinal research, such as that which was carried out by Hetherington should be undertaken by more researchers in order to further clarify these issues. The research in this area has in general been of higher quality than on any other topic, but needs to be expanded in order to show more clearly the nature of the association between sex role and heterosexual social functioning and the death of a parent.

Conscience development, juvenile delinquency, and criminal behavior.

Reasoning about conscience development and delinquent and criminal behavior has been similar to that concerning sex role and heterosexual interpersonal functioning. It has been assumed that without the modeling and guidance provided by parents, and particularly fathers, problems will occur. Research on this topic has again dealt for the most part with general father or parent absence and very few studies on parental bereavement were located. This section will begin with a brief review of the father absence literature, followed by analysis of the studies and review articles on death of a parent.

Research has shown that father absence is more common among those who have engaged in delinquent and criminal behavior than among those who have not been involved in such activities [Biller, (1974), Herzog and Sudia, (1973)]. Herzog and Sudia have noted that the research may not reflect actual differences in behavior between the two groups. Policies among law enforcement agencies on apprehending and reporting delinquency has been shown to vary with socioeconomic status (which is related to father absence) and with family structure. Lack of controls for socioeconomic status within the studies may have also affected the data according to these reviewers. Were the findings to be uncritically accepted, one hypothesis as to

a cause for such results would be that antisocial behavior is expected of father absent boys in much the same way as depression is expected of the parentally bereaved. Such expectations, which seem to be applied more to those whose fathers are absent for reasons other than death (less socially acceptable reasons), could result in a self fulfilling prophesy: expected behavior will come to be realized.

In Table 11 there is a presentation of methodological data and adequacy ratings on empirical studies on associations between early parent death and conscience development, juvenile delinquency, and criminal behavior. The research was not easily categorized in terms of content or ratings. All of the studies utilized relatively valid and reliable outcome measures, and several were highly detailed with respect to information about the family and the deceased parent. Therefore the studies are of great descriptive value which is not reflected in the ratings assigned to them. Two problems led to low ratings in otherwise satisfactory research. One was the lack of statistical analyses of the data, an omission overlooked when sufficient information for determination of significance levels was provided. The other was the failure to differentially interpret results with respect to cause for parent absence.

TABLE 11: Methodological data and adequacy ratings on empirical studies of associations between early parent death and consequent development, juvenile delinquency, and criminal behavior.

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Brown and Eppos, 1966	Prison sentences	x	Prisoners matched on all with normal controls	x	x	<u>Sentencing to prison</u> Higher % had lost a parent to death	x	Age at loss	NI	NI	II
Earle & Earle, 1966	Prison sentences	x	Psychiatric inpatients from intact and mother absent families, age and sex matched	x	x	<u>Incidence of prison sentences</u> Higher % bereaved had been parentally bereaved	x	Age at loss	Sex specified	NI	II
Glueck & Glueck, 1950	Juvenile delinquency	x	JD & controls matched on all	No-easy to figure		Rate of JD -court records x Higher rate for paternally bereaved and for other father absent		Both specified	Sex specified	Detailed	I
Hoffman, 1971	Conscience development	x	Adolescent father absent No and present groups, controlled on all	x		<u>Sentence completion, R's morality tales ratings by teachers, parents, peers</u> sex x age x father absence differences	x	Both specified	Sex specified	Mother-child relationship described	V
Huttunen & Niskanen, 1978	Criminal Record	x	Ss who lost their father prenatally compared with Ss who lost a father during 1st year, SES & age controlled, sex accounted for	x	x	<u>Court records of criminal activity</u> Higher rates among those whose fathers died before their birth	x	Both specified	Sex specified	NI	II
Koller, 1970	Juvenile Delinquency	x	Delinquent girls matched on all with normal controls	No-not easy to figure, re: parent loss		<u>Sentencing to training School</u> Higher general parent loss	x	Both specified	Age & sex specified	Specified	IV

TABLE 11 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Monahan, 1957	Juvenile delinquency	x	JD's of different family backgrounds no matching		No-easy to find	JD recidivism cases High % father absence in general, ND between father death & intact family	No	NI	NI	NI	IV

None of the research on conscience development and absence of a parent focused specifically on subjects who had lost a parent through death during childhood. One interesting and detailed study which may represent the parent absence research at its best is that of Hoffman (1971). Adolescent father absent and father present subjects were matched on sex, age, IQ, socioeconomic status, ethnicity, and school grade. Father absence was defined as no adult male having lived in the home for six months prior to the study. Mothers' relationships with their children were analyzed, resulting in the finding that women without husbands expressed less affection towards their sons than those with husbands. Subjects were assessed on structured projective measures including sentence completion tasks and responses to morality tales and on ratings by parents, teachers, and peers on aggression and moral behavior and attitudes. It was found that father absent boys scored significantly lower than controls on moral judgement, guilt following transgressions, appropriate acceptance of blame, moral values, and rule conformity. They were also rated as more aggressive by teachers. No differences between father present and father absent girls were observed.

The failure to differentiate among subjects on the cause for father absence raises questions about interpretation of this data. Differences between children of

divorced and widowed mothers on social and physical aggressiveness have been noted in studies cited previously. Santrock and Wohlford (1970) found that boys whose fathers were absent because of divorce were more aggressive than boys whose fathers had died. Similarly, Hetherington (1972) showed that daughters of divorcees, relative to daughters of widows, were more socially aggressive with males. On the basis of this research one might speculate that Hoffman's sample was made up largely of children of divorced parents. The association between father absence and children's relationship with their mothers, which was in turn related to conscience development, might also be more finely differentiated through an analysis of the reason for separation from the father. Such a possibility would be suggested by the fact divorced and widowed women have been found to differ with respect to their attitudes towards themselves and their former husbands, the degree to which they are concerned with their adequacy as mothers, and their perceptions about the quality of their relationships with their children (Hetherington, 1972). Research modeled after Hoffman's study but which differentiated subjects as to reason for father absence would clarify these issues. Also useful would be studies on mother absence in order to verify or dispute the belief that fathers alone are instrumental in facilitating conscience development.

individuals whose fathers had died before their birth had higher rates of criminal activity than subjects whose fathers died during their first year of life (Huttunen and Niskanen, 1978). The remaining two studies seemed to indicate that parent absence other than parent death was associated with juvenile delinquency (Koller, 1970, Monahan, 1957).

As this review and others [Brown and Eppos, (1966), Epstein et al, (1975), Fulton and Markusen, (1971)] have indicated, preliminary research suggests that there may be a relationship between delinquent and criminal behavior and death of a parent. A connection between conscience development, which is presumably a precursor to socially acceptable or delinquent or criminal behavior, and childhood bereavement, as differentiated from parent absence in general, has yet to be shown in any study. Work specific to parentally bereaved subjects will provide further verification for the preliminary speculations that have been made. One issue that needs to be clarified is the seeming contradiction between the consistent evidence that individuals who as children lose a parent through death tend to be non-aggressive, and the possibility that this type of family background is also associated with delinquent and criminal tendencies. Several possible explanations might be applied should these findings be further verified. Aggressiveness might be a dimension

which is especially susceptible to change as a result of loss of a parent. Whether expression or constriction of aggressiveness is stimulated by a parent's death may depend on the nature of other situational or child-specific variables. An alternative hypothesis is that bereaved children are more passive and therefore more easily led by gangs involved in antisocial behavior. Differences between groups on temperament, as observed prior to bereavement, would help to clarify this issue.

Cognitive, academic, scientific and creative achievement

A small number of studies have been conducted on a variety of achievements of individuals who have experienced the death of a parent during childhood. The very existence of research in this area represents a marked departure from the orientation of most of the literature which has been more negative in outlook, focusing on psychopathology, personality deficits, sex role difficulties, and criminal behavior. Research on cognitive, academic, scientific, and creative achievement permits consideration of the possibility that "the bereavement process may be worked through in a constructive manner" resulting in increased motivation and energy to be applied towards creative accomplishment (Eisenstadt, 1978). In this section, the seven studies and related literature reviews and theoretical papers examining achievement in these areas will be critically reviewed.

Research on achievement, as on the last few topics reviewed, has been both sparse and fragmented. It has also been of relatively poor quality, as can be seen in Table 12. Four of the seven studies were assigned a rating of V, two at level II, and one each at levels I and IV. In many cases the data has been derived from historical written accounts of famous persons, making it difficult to establish appropriate control groups. This

TABLE 12: Methodological data and adequacy ratings of research relating to childhood parental bereavement to cognitive, academic, scientific and creative achievement

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Cox, 1926	IQ	No		No	No %'s	Histories of parent loss in geniuses, as measured by IQ - retrospective High %'s early parent loss	No	historical retrospective	NI	NI	V
Eisenstadt, 1978	Genius	x = non-traditional	Encyclopedia listed Ss compared w 1-split 1/2 2-with fathers not listed 3-with base rates of parent death	x	x	Listings of 1 column or more in Encyclopedia Britannica & Encyclopedia Americana Overrepresentation of loss of 1 or both parents	x	Both specified	Sex specified	NI	I
Hilgard et al 1960	Academic success	No		x	No	Retrospective interview Father absence associated with success in academic pursuits	x	NI	Sex specified	NI	V
Kirkpatrick et al., 1965	Academic achievement	No		x	No	School records Lowered achievement following a parent's death	No		NI	NI	V
Lifschitz, 1976	Cognitive skills	x	Father bereaved v. not Ss, sex, age, SES matched	x	x	Bieri test of cognitive complexity structured observations Teacher ratings Age x father loss differences	x	Both specified	Detailed	NI	II
Martindale, 1972	Poetic eminence	No		Yes, but indiscriminately grouped	No %'s	Listing in Oxford Anthology of Verse, life hs. Relationship between general father loss & poetic eminence	x	NI	Sex specified	NI	V

TABLE 12 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure <u>Outcome</u>	Could study be replicated?	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Roe, 1953	Scientific achievement	x	v. college students no matching	x	%'s	Listing of scientists, accounts of family background <u>overrepresentation of parent death by age 10</u>	Not easily	Age at loss	NI	NI	IV
Santrock, 1972	Academic, cognitive functioning	x	matched on all for Jr.-Sr. high students from intact and father-separated families	x	x	Stanford Achievement <u>Otis quick IQ</u> Age x type of loss differences	x	Both specified	Sex specified	NI	II

problem was rather creatively addressed by Eisenstadt (1978), however. Other studies of live subjects have also omitted control groups and have in several cases utilized measurement techniques of questionable validity and reliability. The relatively adequate studies (Eisenstadt, 1978, Lifshitz, 1976, Santrock, 1972) have shown that, using both historical records and more traditional methods, credible findings can be obtained.

Most of the work on cognitive and academic functioning has associated undifferentiated parent (usually father) absence with performance on these variables. One selective review article (Albert, 1971) did examine cognitive development and bereavement, finding that early parentally bereaved children were overrepresented among groups of gifted individuals. Most researchers who have reviewed the literature have shown a relationship between father absence and deficits in cognitive and academic performance (Biller, 1974, Herzog and Sudia, 1973, Hetherington and Deur, 1971, Shinn, 1976). These authors have noted the existence of mediating factors such as socioeconomic status, race, amount of parent-child interaction, and anxiety which affects the degree to which father absent children differ from those from intact families on cognitive and academic performance.

Five studies were located which focused on parental bereavement and cognitive and academic success. Three of

the studies were assigned a rating of level V, primarily because they lacked comparison groups. Two of these studies (Cox, 1926, Hilgard et al., 1960) associated loss of a father with high cognitive performance while the third showed a decline in academic achievement following parental bereavement (Kirkpatrick et al., 1965).

In one of the studies rated at level II, Lifshitz (1976) compared nine to fourteen year old children whose fathers had been killed in an Israeli war three to six years prior to testing to children from intact families. The subjects and controls were matched on all relevant variables and were assessed with structured observations, teacher ratings, and the Bieri test of cognitive complexity. Father absent children were shown to be relatively deficient in cognitive skills defined as awareness and differentiation of environmental variables. Children who lost a father before the age of seven scored lower on these measures of cognitive complexity than subjects who were older when their father died.

The other level II study (Santrock, 1972) related scores on standardized achievement and intelligence tests to different types of father absence. Within the age stratified sample, those who had become father absent when they were between the ages of six and nine were found to score lower at ages eight and eleven than did control subjects from intact families. The most substantial

differences were seen in children who had been separated from their fathers for reasons other than death.

Due to the small number of procedurally adequate studies concerned with different aspects of cognitive and academic functioning which have yielded disparate results, no conclusions can be drawn concerning the relationship between cognitive and academic performance. In order to develop this area more completely, research should be carried out to examine more of the cognitive and academic skills in verbal, performance, and quantitative areas. Relevant assessment measures of well established reliability and validity are available for this purpose.

Three research reports were concerned with the relationship between genius and creativity and early death of a parent. Measures of these nebulous concepts were prominent representation in encyclopedias, poetry anthologies, and listings of eminent scientists. All three of the studies, which were of variable quality (levels I, IV and V), showed that death of a parent occurred at a high rate in the background of these creative and gifted individuals.

The difficulty of finding controls appropriate for matching with subjects listed in texts (who were in many cases no longer alive) was dealt with in different ways by each of the researchers. Martindale (1972) omitted the use of controls entirely, thus limiting the extent to

which findings from his study can be generalized. Roe (1953) compared her scientist subjects with college students but because she did not document matching on such variables as age, sex, and social class, the control group served little purpose. Eisenstadt (1978) used three methods for placing data about his subjects, obtained from encyclopedia listings, in larger perspective. He used a split half reliability test on his group of subjects, compared the subjects with their eminent and less well known fathers, and compared bereavement rates from census and insurance tables with those of his subjects. Consistency in finding that loss of one or both parents occurred more frequently among subjects lent support to Eisenstadt's hypothesis concerning the association between parental bereavement and genius.

Some research thus exists showing an association between parental bereavement during childhood and both cognitive and academic deficits and exceptional performance in a variety of fields. Determining differences in the family and individual backgrounds of subjects would be necessary in assessing reasons for dissimilarities in levels of functioning. It may be, for example, that bereaved children who become high achievers have a surviving parent who is unusually involved or achievement oriented, for example. Information about levels of performance before as well as after bereavement would help in appropriately attributing connections among variables.

Contradictions can also be interpreted between the research on creativity and genius and that on locus of control (Parish and Copeland, 1980) cited earlier. It would seem that individuals with external locus of control would be much less likely to attain exceptional achievements in science and the arts due to the drive and self-initiated energy necessary to such pursuits. Again further investigation into individual and family characteristics might help in determining which individuals may be defeated by parental bereavement and which will be, in Albert's words, 'cognitively freed.'

Summary of Research on Behaviors Observed Subsequent
to the Death of a Parent.

The preceding sections indicate that empirical research of relatively high quality has been conducted on each group of behaviors observed subsequent to the death of a parent, with the exception of work on immediate reactions. However, as can be seen in Table 13, fewer than half (forty percent) of all the studies rated met the standards for levels I and II. The proportion is approximately equivalent when studies which were rated more than once because they address more than one area of functioning are excluded (Table 14). A high proportion of the studies showed that subjects bereaved of a parent in childhood differed from controls who had not had this experience: eighty-one percent of all studies and seventy-seven percent of studies when a correction was made for duplicates, yielded positive outcomes. Nearly all of the methodologically sound studies showed differences between bereaved subjects and non-bereaved controls.

In reviewing the research on different categories of behaviors observed subsequent to the death of a parent, it can be concluded that the evidence on differences between bereaved and non-bereaved individuals varies with the type of behavior being assessed. The data on immediate reactions to the death of a parent are exclusively descrip-

Table 13: Ratings and outcomes of studies
on behaviors observed subsequent to
the death of a parent

Level	+	-	Total
I	8	0	8
II	24	2	26
III	18	9	27
IV	7	5	12
V	12	0	12
Totals	69	16	85

Table 14: Ratings and outcomes of studies
on behaviors observed subsequent to
the death of a parent, corrected for duplications*

Level	+	-	Total
I	6	0	6
II	21	2	23
III	17	9	26
IV	6	5	11
Totals	58	16	74

*Two studies which were rated twice (each was rated at levels II and III) are included at both levels. These studies employ a number of different measurement techniques to assess multiple areas of functioning, and each may appropriately be considered to represent two studies of different levels of adequacy.

tive and theoretical, and therefore cannot be interpreted with a high degree of confidence as to reliability and validity. There are general indications that children do undergo a process of bereavement similar to that experienced by adults.

The highest proportion of the research is concerned with manifestations of emotional disturbance, and almost a third of these studies qualified for ratings of levels I and II. Most of this research yielded positive outcomes, and this was particularly true of the higher rated studies. Subjects who had lost a parent were found to be overrepresented among those with symptoms of suicidal and, to a lesser extent, psychotic behavior and among those judged as maladjusted on a more general basis.

The majority of the few studies that have been conducted on personality variables were found to be of relatively high quality. Most of the level I and II studies showed those who had lost a parent through death to be more submissive, dependent, introverted and preoccupied with loss than were those of different family backgrounds. They were also more likely to have an external locus of control.

Almost half of the studies on sex role, sexual, and heterosexual interpersonal functioning were judged to meet the standards for levels I and II. These studies showed males to score lower on measures of sex role behavior and

females to be judged as more feminine than controls. The type of behavior represented by these measures is consistent with that found to be characteristic of subjects on personality measures. Females were also found to have difficulty relating to males when they had been parentally bereaved. Marital relationships were also found to differ, but not in terms of success or failure.

Conscience development was a topic not explored specifically in relation to experiencing the death of a parent. Delinquent and criminal behavior was researched, and was shown to be associated with parent loss. Four of the seven studies on this topic were rated within the top two categories, and all resulted in positive outcomes.

The last category to be discussed was cognitive, academic, scientific and creative achievement. Only three of the studies in this category were judged to be of relative methodological adequacy. One of the studies showed deficits in social perception skills among the bereaved, another indicated relative cognitive and academic deficits in father absent children as a group, while the third study found those who had lost a parent during childhood to be overrepresented among geniuses.

As was asserted repeatedly in these discussions, the choices of topics for research appear to have been logically guided by expectations of behaviors which might change as a result of parental bereavement during child-

hood. Thus, a variety of areas of functioning, such as athletic skills, parenting behavior, forms of emotional disorder such as paranoia, anxiety, character disorders and hyperactivity, substance addiction, and choice of career have not been investigated. It is clear that the field is in need of further development in terms of both the scope and technical quality of the research.

4. Family and Situational Variables Related to the Death of a Parent.

In this section, the analysis of the literature focuses on variables within the child's environment which may influence the way in which a parent's death will affect him or her. These variables include aspects of the loss process: type of loss, preparation for and beliefs and rituals surrounding it; characteristics of the deceased parent: sex, age, attitude towards dying, and relationship with the child; and factors specific to the family living situation before and after the death: family adjustment, climate, and structure, religion, ethnicity, and socioeconomic status. Where empirical evidence exists, it is related to the various behavioral outcomes. There is also speculation about the role of less well researched variables.

Sex of the deceased parent

Death of the Father

The sex of a parent who dies would be expected to be an influential factor in what effects the death will have on the child's future adjustment and development. As has been discussed, mothers and fathers typically play different roles and fill different needs in the lives of their children and therefore identical outcomes would not be expected following the loss of a mother as would be following a father's death. A number of studies have not been sensitive to this possibility, and have treated children of deceased parents as a homogeneous group (Hilgard and Newman, 1963). About half of the studies do differentially relate the sex of the deceased parent to later behaviors in children, however. These studies have either included children of deceased parents of both sexes and interpreted outcomes with consideration of these factors, or have examined behaviors only of children of deceased mothers or fathers.

Of the studies focusing specifically on the loss of parents of one sex or the other, most have been concerned with loss of the father. Several factors may have contributed to this emphasis. One is that fatherlessness is in fact a more prevalent condition as, at all ages, deaths of men are disproportionately high relative to deaths of women. In 1978, 3.5 percent of the child

population was affected by the death of a father relative to 1.5 percent experiencing a mother's death (US Social Security Administration). In addition, the literature on parent death may have been influenced by the research on the effects of divorce on children. In the latter, separation from the father is by far the more common experience. Ninety percent of children whose parents are divorced live with their mother (Biller, 1981). Research in which general parent absence or groups separated from parents for various reasons has been investigated would necessarily focus on absence of the father. Finally, it may be that greater interest, recently at least, in the influence of a father's death is in part due to the fact that most researchers in the social sciences are themselves male and presumably, in many cases, fathers or would-be fathers.

The analysis which follows will be concerned with research focusing specifically on death of a father as well as studies in which parent sex has been differentially related to outcomes. Relevant research in all of the areas of functioning previously considered will be discussed and integrated with the findings of other reviews.

Methodological data and ratings on studies considering death of a father are summarized in Table 15. A breakdown of research by topic and outcome (positive or

TABLE 15: Methodological data and ratings on studies of father loss.

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Archibald et al., 1962	Emotional disturbance masculine identification	X	VA clinic patients compared with normative estimates of bereavement by life insurance company	X	X	MMPI, psychiatric diagnosis *Overrepresentation of bereaved in clinic population	X	Age at admission	Sex specified	NI	II
Baggett, 1967	Personality, sex-roles	X	3 groups of matched college students: father present, deceased father, father absent for other reasons	X	X	Sentence completion & self report inventory *Sex x age at loss differences	X	Both specified	Sex specified	Some information	I
Bendickson & Fulton, 1975	Emotional disturbance	X	General bereaved population followed longitudinally, matched on all	X	X	Behavioral observations & ratings Differences in middle age fewer than in childhood	X	Both accounted for	Sex specified	NI	II
Birtchnell, 1966	Emotional disturbance	X	Depressed and nondepressed state hospital inpatients matched for age before grouping	X	X	Psychiatric diagnosis ND between groups; differences between severely & moderately depressed found, more mother death in severely depressed	X	Age at loss	Sex specified	NI	III
Birtchnell, 1970	Emotional disturbance	X	Psychiatric inpatients compared with outpatient medical patients, Age matching, sex, SES accounted for	X	X	Psychiatric hospital admission *Some differences - age x age at loss found	X	Both specified	Sex specified	NI	II

*Father-specific differences

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Birtchnell, 1972	Emotional disturbance	X	Psychiatric inpatients compared with medical patients Age matching, sex, SES accounted for	X	X	Psychiatric diagnosis *Higher % depressed inpatients were parentally bereaved	X	Both specified	Sex specified	NI	II
Birtchnell, 1975	Emotional disturbance	X	Psychiatric inpatients of various diagnoses compared, age & sex matched	X	X	MMPI & case histories Sex x parent sex difference on dependency scale	X	Age at death	Sex specified	NI	II
Brill & Liston	Emotional disturbance	X	Psychiatric inpatients compared, age & sex matched	X	X	Inpatient admission Only father loss for reasons other than death significant	X	NI	Sex specified	NI	II
Brown & Eppos,	Prison sentences	X	Prisoners matched on all with normal controls	X	X	Sentencing to prison Higher % had lost a parent to death	X	Age at loss	NI	NI	II
Brown et al., 1977	Emotional disturbance	X	Depressed and non-depressed inpatients, neurotic non-patients & normals compared All women, no other matching	X	X	Psychiatric diagnosis Age at loss x sex of parent differences in depressed	X	Both specified	Sex specified	NI	III
Cain & Fast, 1965	Emotional disturbance	X	Bereaved v. non-bereaved child clinic clients compared Age & sex matched	X	%s only (Fitted for this analysis)	Intake data - psychiatric diagnoses *ND in parent bereavement except in psychosis (more bereaved)	X	Both specified & differentially related	Sex specified	NI	II

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure, Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Clarke, 1961	Sex role	X	Age matched boys separated from fathers for various reasons	X	X	IT scale less masculinity for all father separated but especially complete separation	X	Age at assessment	Sex specified	NI	II
Dennely, 1966	Emotional disturbance	X	Depressed psychiatric inpatients compared with 1921 census figures	X	X	Psychiatric diagnosis *Sex x sex of parent x age at loss differences	X	Age at loss	Sex specified	NI	III
Eisenstadt, 1978	Genius	X	Encyclopedia listed 1s compared 1-split 1/2, 2-with fathers not listed, 3-with base rates of parent death	X	X	Listings of 1 column or more in 2 encyclopedias *Overrepresentation of loss of 1 or both parents	X	Both specified	Sex specified	NI	I
Forrest et al.,	Emotional disturbance	X	Psychiatric v. general hospital patients - age & sex differences accounted for	X	X	Psychiatric diagnoses Early parent death higher among the paranoid	X	Age at loss	Sex specified	NI	III
Gay & Tongue, 1967	Depression, marital discord	X	Psychiatric inpatients No matching	X	No	Case history *Differences with loss of opposite sex parent	No	Age at loss	Sex specified	NI	IV
Glueck & Glueck, 1950	JD	X	JD & controls matched on all	X	No - easily figured	Rate of JD - court records *Higher rate for paternally bereaved & for other father absent	X	Both specified	Sex specified	De-tailed	I
Hainline & Feig, 1978	Interpersonal heterosexual functioning, personality	X	College age women with intact families, divorced parents, deceased fathers age & sex matched	X	X	Structured observations & interview ND	X	Age at assessment	Sex specified	NI	II

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Haworth, 1964	Preoccupation with loss	X	2 clinic groups with an absent parent v. non-clinic institutionalized v. children from intact families sex & age matched	X	X	Rorschach, TAT - high reliability obtained All loss groups scored higher	X	Both specified	Sex, # parents deceased	NI	II
Hetherington, 1972	Interpersonal sex role behavior, personality	X	Adolescent girls from intact families or with father loss due to death or divorce	X	X	Structured interview & observation Bereaved = shy, anxious, dependent	X	Age at assessment	Sex specified	NI	I
Hetherington & Parke, 1979	Marital adjustment	X	Followup on 1972 study	X	X	Structured interview *Married vocationally successful & ambitious men who were overly controlled	X	Age at assessment	Sex specified	de-tailed	I
Hilgard & Newman, 1963	Emotional disturbance	X	3 groups: schizophrenic inpatients, alcoholic inpatients, & SES, sex, age matched controls	X	X	Psychiatric diagnosis Signif. differences in bereavement for schizophrenics	X	Age at admission	Sex specified	NI	III
Hilgard, Newman, & Fisk, 1960	Academic achievement	No	--	X	No	Retrospective interview *Father absence associated with success in academic pursuits	X	NI	Sex specified	NI	V
Hill, 1969	Suicide	X	2 groups of depressed inpatients, one suicidal, age controlled	X	X	Suicide attempt, psychiatric diagnosis Suicide attempts were common in depressed women who lost their fathers	X	Age at loss	Sex specified	NI	III

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure, Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Hill & Price, 1967	Depression	X	Endogenous & reactive depressed inpatients compared, controlled for age	X	X	Psychiatric diagnosis of different types of depression *Age at loss x sex differences found	No	Age at loss	Sex specified	NI	IV
Huttunen & Niskanen, 1978	Emotional disturbance	X	Ss who lost father prenatally compared with Ss who lost a father during 1st year, sex matched	X	X	Psychiatric diagnosis *Higher % schizophrenics lost father prenatally	X	Both specified	Sex specified	NI	III
Illsley & Thompson, 1961	Marital adjustment	X	Normally distributed sample of maternity hospital patients, hospitalized for birth of 1st child	X	No - % signif. figured for this	Structured interview & self report scales *Type loss x family structure differences	X	Both specified	Detailed	De-tailed	I
Jacobson & Ryder, 1969	Marital adjustment, immaturity	No	--	X	No	Interview *Immaturity, poor marital adjustment	No	Age at loss	Sex specified	NI	V
Kirkpatrick et al.	Emotional disturbance	No	--	X	No	School records Changes in level of adjustment follow	No	Age at loss	Sex specified	NI	V
Koller, 1970	Juvenile delinquency	X	Delinquent girls matched on all with normal controls	X	No	Sentencing to training school Higher general parent loss, especially father	X	Both specified	Age & Sex specified	Specified	IV

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Lifshitz, 1976	Cognitive skills	X	Father bereaved v. nonbereaved Ss, sex, age & SES matched	X	X	Bieri test of cognitive complexity, structured observations, teacher ratings *Age x father loss differences	X	Both specified	Detailed	NI	II
Martindale, 1972	Emotional disturbance, poetic eminence	No	--	Yes but indiscriminates grouping	No %'s	*listing in Oxford Anthology of Verse, life histories Relationship between psychopathology & father	X	NI	Sex specified	NI	V
Munro & Griffiths	Emotional disturbance	X	Psychiatric inpatients, outpatients & general hospital controls Age & geography matched	X	X	Psychiatric diagnosis Inpatient depressives showed excess maternal bereavement	X	NI	Sex specified	NI	III
Parish & Copeland, 1980	Locus of control	X	Undergraduate college students sex accounted for	X	X	Rotter internality-externality scale *Bereaved showed external locus of control	X	Age at assessment	Sex specified	NI	II
Pitts et al.	Emotional disturbance	X	Affectively disordered inpatients Age, sex, SES, & M.S. with medical patients	X	X	Psychiatric diagnosis ND	X	NI	Sex specified	NI	III
Santrock, 1972	Cognitive, academic functioning	X	Junior-senior high school students from intact & father separated families	X	X	Stanford Achievement Test, Otis Quick IQ *Age x type of loss differences	X	Both specified	Sex specified	NI	II

TABLE 15 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure; Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Sanrock & Wohlford, 1970	Aggression gratification delay	X	5th grade boys from same school	X	X	Gratification delay task; doll play interview *Differences on aggressiveness & gratification delay	X	Both specified	Sex specified	NI	II
Trunnell, 1968	Emotional disturbance	X	Father present, Absent clinic subjects, matched on age, SES	No	X	Psychiatric diagnosis *Environmental factors x parent characteristics x individual characteristics -- differences	X	Age at death	Detailed	Prior, subsequent family situation detailed	III
Tuckman & Ryan, 1966	Emotional disturbance	X	Age matching of children in parent separated homes	X	X	Clinic referral More clinic referral problems in homes with separation & divorce	X	NI	Sex specified	Speculation concerning	II

negative) is presented in Table 16. Also in Table 16 are indications of studies in which differences in outcome were attributed specifically to absence of the father. As can be seen, of the forty-six studies (including six counted twice because functioning in two areas was examined), over half were rated in the two highest categories. As specification of characteristics of the deceased parent was one of the criteria for Level I, and one that functioned to lower the ratings of numerous studies, a relatively large proportion of level I studies would be expected among those dealing with death of a father. Over three quarters of the level I and II studies showing positive outcomes attributed differences between groups specifically to absence of the father. (Some of these studies also attribute differences specifically to mother loss.) In all, sixty-five percent of the studies which directly considered loss of the father through death revealed differences related to father absence.

In research dealing with emotional disturbance and father death, there were no studies rated level I and seven studies rated level II. Three of these studies, [Archibald et al., (1962), Birtchnell, (1970), and Cain and Fast, (1965)], showed that death of a father was specifically associated with some manifestation of emotional disturbance. Archibald et al. compared the incidence of childhood bereavement among patients at a VA

TABLE 16: Ratings of studies on father death by topic and outcome.

Topic	I				II				III				IV				V				Total by behavior			
	+	-	Father spec- ific	Total	+	-	Father spec- ific	Total	+	-	Father spec- ific	Total	+	-	Father spec- ific	Total	+	-	Father spec- ific	Total	+	-	Father spec- ific	Total
Emotional disturbance					6	1	3	7	9	2	5	11	2		2	2	2		1	1	19	3	11	23
Personality	1	1	1	2	4		3	4									1		1	1	7	-	6	7
Sexual- social functioning	3	1	3	4	3		3	3					1		1	1	1		1	1	8	1	8	9
Delinquent criminal behavior	1		1	1	1			1									1		1	1	3	0	2	3
Cognitive- academic- creative functioning	1		1	1	2		2	2									2		2	2	5	0	5	5
Total by rating	6	2	6	8	16	1	11	17	9	2	5	1	3	0	3	3	7	0	6	7	42	4	41	46

mental health clinic with nominative estimates generated from life insurance company statistics. They found that both loss of the mother and the father was higher than would have been predicted among the clinic patients. In Birtchnell's study, only patients who experienced death of a father during childhood were overrepresented among adult psychiatric inpatients, although there was also an association between hospital admission and recent death of a mother. Cain and Fast (1965) examined a group of clinic outpatients and determined that, among those with psychotic symptoms, a high percentage had had a father who had committed suicide.

A small proportion of the research on emotional disturbance was concerned specifically with father absence, relative to research on other areas of functioning. This pattern may be the result of expectations of researchers, founded on empirical evidence, about the roles of mothers and fathers. While there is no direct data showing that fathers do not play a role in affective development (some of the better research, such as that by Baumrind, (1967), has looked at the effects of parents as a unit), research has shown fathers to be more concerned and influential than mothers on other areas of functioning, such as sex role development and cognitive functioning (Lamb and Lamb, 1976, Lynn, 1976). On the other hand, mothers, as the primary caretakers early in life,

have been traditionally expected to fill the nurturing role, and this relationship has been considered the basis for subsequent emotional development (for example, Rheingold, 1956). A theoretical extension of this position, held by psychoanalytic writers and others who have drawn support from research on institutionalized children (Spitz, 1946), has been that emotional disturbance is linked to maternal deprivation. These conclusions have of course been drawn from observations of parentally deprived children. This issue will be raised again in the discussion of death of a mother. From the father absence literature in the present review and others (Biller, 1972, 1974, Herzog and Sudia, 1973, Hetherington and Deur, 1971), it can be stated that there is some evidence of a relationship between father absence and emotional disturbance.

The research on personality and parent death has generally been of relatively high quality, and these standards have been upheld with regard to the research on paternal death. Six of the seven studies were rated within the two highest categories, and four of these related outcomes specifically to death of a father. These studies represent most of those conducted on personality and parent death. Thus the outcomes obtained are relatively consistent with those discussed in the general personality section, showing paternally bereaved subjects more likely to be submissive (Baggett, 1967) dependent (Hetherington, 1972), low in aggression and able to delay

gratification (Santrock and Wholford, 1970), and externally oriented in terms of locus of control (Parish and Copeland, 1980). These behaviors appear to be sex role related, fitting with the behavior typically expected of females. The outcomes of the level I and II studies focusing on sex roles (Archibald et al., 1967; Baggett, 1967; Clarke, 1961) are also consistent with these findings, showing sex role difficulties in males who had lost a father through death. These findings would thus support research indicating the father's instrumental function in transmitting sex role behavior (Biller, 1974; Lamb and Lamb, 1976; Lynn, 1976.) Both the sex role behavior of males and females appears to be affected by death of a father; both become less traditionally masculine. It might be speculated that not only does the father instill notions of sex role behavior in his offspring of both sexes, but also that his modeling of traditionally masculine behavior is adopted to some extent by both his sons and daughters.

Other research on sex role and heterosexual social relations has shown paternally bereaved females to be more anxious and shy with males than were those from other family backgrounds (Hetherington, 1972) and to marry vocationally successful but affectively constricted men (cited by Hetherington and Parke, 1979). Again, this behavior is consistent with the non-assertive style

described in other studies. Illsley and Thompson (1961), in contrast found differences specific to death of a father only in women who were raised by their mother and a stepfather (and thus might not be considered father absent). These subjects showed less conforming nonassertive behavior. Relative to those from intact families, they left school earlier and were more likely to conceive or deliver a child in their teens or before marriage. It is possible that were other researchers to examine family structure variables as carefully as did Illsley and Thompson, differences among those of different background would be found. It should be noted that Hetherington did control for these variables, but her findings are not necessarily inconsistent with those of Illsley and Thompson as she considered only subjects with no adult male living in the home.

The sex role related literature reviewed above was similar to the personality research not only in subject matter and outcome but in methodological adequacy and proportion of outcomes which could be attributed to paternal death. Seven of the nine studies considering death of a father were rated at levels I and II and in all of these, absent father-specific results were found.

Only three studies within the relatively sparse research of delinquent and criminal behavior considered father death specifically and two of these were rated

within the top two categories. Differences specifically attributable to father death were found in the one level I study by Glueck and Glueck (1950). They found that father absent boys, including those who were paternally bereaved were overrepresented among juvenile delinquents. Brown and Eppos (1966) found father absence, including paternal bereavement to be characteristic of the backgrounds of both male and female prison inmates. Additional, more current research would be necessary before generalizations on a relationship between death of a father and delinquent behavior can be made.

All of the five studies considering cognitive, academic and creative functioning and paternal bereavement showed that differences could be attributed to loss of the father, rather than mother loss or the loss of either parent. Three of these studies have shown relationships between father absence and genius, as determined by prominent listings in encyclopedias (Eisenstadt, 1978), deficits in cognitive and achievement test performance in boys (Santrock, 1972). In the later study, absence due to death was found to be less detrimental than absence due to divorce, separation or desertion. Death of the father was most closely associated with poor scholastic functioning if it occurred when the boys were between six and nine years of age. In Lifshitz' study, infancy through age seven was the critical period for paternal bereavement.

The three studies are thus contradictory, suggesting that paternal bereavement may be either an asset or a liability to achievement. Investigations into the variable which could potentially cause these dichotomized outcomes, such as temperament, prior functioning, and the mother-child relationship, are needed.

The relationship between father absence in general and cognitive and academic difficulties has been noted by a number of reviewers (Biller, 1974, 1980; Hamilton, 1977; Herzog and Sudia, 1973; Pedersen, 1976; Shinn, 1976). These authors have criticized much of the research for failing to consider the socioeconomic status of the subjects, a variable directly correlated with both cognitive-academic performance and father absence. Socioeconomic status was controlled for in the studies discussed above.

Another factor, relevant both to cognitive-academic functioning and, quite probably, all other categories of behavior, is the nature of the mother-child relationship. Biller (1972) showed that a mother's negative attitude towards an absent husband and men in general was related to academic underachievement in boys. Overprotective or rejecting mothers in single parent households were found to have sons with low self concepts. Other writers have suggested similar relationships (Lynne, 1974; Shinn, 1976). It has been shown that mothers' behavior towards

TABLE 17 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Munro & Griffiths 1968	Emotional disturbance	X	Psychiatric inpatients, outpatients, & general hospital controls - Age, geographic location matched	X	X	<u>Psychiatric Diagnosis</u> *Inpatient depressives showed excess of maternal bereavement	X	NI	Sex specified	NI	III
Pitts et al. 1965	General emotional disturbance	X	Affectively disordered inpatients matched on age, sex, SES & marital status with medical patients	X	X	<u>Psychiatric diagnosis</u> ND	X	NI	Sex specified	NI	III
Wilson et al., 1967	Emotional disturbance	X	Consecutively admitted depressed inpatients who were from intact or parent death families	X	X	<u>Psychiatric diag. MMPI</u> *Parentally bereaved had higher scores on the psychotic tetrad	X	NI	Sex specified	NI	III

*Mother absence-specific outcomes.

Table 18. As can be seen, half as many studies were conducted on death of a mother as on death of a father.

Three studies looked only at death of the mother, and all of these were level III studies on emotional disturbance. One study was counted twice as it dealt with both depression and marital discord. Fewer than one third of the studies were rated within the top two categories as compared with over half of the research on father death. Within levels I and II, three fifths of the studies resulted in outcomes which could be attributed to death of a mother (all within level II), while just over two thirds of the father death studies had such results. Approximately the same proportion of mother and father death research led to findings which could be specifically attributed to the parent of the sex being examined.

The majority of the studies linking maternal bereavement with subsequent behaviors focused on emotional disturbance. Of the studies on topics other than emotional disorders, one each was categorized at level I and level II, and in neither of these studies were absent mother-specific outcomes obtained. Most of the lower level studies did attribute differences directly to the mother's death, but these findings cannot be interpreted with confidence.

Nineteen of the twenty-five studies on maternal bereavement were concerned with emotional disturbance, and

TABLE 18: Ratings of studies of maternal bereavement by topic and outcome.

Topic	I				II				III				IV				V				Total by behavior			
	+	-	Mother spec- ific	Total	+	-	Mother spec- ific	Total	+	-	Mother spec- ific	Total	+	-	Mother spec- ific	Total	+	-	Mother spec- ific	Total	+	-	Mother spec- ific	Total
Emotional disturbance					5		3	5	11		11	11	1			1	2		1	2	19		15	19
Personality					1			1		1		1									1	1		2
Sexual- social functioning	1			1											1		1	1		2		1		2
Delinquent criminal behavior													1			1				1				1
Cognitive- academic- creative functioning																								
Total by rating	1	0	0	1	6		3	6	11	1	11	12	2	0	0	2	3	0	2	3	23	1	16	24

fifteen of these (seventy-nine percent) yielded outcomes linked to maternal bereavement as separate from parent death or death of the father. This finding contrasts with the data on paternal bereavement in which half of the twenty-two studies on emotional disturbance showed absent father-specific differences. Even fewer studies which were of relative methodological adequacy showed a direct relationship with father death (three of eight). Of the level II studies on emotional disturbance and maternal death, three of the six studies associated outcomes specifically with death of the mother. These studies were conducted by Archibald et al. (1962), Bendickson and Fulton (1975), and Birtchnell (1975). Both Archibald et al. and Birtchnell showed that, among psychiatric inpatients, those who had lost a mother through death during childhood showed more psychopathological dependency. In Archibald et al.'s study, this observation applied to males who had lost a mother during childhood, while Birtchnell related this finding to women who were maternally bereaved before ten years of age. Bendickson and Fulton found some general symptoms of maladjustment in subjects who had been bereaved of either a mother or a father during childhood. The differences between those who had lost a parent and matched controls persisted, but in decreasing intensity, through early middle age.

There is, then, the suggestion of a link between maternal bereavement and the development of emotional disturbance, a relationship which may be stronger than that between paternal bereavement and emotional disorders. Further methodologically sound work on possible associations is needed to assess the validity of what is now speculation. It should be noted that death of a mother may be less generally traumatic than a father's death because, due to the mother's usually larger role in child care, a mother surrogate is more likely to be sought and found. Were a connection between maternal bereavement and emotional disturbance established, it would be interesting to determine whether changes in the roles of mothers and fathers have an effect on the apparent affective deprivation of motherless children. In the past, such children were unlikely to be cared for and nurtured primarily by their fathers (Ferri, 1973). If fathers are now more likely to assume the major responsibility for nurturance and caretaking, a decline in the negative effects of maternal bereavement might be expected.

Reason for the parent's absence

Differences in the experience of the child with death and divorce

A large portion of the literature on the general topic of parent absence has not differentiated subject groups on the basis of the reason for separation from the parent. Most of this research was eliminated from the current analysis due to the belief that the diverse reasons for parent loss: death, divorce, separation, desertion, absence due to military service or other employment factors, and removal by child protective authorities due to neglect or abuse, represent separate and unique experiences and must be treated as such. Some researchers have recognized these differences and have included in their studies subjects who have experienced the most common forms of parental absence, death, separation, and divorce. Outcome variables on both groups have been compared, and differences in behavior patterns have been discovered. In the discussion that follows, this literature will be critically reviewed, and the views of other writers in the field on the way in which divorce and parent death are experienced by children will be presented.

The reasons for the absence of a parent hold distinct significance in the contexts both of society and the family. The way in which others behave towards these children and the expectations of the children's own

behavior may differ. Others are likely to behave in a sympathetic manner towards bereaved children, a response which may persist for many years after the death has occurred. Depression is often expected of bereaved children, and such an expectation may become a self fulfilling prophecy. In general, others may be willing to excuse maladaptive behavior in children who have lost a parent through death, attributing such behavior to the children's presumably traumatic experience.

The treatment accorded to children of divorce may be quite different. There is still some stigma attached to divorce which may be reflected in the reactions of others towards children whose parents have divorced. Such children are less often expected to mourn the loss of a parent but rather, some form of acting out behavior may be seen as consistent with their family backgrounds. The attribution of blame for behavior problems may be more of an issue in this situation and, while the parents are likely to be the recipients of such attitudes, the children will inevitably be affected.

Within the family, similar differences in behaviors and attitudes specific to the reason for parent absence may be manifested. It has been the consensus of many authors who have reviewed the father absence literature that loss of a husband through death is less damaging to a woman's self esteem than is divorce, and that a mother's

treatment of her children will vary accordingly (Benson, 1968; Biller, 1981; Lynn, 1974). A divorced mother is more likely to speak disparagingly about the father of her children and such an attitude has been associated with poor self concept and acting out in boys (Benson, 1968; Lynn, 1974). These authors have also stated that mothers find death easier to explain than divorce, and that young children find death less difficult to understand and accept. Although children may tend to blame themselves for any type of parent loss, such thoughts may seem more logical when a parent's leaving is clearly intentional. Differential reactions to the reasons for a mother's absence would be expected to be similar to reactions to a father's absence. While children of bereaved parents would, on the basis of this discussion, be expected to have an advantage over children of divorce, some aspects of adjustment might be easier for the latter. For example, Bowerman and Lush (1962) found that adjustment of children to step parents was more satisfactory after a divorce as the children were less likely to compare their parents' new spouses unfavorably with the absent parent. A parent absent due to divorce is less often idealized than is a deceased parent.

Fifteen studies were located which compared subjects who had lost a parent through death and through divorce. Methodological data and ratings on the research are

presented in Table 19. All but one of these studies yielded outcomes showing differences between subjects who had lost a parent for different reasons. The breakdown with regard to ratings was as follows: level I -- three studies, level II -- eight studies (one negative), level III -- two studies and level IV -- two studies. Research was conducted on the relationship between different forms of parent absence and emotional disturbance, cognitive and academic functioning, personality, sex role and heterosexual interpersonal behavior, and juvenile delinquency. There were studies categorized within levels I and II in all of these areas except juvenile delinquency.

Two level II studies dealt with emotional maladjustment and parent loss. Tuckman and Regan (1966), in examining the backgrounds of children admitted to a mental health clinic, found an over-representation of children who had lost a parent through separation or divorce, but not through death. Felner et al. (1975) studied school children from intact families and from families in which a parent was absent due to death, divorce, or separation. They found that parent-separated children scored higher on a scale of maladjustment than did children from intact families. Subjects who had lost a parent through death were more anxious, depressed, and withdrawn than matched controls while children whose parents were divorced or separated were more aggressive and tended to act out.

TABLE 19: Methodological data and ratings of research comparing children of divorce and bereavement

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Clarke, 1961	Sex role	x	age matched boys separated from fathers for various reasons	x	x	IT scale Less masculinity for all father separated but especially complete separation	x	Age at assessment	Sex specified	NI	II
Crooke and Raskin, 1975	Emotional Disturbance	x	Depressed inpatients with suicidal attempts compared with non-suicidal depressed Ss & normals, matched on sex & age	x	x	Psychiatric diagnosis case histories of attempts More parent loss among suicidal except for loss through death	x	Age at loss	NI	NI	III
Earle & Earle 1959	Emotional disturbance	x	Psychiatric inpatients from intact and mother absent families, age & sex matched	x	x	Psychiatric diagnosis Depression more common in maternally deprived	x	Age at loss	Sex specified	NI	III
Felner et al. 1975	Emotional disturbance	x	Normal v school referred maladapted children matched on age & sex, SES equivalent	x	x	AMI checklist, teacher referral form Bereaved group: More anxious, depressed, withdrawn	x	Both specified	NI	NI	II
Hainline & Feig, 1978	Interpersonal heterosexual functioning, personality	x	College age women with intact families, divorced parents, deceased fathers, age & sex matched	x	x	Structured observations & interview ND	x	Age at assessment	Sex specified	NI	II
Haworth, 1964	Preoccupation with loss	x	2 clinic groups with an absent parent v. now clinic institutionalized v children from intact families - age & sex matched	x	x	Rorschach, TAT - high reliability obtained All loss groups higher		Both specified	Sex, # parents deceased	NI	II

TABLE 19 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Hetherington, 1972	Interpersonal sexual behavior personality	x	Adolescent girls from intact families or with father loss due to death or divorce	x	x	Structured interview & observation Bereaved = shy, anxious dependent	x	Age at assessment	Sex specified	NI	I
Illsley & Thompson 1961	Marital adjustment	x	Normally distributed sample of maternity hospital patients, hospitalized for birth of 1st child	x	No %'s given were figured for this	Structured interview & self report scales *type loss x family structure differences	x	Both specified	Detailed	detailed	I
Hetherington & Drake, 1979	Marital adjustment	x	Followup on 1972 study	x	x	Structured Interview *Married vocationally successful & ambitious men who were overly controlled, inhibited	x	Age at Assessment	Sex specified	Detailed	I
Koller, 1970	Juvenile Delinquency	x	Delinquent girls matched on all with normal controls	x	No	Sentencing to training school Higher general parent loss, especially father	x	Both specified	Ages, sex specified	Specified	IV
Munro, 1966	Emotional disturbance	x	Depressed inpatients and age and sex matched general hospital controls compared	x	x	Psychiatric diagnosis severe v. moderate depression ND between groups re: different types of loss	No	NI	Quality of relationship with deceased parent, sex	NI	IV
Parish & Copeland, 1980	Personality	x	Undergraduate college students, sex accounted for	x	x	Rotter internality-externality scale Sex x reason for loss differences on gratification delay	x	Age at assessment	Sex specified	NI	II

TABLE 19 continued

Reference	Subject	Comparison group present	Group Matching (sex, age, SES)	Specify type loss	Statistical sign. test	Outcome measure Outcome	Could study be replicated?*	Time of assessment loss	Characteristics of deceased patient	Family structure	Rating
Santrock, 1972	Cognitive, academic functioning	x	Jr.-Sr. High school students from intact & father-separated families	x	x	Stanford Achievement Quick IQ Age x type of loss differences	Otis x	Both specified	Sex specified	NI	II
Santrock & Wohlford 1970	Aggression gratification delay	x	5th grade boys from same school	x	x	Gratification delay task, x doll play interview Differences on aggressiveness & gratification delay		Both specified	Sex specified	NI-	II
Tuckman & Ryan, 1966	Emotional disturbance	x	Age matching of children in parent separated homes		x	Clinic referral more clinic referral problems in homes with separation & divorce	x	NI	Sex specified	speculation concerning	II

There were no prior differences in adjustment levels of the subjects and controls. The two studies appear to be contradictory although it should be noted that children showing the behaviors Felner et al. (1975) found in the bereaved group are probably less likely to be referred to clinics, as these passive behaviors are less noticeable and less troublesome to those in a position to make clinic referrals, as, for example, teachers (McCandless, 1967).

One level II study (Santrock, 1972) dealt with cognitive and academic achievement. Santrock found depressed intelligence and achievement test scores among boys whose fathers were absent for any reason. Differences from controls who came from intact families were greatest for subject who were father-separated for reasons other than death. Age at the onset of father absence was also a significant outcome factor.

With respect to personality variables, there were three level II studies which compared children from a variety of family backgrounds. Differences between children who had lost parents for different reasons were found only in children who had lost both parents in Haworth's (1964) investigation. When the loss of both parents included the death of one, such subjects scored higher on measures designed to assess their preoccupation with loss. The subjects who had lost both parents were living in orphanages and therefore had quite different

experiences from the subjects of other studies which were reviewed.

Parish and Copeland (1980) found that college males who had been paternally bereaved were more externally oriented than were individuals of both sexes with divorced parents and intact families and paternally bereaved females. Such a finding would not be unexpected as the parents of the non-bereaved subjects clearly had more control over their lives than did the bereaved subjects' parents. The sex difference on this variable is not easily explained, however.

The other level II study on personality conducted by Santrock and Wohlford (1970) showed that ten year old boys who were father absent due to death had less trouble delaying gratification than boys whose parents were divorced. The bereaved subjects were also less aggressive. These findings are consistent with those of Felner et al. (1975), showing that parentally bereaved children tend to be more controlled and passive than children of divorced parents, to behave in a manner that may be more socially acceptable.

Three methodologically sound studies concerned with sex role functioning and social behavior with members of the other sex also had outcomes similar to those obtained by Santrock and Wohlford and Felner et al. Clarke (1971) in his study of father absent boys found a substantial

disturbance in masculine identification in subjects who were bereaved or permanently separated from their fathers. Boys whose parents were separated or divorced and therefore experienced only intermittent father absence had fewer problems with masculine identification. A more passive, dependent style of behavior might be expected from boys less identified with the male role. Hetherington (1972) found daughters of divorces to be aggressive and to seek attention from males while the daughters of widows were shy and avoided physical proximity with males. Hainline and Feig (1978) failed to find results consistent with Hetherington's in their replication of her study using older and higher social class subjects. They found no differences between children of widows and divorcees.

Data on marital relationships have been inconsistent with studies showing that bereaved children tend towards passive conformity while children who have divorced parents are more likely to act out. Hetherington and Parke (1979, citing findings of a study by Hetherington et al., 1979) discovered that women whose parents were divorced were likely to have married young and to have been pregnant at the time of their marriage, to have husbands with criminal records and problems with impulse control, and to have had marital difficulties resulting in separation or divorce. In contrast, women whose fathers

had died tended to have intact marriages with ambitious, vocationally successful and socially inhibited men. In Illsley and Thompson's (1961) study, women from homes in which a parent was lost for reasons other than death also more often conceived or delivered children in their teens or before marriage and, like their husbands, were likely to have left school at an early age. Among the bereaved, only those raised by their mother and a step father showed similar patterns of behavior while others who had had a parent die did not differ from women from intact families.

Thus, the popularly accepted notion of the differential effects of divorce and bereavement has received some support from empirical studies. Children of divorce, relative to those from intact families and families in which a parent has died, tend to be aggressive, to have difficulty delaying gratification, to act out and otherwise call attention to themselves. They are more likely to become pregnant out of wedlock and to have unsatisfactory marriages, possibly due to impulsiveness. They may perform poorly on cognitive and achievement tests. In contrast, individuals who have lost a parent to death show less assertive behaviors; they are withdrawn, anxious, depressed, and less likely to have the cognitive, academic, impulse control, and marital problems seen in children of divorced parents.

Reason for death

The reason for a parent's absence can be specified beyond distinguishing between death and other forms of loss, and it would seem that these differentiations would be important in understanding a child's subsequent behaviors. Death can result from sudden or prolonged illness which may or may not be genetically linked, from an accident, suicide, homicide or from military-related causes. Each of these forms of death carries with it certain psycho-social implications. The family of a suicide or homicide victim may be stigmatized while a military-related death may reflect honor on surviving family members. Death of a parent from an illness with a genetic basis may lead to excessive concern about one's own health. Despite these potentially different effects of various forms of death, this subject has been considered to a very minimal extent by researchers. The literature is comprised of two empirical studies on surviving children of suicide victims, several case studies and theoretical articles on families in which a suicide takes place, one article describing a number of families in which a homicide occurred, and two theoretical articles contrasting reactions to sudden and anticipated deaths. This work is reviewed in the section which follows.

At the most general level, reasons for death can be differentiated as death that can be anticipated and that which is unexpected. Only a prolonged illness would be consciously anticipated with certainty, although the likelihood of the occurrence of each of the other forms of death can, to greater or lesser degrees, be predicted. The family of a military officer, a careless driver, a chronically depressed individual, an alcoholic, or a person involved in criminal activity lives with the knowledge that death may occur prematurely. Yet it is only with a relatively prolonged illness that families are overtly involved in planning for the death. Goldberg (1973) has termed this "anticipatory grief." Family reactions to such a death are, relative to reactions to a sudden death, more gradual, less intense, and of longer duration. Ideally this process includes the dying person, resulting in an experience of sharing which contrasts with the affective isolation often felt during bereavement from other causes.

Another level at which forms of death can be differentiated is intentionality. Although this is a relative concept, as risk takers may be perceived as contributing to their own deaths, only suicide is clearly intentional. Dorpat (1972) has pointed out that intentional deaths may be perceived of by a child as within the control of both the parent and the child, thereby

increasing the likelihood of guilt on the part of the surviving child. Suicide is the one form of death that has been explored, at least clinically, in some detail. Several case studies (by Darpat, 1972; Ilan, 1972; Rudestam, 1977; Warren, 1972) have been conducted and have been in agreement that suicide of a parent has traumatic effects on surviving children. These case studies have all originated in clinical situations, resulting in a sample biased towards manifestations of maladjustment.

The family situations of suicide victims have been described in some detail and appear to be related to outcomes. The tendency of adults to hide the facts surrounding the suicide has invariably led to maladaptation in children (Ilan, 1972; Warren, 1972). In contrast, families in which there can be open communication find support from one another and relationships are often strengthened following the suicide (Rudestam, 1977; Holman et al., 1971). Dorpat (1972), however, found that among his sample of seventeen psychiatric patients who had survived a parent's suicide, family relationships prior to and subsequent to the death were marked by problems such as marital discord, other suicidal attempts, psychosis in one of the parents, and death of the non-suicidal parent. Again this sample can hardly be considered random or widely representative.

Among the reactions of children to a parent's death described in the case studies have been psychosomatic and other physical symptoms, guilt, depression, preoccupation with the suicide, arrested development, over-identification with the deceased, and self-destructive behaviors. Observations have taken place from a few weeks after the suicide to sixteen or more years later.

The two empirical studies on reactions to suicide were conducted by Shepherd and Barraclough (1976) and Cain and Fast (1965). These studies, which were rated level I and level II respectively, have been described in detail in the section on emotional disturbance and therefore outcomes only will be described here. Shepherd and Barraclough found that about half of the children they assessed could be described as functioning adequately with regard to school performance and psychological adjustment. Only children adapted better than did children with siblings. Children whose families had been characterized by marital discord, criminal activity or mental health problems prior to the suicide adjusted less well as did children whose physically living situation was unstable subsequently. Cain and Fast found that survivors of a parent's suicide were over-represented among those diagnosed as psychotic in a clinic population.

The one study concerned with families of a homicide victim (Burgess, 1974) was descriptive and theoretical in

orientation. Burgess reviewed case studies of six families in which a member was killed, and interviewed five additional families. She described a two phase syndrome experienced by families of homicide victims: 1) the crisis phase and 2) long term reorganization. Interestingly, Wolman et al. (1971) describe a similar process in families in which there is a sudden death for any reason. During the crisis phase, according to Burgess, there are two types of response: ego-oriented ("How does the loss affect me?") and victim oriented, marked by questioning, a need to blame someone and to seek revenge, and identification with other victims. During the reorganization phase, new family roles are assumed and there may be an attempt to "set things right" through legal procedures.

Empirical evidence on reactions to death for different reasons is thus sparse, and applicable only to death by suicide. It is assumed that, in all of the studies reviewed previously, subjects whose parents had experienced various forms of death were grouped together without regard for differences on this variable. Longitudinal studies comparing children whose parents died from different causes would be helpful in determining whether the experiences are in fact dissimilar in outcome.

Other Family and Situational Variables

A number of other variables may be related to a child's adjustment and development subsequent to a parent's death. Some of these factors include characteristics of the parent such as his/her age, attitude towards dying, and relationship with the child, family variables prior and subsequent to the death including family adjustment, size and structure, religion, ethnic background, and socioeconomic status. Also of potential importance are the preparation of the child for the death, the type of rituals engaged in, and the degree to which the child is involved in these rituals. The role of these variables has been the source of speculation among some of the writers in the field, and has been considered in a few of the empirical studies. Of interest is the fact that when family-related variables are analyzed in conjunction with behavioral outcome data, they are often found to be of primary importance, perhaps of more significance than the absence of a parent (Herzog and Sudia, 1973). In the following discussion, hypotheses and evidence concerning the role of family and situational variables will be presented.

Characteristics of the deceased parent, with the exception of sex have not been considered by many of the writers and researchers concerned with the effects of a parent's death on surviving children. Yet it would seem

that knowledge of the parent and his/her relationships with his/her children would be of great importance in understanding a child's immediate and long term reactions. A child who has not been especially close to a parent who dies is unlikely to react in the same way to the parent's death as one whose relationship with the parent has been more significant. A child with ambivalent feelings toward a parent before his/her death may experience more of a sense of responsibility and guilt with regard to the parent's death than a child who had more consistently warm feelings towards the parent. The strength and nature of the parent-child relationship may be an important determinant of the extent to which a child can use the memory of the deceased parent in a positive or negative way later in life.

The parent's attitude towards dying, if the death is anticipated would also be likely to influence the child's reaction to the parent's death, as well as his/her attitude towards death in a more general sense. Kübler-Ross (1975) observed that experiencing death as a natural event, accepted with calm and lack of fear by the dying person during childhood is associated with good adjustment towards death in general and one's own death in particular. Similar effects on immediate reactions to death might also be expected.

A parent's age at death may also have an effect on the child's responses to the event and his/her later behavior. The death of a young parent is likely to affect a child's feelings about his/her own mortality. It is possible that a younger parent may be more closely identified with than an older parent and therefore the death would have more of an impact on the child. The parent's age at death may also affect the child as an adult. Approaching the age at which a parent died may well be associated with increased concern about an individual's own well being. Similarly, passing through that point in time may be experienced with a sense of relief.

Information about the functioning of the family system as a whole would seem to be of some importance in assessing the effect a parent's death will have on a child. In the few studies in which this set of variables was considered, it was found to influence children's subsequent adjustment (Cain and Fast, 1965; Shepherd and Barraclough, 1976; Trunnell, 1968), as has also been found in families in which a divorce has occurred (Hetherington, Cox and Cox, 1978). For example, Shepherd and Barraclough, in their study of children of suicide victims found that children functioning inadequately five to seven years after the suicide had parents who had had marital separations, criminal records, and/or emotional problems. Children from less troubled backgrounds made more satis-

factory adjustments. Trunnell found severe emotional disturbance to be associated with four factors in addition to a father's permanent absence: severe psychopathology in the father (psychosis, alcoholism, or impulse disorder), severe psychopathology in the mother (psychosis or impulse disorder), periods of long absence of the parent prior to the final absence, and an early history of developmental problems in the child. It may be that in families in which a parent commits suicide, family problems are common and therefore cannot be separated as discrete factors influencing subsequent adjustment. Darpat (1972) found family relationships to be 'traumatic' before and after a parent's suicide. Marital discord, psychosis in one of the parents, a prior history of suicidal attempts, loss of the non-suicidal parent, and a long-standing pattern of invoking guilt in family members on the part of the suicide victim were conditions found to be characteristic of the families Dorpat studied.

A healthy family climate and an adequate level of functioning on the part of individual family members may, in contrast, positively influence adjustment to a parent's death (Goldberg, 1973; Herzog and Sudia, 1973). Volman et al. (1971) suggested that in families that have been open to the expression of feelings of anger, guilt, sadness, and loss, adjustment to death is less difficult than in families not tolerant of such openness. Also important

according to these authors, is the pattern of role assignment within the family. Reorganization of roles is a major task of mourning and is facilitated by prior distribution of roles in an explicit fashion, according to individual skills and needs. Such families have an automatic process allowing roles left vacant to be re-assigned. The disfunctionality of families in which role reassignment does not take place has been demonstrated by Boss (1977) in her study of missing-in-action fathers. If the deceased individual held a number of roles and/or served functions which cannot be readily assumed by others, difficulties in adjustment may arise.

The reaction of family members to the death which may be predicted, at least in part, by previous indications of adjustment, may also contribute to the effect the parent's death will have on a child. Warren (1972) noted that if family members do not share information and feelings about the death, children are less likely to be able to cope in a healthy manner. Such a pattern of communication (or lack thereof) is likely to be established previously, as Volman et al. (1971) have observed.

Goldberg (1973) has proposed that a number of family tasks must be undertaken in order for adequate adjustment to a death to be achieved. These tasks include: 1) someone giving permission for the grief process to proceed; 2) mutual encouragement of the expression of

feelings; 3) relinquishment of the memory of the deceased as a force in family activities, rather than continuing to live as if his/her were still alive; 4) realignment of roles within and outside the family. The need for role reorganization has been emphasized by Burgess (1974) as well as Volman et al. (1971).

The surviving parent is usually considered the most important family member in influencing the child's subsequent adjustment and development. The role of the now-single parent was addressed in some detail in the section comparing the differential effects of death and divorce. Most writers have focused on the matter as the surviving mother, as research has largely been concerned with loss of the father. It has been suggested that when a father is absent, the mother-child relationship is magnified in importance (Bilbor, 1981) and it may be the quality of those interactions, rather than the father's absence, that most strongly influences the child's behavior (Herzog and Sudia, 1973; Shinn, 1976). The mother's own level of adjustment, the degree to which she is able to assume the father's functions, her level of involvement with the child, and her success in supervising him or her are the variables which have been identified as significant in this regard (Bilber, 1972, 1974, 1981; Herzog and Sudia, 1973; Shinn, 1976). Research concerning surviving fathers would be likely to suggest the impor-

tance of his performance in these areas as well as in filling roles usually held by mothers.

The influence of siblings, surrogate parents, and extended family members such as grandparents, aunts and uncles has seldom been studied, a serious omission according to some reviewers (Biller, 1981; Herzog and Sudia, 1973). Krupp (1972) has written that the presence of the extended family mitigates the trauma of death as the family maintains a collective identity, provides alternative sources of support and affection, and its members are able to share the sense of responsibility for the death. Therefore, he sees the trend towards the nuclear family, geographical mobility, freedom of the individual within the family, and extended childhoods which encourage a high degree of involvement with a few family members, as likely to cause a death in the family to be more traumatic and disruptive.

The presence of a surrogate parent would be expected to influence a child in either positive or negative ways, depending on the nature of the relationship he/she and the child develop. All of the variables listed as important with regard to the surviving parent might also be of significance with the surrogate parent as his/her skills may complement those of the surviving parent.

Surrogate parents may be either the new spouse of the surviving parent or a member of the extended family who

has volunteered to fill some of the roles of the deceased parent or an individual hired for that purpose. Except in the case of remarriage, mother surrogates are usually more actively sought and found than are father surrogates (Biller, 1981). If the household has previously been run along traditional lines with mother as caretaker for the children and home and father as the wage earner, mothers who lose husbands tend to attempt to fill their absent husband's functional role while fathers seek others to carry out their wives' domestic tasks. Both bereaved mothers and fathers may enlist the help of their older children in household duties. These children have been shown to make a less satisfactory long term adjustment than their younger siblings who have had fewer family responsibilities (Illsley and Thompson, 1961).

In the case of step parents, there is some evidence that their presence may not necessarily benefit children who have lost a parent through death. There may be a tendency to resent an individual who seeks to replace a deceased parent, as was seen in the study by Bowerman and Irish (1962). These researchers found that bereaved children were less likely to satisfactorily adjust to step parents than were children of divorced parents, as the latter showed less of a tendency to unfavorably compare their parent's new spouse with their absent parent. Similarly, Illsley and Thompson's (1961) research indi-

cated that children whose mothers remarried showed a less positive long term adjustment than did other bereaved children. The child's age at the time of introduction of a step parent may influence the nature of the adjustment that is made. Most research on parent absence has not specified as to whether any form of parent substitute is present, thereby confusing any interpretation which might be made either about parent absence or the effect of a surrogate parent.

The ability of siblings to fill needs of children ordinarily met by parents is also worthy of explanation. Some of the research on sibling and sibling-like relationships suggests bereaved children may well benefit from peer support. One source of evidence comes from a study of six children orphaned before the age of one year who lived in a concentration camp and a succession of hostels until they were three years of age (Freud and Burlingham, 1944). These children, who had no consistent adult caretakers appeared to derive a considerable amount of nurturance and care from their small group of peers. They showed a form of separation anxiety when apart and seemed to place the needs of their group members above their own. More recently, Bank and Kahn (in press) as cited by Adams, (1981), found a similar case of sibling loyalty and intimacy in natural siblings. Such relationships were seen only in those whose parents were either absent or

inadequate when the children were growing up. The authors concluded that, in such cases of family collapse, sibling relationships increase in importance. In studies of father absence, the presence of older brothers has seemed to mitigate some of the potentially negative consequences of paternal deprivation (Biller, 1981).

Socioeconomic status has been shown to be a significant factor in the way father absent children adjust and develop. Mother absence and parental death as differentiated from other forms of absence has not been systematically investigated. In general, it has been found that lower class children are more negatively affected by father absence than are those from middle class families [Biller, (1974, 1981); Lynn, (1974); Shinn, (1976)]. As Lynn has stated, "Father absence handicaps the lower class child more than the middle class child... (as loss of the father) adds to the debilitating effects on the child associated with poverty and the impact of some neighborhoods where there is pressure for conformity to gang standards, and daily confrontation with violence, sexual promiscuity, and drugs."

In view of these findings, it is unfortunate that father absence is especially common in lower class families (Biller, 1974). The association between poverty and father absence is due to the fact that father separation occurs more frequently in lower class families and

loss of the father often results in decreased income. The latter may be less likely to affect bereaved families because of death benefits (Herzog and Sudia, 1973). It should be noted that father absence, through divorce is also common in upper middle class families relative to those in the middle class.

Religion and ethnicity are also factors which would seem important in the way children are affected by a parent's death. Ethnicity has been explored only in so much as minority group status has been associated with poverty and therefore with especially extreme effects of parent- or at least father-loss. The traditions and support systems associated with different ethnic groups might also be expected to play a role in the outcome of parental bereavement. Similarly, religious beliefs and practices may be influential in both immediate and long term reactions to a parent's death. Belief in an afterlife and/or an individual's continued involvement in the affairs of the living would be likely to have a continuing effect on a child's feelings about and behavior subsequent to a parent's death. Lack of such a belief system may be associated with a more extreme sense of loss, which in turn might lead to depression or increased independence.

Integral to religious beliefs and practices are the various rituals associated with death. Krupp (1972) has

purported that the role of ritual is to channel and legitimize the expression of grief, to encourage the emotional support of friends and to facilitate establishment of new roles. Children have often been excluded from participation in death rites in the belief that they need to be shielded from the harsh realities of death adults have come to face through the use of such rituals. The validity of the practice of protecting children in this way has not been fully explored, although one study does seem to support it. O'Brien (1979) found that inclusion of fifth and seventh graders in mourning rituals (not necessarily for their parents) led to increased anxiety about death. O'Brien did not specify the nature of the rituals in which these children took part, however. The reaction of a child to viewing the body of the deceased and perhaps being forced to kiss him/her might differ dramatically from a child's response to inclusion in a closed-casket funeral service. The short and long term effects of participation in different forms of ritual might also differ.

A number of characteristics of the family before, during, and following bereavement may therefore be expected to play a part in the effect a parent's death will have on a child. To the extent such variables have been accounted for in research, they have greatly added to the clarity and specificity of findings. Further ex-

ploration of the role of such variables can only increase understanding of the way in which parental bereavement during childhood will influence subsequent adjustment and development.

Summary of Research on Family and Situational Variables Related to the Death of a Parent

Based on the evidence presented in this section, it can be concluded that family and situational variables related to the death of a parent are associated with subsequent behaviors observed in the child. Wherever such variables have been considered in empirical research, their importance has become clear. Much of the research has failed to take these factors into account, so that general statements about the findings must be interpreted with caution. One of the most well supported outcomes concerns children's reactions to different forms of parent loss. Children of divorced parents have shown a pattern of acting out and undercontrolled behavior, while bereaved children tend to be more constricted and socially acceptable in their actions. Specific forms of death have not been differentiated in the majority of studies. Suicide of a parent does seem to be associated with problems in children and also has been connected with daily difficulties both before and after its occurrence. A great deal of research has focused specifically on paternal bereavement, which has been associated with emotional disturbance, personality variables, sex role and related interpersonal functioning, cognitive functioning and delinquent behavior. Except for one study on genius, father absence due to death has been related to deficits

or problems in these areas. Death of the mother, which has been less frequently studied, possibly because it occurs less often, has been linked only to emotional disturbance. This research does not necessarily indicate differences in the effects of maternal and paternal bereavement, but does seem to show that death of either parent may make a difference to children's subsequent behavior. Other variables which seem to be related to children's adjustment and development subsequent to a parent's death, but have been the topic of fewer investigations include factors associated with the loss process, other characteristics of the deceased parent, including age, attitude towards dying, and relationship with the child, and family structure and adjustment, most especially behavior of the surviving parent, presence and behavior of other family members, predeath family functioning, and socioeconomic status. The demonstrated role of these environmental context variables suggests that, in research on parental bereavement, subjects can not be considered a homogeneous group by virtue of their common experience with a parent's death. The need for a multidimensional approach to research in this area is clearly indicated.

5. Characteristics of the Child related to Behavior Subsequent to Parental Bereavement

Differences among children before the death of a parent would necessarily influence subsequent behavior. Temperament, emotional adjustment, cognitive level, academic creative and athletic skills, social relationships, and conscience development are some of the broad areas of functioning which might be expected to affect and be affected by the major crisis and ongoing deprivation death of a parent may represent. Researchers, while giving attention to later performance and development with respect to these variables, have not considered functioning prior to the parent's death. Thus, it is not known whether subject and control groups compared on these factors were originally equivalent, and, as a result, whether differences can be attributed to bereavement.

Subjects have been differentiated on such major attributes as age, and sex in some of the research. These studies will be analyzed in the section which follows. Also reviewed will be the literature on the development of the concept of death in children. Subjects' levels of comprehension of death have not been considered in parental bereavement studies, but data on the development of understanding of death has significance for interpretation of the results of this research.

Development of Conceptions of Death

A child's level of understanding of the concept of death would seem to be integrally related to the reactions/he will have to a parent's death. A child who does not fully comprehend the nature of death would not be expected to have the same response as one who is more knowledgeable. The former may, for example, continue to hope for a parent's return, perhaps connecting some aspect of his/her own behavior to the time or likelihood of the parent's reappearance. A child more aware of the characteristics of death might, conversely, become more fatalistic in his/her outlook. Unfortunately, none of the research reviewed attempted to draw a connection between a child's comprehension of death, the death of a parent, and later behaviors on the part of the child. Research of relatively high methodological adequacy has been conducted on the development of conceptions of death. This research is reviewed in order to (1) illustrate the potential importance of determining understanding of death in assessing parentally bereaved children and (2) provide information of relevance to the discussion of age-related differences in responses to a parent's death, which will be presented in the next section.

Research in this area has varied in approach but has been relatively consistent in terms of its quality as well as in its results. Methodological and outcome data are

presented in Table 20. The studies were evaluated on outcome measures and the makeup of subject and comparison groups. Outcome measures have included structured interviews with children and/or parents, receptive language tasks, work definition and association tests, projective measures such as drawings, self report questionnaires, responses to stories, analysis of play behavior, and measurement of latency of reactions and galvanic skin responses after death related statements. Measures of cognitive functioning have often been used to supplement these assessment techniques. The instruments have, for the most part, been of demonstrated validity and reliability. Results have been of such consistency that concern about the few relatively unstructured measurement tools becomes less important.

Studies have all utilized cross-sectional methods, comparing children of different ages on the same variables. A longitudinal approach would have insured matching on all relevant variables, lending credibility to statements about age-related changes found in many of the studies. However, care was taken to account for any intra-group differences which might affect outcome. In addition to age, sex was accounted for in all of this research, and cognitive level, socioeconomic status, religion, and parent's education was controlled for to varying degrees. Except for cognitive level, these

differences on other variables usually did not alter outcomes.

The development of an understanding of death has been researched in terms of acquisition of a number of components central to the concept. Kastenbaum (1967) has suggested that comprehension of death involves seven distinct ideas: 1. ability to distinguish the self from others; 2. classification of oneself within a category of beings with the attribute of mortality; 3. the inevitability of personal death; 4. the fact that, while some specific causes of death may be evaded, individual control is limited; 5. the notion of an abstract future; 6. the finality of death; and 7. the inclusiveness of separation from the world of living beings that death entails. Portz (1967) has conceptualized death in more general, less personally oriented terms, which represent the aspects examined by most of the researchers. He conceived of comprehending death as mastering the following issues: death as a temporary or permanent change, reversible or irreversible, a natural or a magical event, the dead as mobile or immobile and as physically insensible to controlled by external constraints. Knowledge of the inevitability of death, which was mentioned by Kastenbaum, and death's universality, was also assessed in many of the studies.

TABLE 20: Methodological and outcome data on research
on the development of the conception of death.

Reference	Comparison Group	Outcome Measure	Outcome
Alexander & Adlerstein, 1959	Children of 3-10 years male & female	GSR, latency of response	Differential reaction to death related concepts in children of 5 years and above
Anthony, 1940	Disturbed and non-disturbed school age children, male & female, lower middle class	Interview, word association, play	Average MA of 7-8 in understanding death; C's under 7 showed limited understanding
Anthony, 1972	2-12 year old children, male & female, lower middle class	Parent interviews, word definition, story completion	5 stages in concept development identified, & correlation with age
Hornblum, 1978	4-11 year old children, male & female	Conservation and time tasks, interview	Age & cognitive level predicted understanding of death; 7-8 = x age for grasping concept
Kane, 1979	3-12 year olds, male & female	Receptive language task; open-ended interview tapping 9 aspects of death conceptualization, coded Rs	No reification; Age & Piagetian cognitive level predicted sequential development of death concept; Most concept components acquired by age 8. Death experiences accelerated development in Ss less than 6
Koocher, 1974	6-15 year olds of average IQ, middle class, males & females ethnicity accounted for	open-ended, structured interview	Piagetian stage predicted concept level; disputed Nagy's results on personification
Maurer, 1964	17-19 year old females	unstructured essay: 'What comes to mind when you think of death?	The greater the cognitive ability the less the fear; all understood inevitability

TABLE 20 continued

Reference	Comparison Group	Outcome Measure	Outcome
Melear, 1973	3-12 year old males & females	Structured interview on components of death concept	Full understanding achieved most often in Cs 6 & above The greater the understanding the greater the fear
Nagy, 1948	3-10 year old Hungarian males & females, full range of SES, religion, IQ	Word association, drawings, interview	3 age related stages identified
O'Brien, 1979	1st, 3rd, 5th and 7th grade inner city parochial students	Questionnaire on death information and anxiety	Age related level of understanding, class related to anxiety, ritual inclusion related to anxiety
Swain, 1979	2-16 year olds, randomized on sex, religion, parent education	Coded structured interviews	Age-related concept continuum; concrete understanding shown at 5-7; abstract understanding in teens
White et al., 1978	K-4th grade males and females	Conservation task, R's to story	Age & Piagetian stage related to understanding, universality concept present at 6-7; causal connection related to perceived virtue

Researchers have found that comprehension of death develops in stages which are related to both age and to the succession of levels of cognitive development identified by Piaget (published in English in 1958). Piaget's cognitive stages have also been associated with general age periods.

The sensorimotor period, which extends from birth to approximately two years of age, is characterized by development of coordination of the senses and understanding of object constancy. According to Kane (1979), all components of the concept of death are either absent or incomplete during this period. However, basic ideas central to more complex notions related to death develop at this time. Kastenbaum and Costa (1977) have identified the six month old's experiments with the concepts of being and non-being (peek-a-boo) as the beginning of the discovery of the meaning of death. Mastering separation anxiety would also be an experience relevant to understanding and eventually dealing with death. In this regard, parental bereavement could make a difference, as children with two actively involved parents tend to show separation anxiety less frequently than those with only one primary caretaker (Spelke et al, 1973). While, generally speaking, children of this age and level of cognitive maturity have no knowledge of abstractions, awareness of concepts of finitude, irreversibility, and

cessation of bodily functions as young as sixteen months of age (Kastenbaum and Costa, 1977).

Piaget's preoperational state covers the period roughly from two to seven years of age. A number of concepts are acquired during these years but many skills necessary to an understanding of death are still lacking. Preoperational children can profit from the experiences of others only to a limited extent, and still have difficulty distinguishing between animate and inanimate objects. Egocentrism and magical thinking are also characteristic of this stage. Thus, children think of death as something that can be evaded or reversed, and as a relative or temporary state [Melear, (1973), Nagy, (1948), Rochlin, (1967)]. Melear found that those children viewed the dead as having feelings and functioning biologically. In Nagy's study, children were found to personify death (a "death man") but this finding was inconsistent with most of the other research. Preoperational children consistently recognized and displayed emotional responses to the concept of death [Alexander and Adlerstein, (1959); Anthony, (1972); Kane, (1979); Swain, (1979)], although understanding was shown to be very limited. Some cognitive and affective comprehension of death was thus displayed.

Children of seven to eleven years of age show characteristics of the stage termed "concrete operations" by Piaget. At this stage, children understand notions of

classification, can think in terms of specifics, and can consider two aspects of a situation simultaneously. Attainment of concrete operational thinking (often assessed by easily administered conservation tasks), has been consistently shown to relate to comprehension of such aspects of death as universality, finality, inevitability, irreversibility, and understanding of the dead as lacking the biological capacities of the living [Anthony, (1940, 1972), Hornblum, (1978); Kane, (1979); Koocher, (1974); Melear, (1973); Nagy, (1948); O'Brien, (1979); White et al., (1978)]. In the studies in which Piagetian stage was not specifically determined [Anthony, (1940, 1972); Melear, (1973); Nagy, (1948); O'Brien, (1979)], the attainment of these concepts was identified as occurring during the years marking the beginning or middle of the period.

The formal operations stage, which begins at about age twelve, involves attainment of skills in abstract reasoning, hypothesis generation, and the ability to consider more than two aspects of a situation simultaneously. It is at this stage that death is fully understood in abstract, reality based terms [Kane, (1979), Kastenbaum, (1967), Koocher, (1974); Swain, (1979)]. Both understanding of death within the total view of life, and as a concept of personal relevance is developed at this time.

In younger children, six years and below, experiences with death were shown to accelerate the development of understanding of the topic (Kane, 1979). Thus children who lose a parent early in life may come to understand the nature of their loss at a level which would not otherwise be expected. However early comprehension of death has been associated with anxiety about death (Melear, 1973). A similar association has been found with preadolescent children who have been included in mourning rituals (O'Brien, 1979). Death anxiety has also been associated with lower cognitive ability in adolescent females (Maurer, 1964), and with membership in the middle class, in contrast with lower class standing (O'Brien, 1979). Further exploration of the relationship between cognitive and affective factors in understanding death would be useful. It might be speculated that emotional disturbance would inhibit or distort acquisition of conceptions of death, for example. Both the ability to understand death and the affect associated with it will have implications for the effect a parent's death has on a child's adjustment and development.

Child's age at the time of Parental Bereavement

The child's age at the time of a parent's death is another variable which would seem likely to make a difference in the effects the loss of the parent would have on the child's subsequent adjustment and development. Children of various ages have different needs for parental involvement and therefore the initiation of a parent's absence during one period of time would not be expected to influence behavior in the same way that an earlier or later separation would. As was seen in the last section, children of different ages also show dissimilar conceptualizations of death which in turn may affect behavior exhibited following parental bereavement. A relatively small number of studies have considered the specific ages of children at the time of a parent's death. This research is analyzed and integrated with findings of other reviewers about the development of an understanding of death.

All of the studies reviewed for this project were concerned with the death of a parent during childhood. Thus it was stated (or presumed) that the loss occurred some time before the child's eighteenth birthday. Specification of loss beyond this global distinction was seldom made, however. The present analysis is concerned with research in which attempts were made to differentially relate behaviors to the age at which the loss

occured, or when the range of ages of subjects at the time of loss was less than a twelve year time span. Fourteen of the studies, which were concerned with either emotional disturbance, personality variables, cognitive functioning or marital adjustment, met these standards. Information on outcomes and ratings of these studies can be found in Table 21.

Half of the fourteen studies were given a rating of I or II. Of these, adult subjects were assessed in three studies and children and adolescents in four studies. These studies dealt with emotional disturbance, personality, and cognitive functioning. Of the seven relatively adequate studies, six indicated that individuals separated from a parent at some point before the age of eight differed from controls (Baggett, 1967, Greer, 1964, Haworth, 1964, Lifshitz, 1967, Santrock. 1972, and Lantrock and Wohlford, 1970). The other level II study (Birtchnell, 1970a) found the critical period for parent loss to be ages ten through nineteen.

With respect to cognitive functioning, two level II studies have demonstrated the negative consequences of early death of a father. Santrock (1972) showed that adolescent boys whose fathers died when they children were aged six through nine scored lower than did controls from intact families on intelligence and aptitude tests. Still earlier separation was more significant in children of

TABLE 21: Ratings and outcomes on studies specifying age at parent loss.

Reference	Age Period at loss	Age Period at assessment	Behavior measured	Outcome Measure	Outcome	Rating
Hill, 1969	Under 10 10-14 15-19	Adulthood	Emotional disturbance	Psychiatric diagnosis suicide attempt	Suicide attempts were more common in depressed women whose fathers had died when the girls were 10-14 and, to a lesser extent, 15-18, compared with other depressed inpatients; men and women bereaved of a mother when under 10 also attempted suicide more often	III
Lester & Beck, 1976	Under 10	Adulthood	Emotional disturbance	Suicide attempt	Loss of both parents before age 10 was associated with suicide attempts after a recent loss in females	V
Hill and Price, 1967	10-14	Adulthood	Emotional disturbance	Psychiatric diagnosis of endogenous v. reactive depression	Bereavement at 10-14 predicted reactive depression in female patients	IV
Birtchnell, 1970a	10-19	Adulthood	Emotional disturbance	Overt behavioral observations	Men and women bereaved of a parent from ages 10-19 were overrepresented among psychiatric admissions who had attempted suicide	II
Brown, et al., 1977	Under 11	Adulthood	Emotional disturbance	Psychiatric diagnosis	Loss of a mother by death, separation or divorce before age 11 was associated with depression among female psychiatric patients	III
Jacobson & Ryder, 1975	Under 12	Adulthood	Marital problems personality	Interview	Death of the husband's father prior to age 12 was associated with a high rate of marital problems with husbands immature, socially incompetent	V
Huttunen and Niskanen, 1978	Prenatal, 1st year	Adulthood	Emotional disturbance	Psychiatric diagnosis	Ss whose fathers died prior to their birth were represented in a schizophrenic population in numbers higher than Ss whose fathers died during their 1st year of life	III

TABLE 21 continued

Reference	Age Period at loss	Age Period at assessment	Behavior measured	Outcome Measure	Outcome	Rating
Barry and Lindeman, 1960	Under 2 Under 5	Adulthood	Emotional disturbance	Psychiatric diagnosis clinical interview	Women who were under 5, and especially those under 2 when mothers died were overrepresented among neurotics	III
Santrock, 1972	Under 2 6-9	Adolescence	Cognitive-academic functioning	Stanford Achievement Test, Otis Quick IQ	Adolescents who were paternally bereaved before age 5, and especially before age 2, scored lower than controls from intact families	II
Santrock & Wohlford, 1970	3-5 6-9	Pre- adolescence	Personality	Gratification delay task doll play interview	Boys father separated between 3 & 5 showed less ability to delay gratifica- tion than those who lost a father earlier or later - but gratification delay was more of a problem for boys father separated by divorce than death	II
Greer, 1964	Under 5	Adulthood	Emotional disturbance	Suicide attempt	Overrepresentation of parent loss from any cause before the age of 5 among suicidal inpatients, in contrast to nonsuicidal inpatients	II
Haworth, 1964	Under 6	Childhood- adolescence	Preoccupation with loss	Rorschach & TAT - with high interrater reliability demon- strated	Children who had lost one or both parents before age 6 showed more concern with loss than controls from intact families	II
Lifshitz, 1976	3-11	Childhood adolescence	Cognitive social perception skills	Bieri test of cogni- tive complexity, structured observa- tions, teacher ratings	Children who were paternally bereaved before age 7 showed lower cognitive complexity than nonbereaved controls	II
Baggett, 1967	Under 8	Adulthood	Personality	Sentence completion & self report inventory	Men father separated before age 8 (through death) were more submissive than those from intact families	I

both sexes who were father separated for other reasons. In Lifshitz' 1976 study, children who were paternally bereaved before age seven were found to be deficient on a scale of cognitive complexity relative to non-bereaved subjects.

The three level I and II studies on personality found differences related to age at parent loss on such diverse characteristics as submissiveness, ability to delay gratification, and concern with loss. Baggett, (1967) found men who were paternally bereaved before the age of eight were more submissive than controls from intact families. Concern with loss was shown in children studied by Haworth (1964) when one or both parents were lost for any reason before the children were six years old. Santrock and Wohlford, in their study of 1970, showed that boys father-separated by divorce were less able to delay gratification than were bereaved children. Among bereaved subjects, however, those who lost their fathers when they were between three and five years of age exhibited less of a tendency to delay gratification.

The one study of relative methodological adequacy showing differences specific to death when a child was over eight was concerned with emotional disturbance. Birtchnell's (1970a) study indicated that men and women who were parentally bereaved during the ten to nineteen year age period were overrepresented among psychiatric

inpatients who committed suicide. Greer (1964), in contrast, found parent loss from any cause before a child reached five years of age to distinguish suicidal and non-suicidal psychiatric inpatients. In both studies, adult subjects were studied, indicating that parental bereavement may have long term effects.

The small number of studies on a wide range of topics in which age at loss has been differentially related to outcome precludes conclusions about the type of behavior which might be predicted from parent loss at a given age. Failure to differentially relate age at loss with age at assessment further impedes efforts at interpretation. The research which can be interpreted with relative confidence is consistent in relating less positive behavior with loss of a parent before age seven. It will be recalled that it is only at about age seven or eight, the beginning of the concrete operations stage, that children begin to understand death in a realistic way. A lack of comprehension of the meaning or significance of death may therefore be associated with negative consequences of a parent's death as the only significant form of parent loss, and other reviewers (Biller, 1971, Herzog and Sudia, 1973, Pederson, 1976) have concluded that early loss of a parent, or at least of a father, for any reason, is more detrimental to development than would be a later loss. It is therefore probable that, while understanding of death may be

important, other factors related more generally to a parent's absence are significant. The need for nurturance or for a role model may be greater in the early years, for example. It also may be that the presence of the parent for a longer period of time in those who lose a parent later, has already provided the child a basis for further, more independent development. Children who lose a parent very early in life may thus be deprived of what they need from parents when they need it most as well as the accumulation of parent-related experiences from which to draw on later in life.

Sex of the Child

Females

The issue of sex differences in behavior subsequent to a parent's death might be expected to be related to the sex of the deceased parent. It is generally accepted that all children are in need of parental involvement, but that males and females may look to each parent for the fulfillment of different needs. Sex by sex of deceased parent differences have been found, and the failure to specify both variables in studies may be one explanation for the failure to find more sex differences in post-bereavement behavior. An alternative explanation would be that fathers are most likely to be deceased and that their absence has similar effects on both males and females. The general deprivation which may be associated with being raised in a one parent family may also influence male and female children in the same way. The analysis which follows focuses on studies in which differences in bereaved and non-bereaved subjects were found specifically for females. The studies reviewed include those using only female subjects and studies in which sex differences were found when both males and females were assessed.

Eighteen of the studies had findings linking parental bereavement to the subsequent behavior of females. As can be seen in Table 22, seven of these studies were rated in categories I and II. All of the areas of functioning

TABLE 22: Ratings and outcomes on studies on females.

Reference	Behavior measured	Subjects	Outcome Measure	Outcome	Rating
Baggett, 1967	Sex roles	Male & female college students	Sentence completion & self report inventory	College women were more feminine on a masculinity-femininity scale when they had been parentally bereaved	I
Barry & Lindemann, 1960	Emotional disturbance	Male & female psychiatric inpatients	Psychiatric diagnosis Clinical interview	Death of mother early in life associated with neuroses in females	III
Birtchnell, 1966	Emotional disturbance	Male & female psychiatric	Psychiatric diagnosis	Females bereaved of mother over-represented among severely depressed	III
Birtchnell, 1972	Emotional disturbance	Male & female psychiatric inpatients	Psychiatric diagnosis	Maternal bereavement in females associated with depression	III
Birtchnell, 1975	Personality	Age & sex matched male & female inpatients	MMPI	Women maternally bereaved before 10 found to be more dependent	II
Brown et al., 1977	Emotional disturbance	Female psychiatric patients	Psychiatric diagnosis	Loss of either parent associated with higher incidence of psychiatric depression	III
Dennehy, 1966	Emotional disturbance	Male & female psychiatric patients	Psychiatric diagnosis	Females who lost fathers before age 15 had higher than expected rate of depression	III
Dietrich, 1979	Emotional disturbance	Male & female college students	MMPI, TAT, Rosenweig Picture Frustration Test, Lester & Templer Death Fear Scale	Psychopathologic trends associated with late childhood bereavement in females, although scores less extreme than males	II

TABLE 22 continued

Reference	Behavior measured	Subjects	Outcome Measure	Outcome	Rating
Gay & Tongue, 1967	Emotional disturbance	Male & female psychiatric patients	Psychiatric diagnosis	In women, reactive depression associated with paternal bereavement, other neurosis associated with maternal bereavement	IV
Hainline & Feig, 1978	Personality Interpersonal behavior with males	Adolescent females	Structured interview and observations on Ss from various family backgrounds	ND among groups	II
Hetherington, 1972	Personality Interpersonal behavior with males	Adolescent females	Structured interviews Observations	Daughters of widow's shy with males All father absent = dependent	I
Hetherington & Parke, 1979	Marital adjustment	Female young adults	Structured interviews	Daughters of widows married vocationally ambitious, socially constricted men	I
Hill, 1969	Emotional disturbance	Male & female psychiatric inpatients	Psychiatric diagnosis suicide attempt	Suicide attempted more frequently in depressed when losing fathers after 10, mothers before 10	III
Hill & Price, 1967	Emotional disturbance	Male & female psychiatric inpatients	Nontraditional diagnosis	Females bereaved from 10-14 of fathers more often depressed than others	IV
Illsley & Thompson, 1961	Marital adjustment	Maternity hospital patients	Structured interview self report scales	Women raised by mother & stepfather had left school earlier, had lower level jobs as did husbands, conceived in teens or outside marriage, ND from controls with other bereaved subjects	I
Koller, 1970	Juvenile delinquency	Delinquent females	Sentencing to training school	Higher general parent loss	IV

TABLE 22 continued

Reference	Behavior measured	Subjects	Outcome Measure	Outcome	Rating
Lester & Beck, 1976	Emotional disturbance	Females who had attempted suicide no controls	Suicide attempt	Loss of parent before 10 associated with suicide attempt after a recent loss	V
Roy, 1979	Emotional disturbance	Female gym students	Psychiatric diagnosis	ND on family background between depressed & others	III

previously discussed, with the exception of cognitive performance were represented in the seventeen studies. Among the higher level studies, the topics considered included personality variables, marital and heterosexual-social adjustment, and emotional disturbance.

Eleven of the studies were concerned with the family backgrounds of emotionally disturbed women. Such an emphasis can be explained not only because of the general research interest and pattern of positive findings on emotional disturbance among the parentally bereaved, but also due to the fact that women are overrepresented among psychiatric populations (Chesler, 1972). Males tend to be overrepresented in groups with emotional and other problems of childhood, and in criminal populations in adulthood. Only one of these studies was rated at Level II, and none at Level I, primarily because of the reliance on psychiatric diagnoses as measurement tools. Dietrich (1979) found psychopathological scores on a number of scales in college women who had been parentally bereaved in late childhood. These scores were not as extreme as those of the early bereaved male subjects.

The three methodologically sound studies dealing with personality variables looked at dependency in women. Birtchwell (1975) found that, among male and female psychiatric inpatients, higher scores on the MMPI dependency scales were found for women who had been maternally

bereaved before the age of 10. Hetherington (1972) found that daughters of both divorced and widowed women were more dependent on females than were girls from intact families. However, Hainline and Feig (1978) failed to find differences among groups in their replication of Hetherington's study, using older subjects of higher socioeconomic status.

Related to the findings on dependency was the one Level I study on sex role identification in females. Baggett (1967) found parentally bereaved college women to be more traditionally feminine on a masculinity-femininity scale than women from the other family backgrounds. The tendency toward dependency found in other studies might be considered consistent with characteristics viewed as feminine.

Marital and social relationships of bereaved females were examined in four studies meeting the standards for levels I and II. In the study described above, Hetherington found that adolescent girls whose fathers had died were shy and anxious in the presence of males while girls whose parents were divorced were aggressive and sought attention in such situations. Again, Hainline and Feig (1978) found no differences between father absent and father present college women. With regard to marital functioning Hetherington's followup on her 1972 study (described in Hetherington and Parke, 1979) and Illsley's

1961 study revealed different, but not necessarily inconsistent findings. Hetherington found daughters of widows married vocationally ambitious, socially constricted men, in contrast to daughters of divorcees who married men of lower vocational accomplishments and were more likely to have conceived outside of marriage, to be married at a younger age, and to experience marital difficulties after a short time. Illsley and Thompson (1961) found women separated from a parent for reasons other than death to be similar to the daughters of divorcees in Hetherington's study, except that Illsley's subjects did not have early evidence of marital problems. Bereaved subjects raised with a mother and a step father were similar to non-bereaved parent-separated subjects. (The mothers of Hetherington's subjects did not remarry.) Other bereaved women did not differ from controls from intact families.

Differences between females who have been parentally bereaved and those from other family backgrounds have thus been found for subjects who have lost fathers or mothers. The small number of studies focusing on females or finding sex-related differences does not permit generalizations about the potentially dissimilar nature of the experience of losing a mother or a father on girls, and this is a topic which might be given more attention. The literature now available does indicate that losing a parent through death affects female children and that these effects are

different from those seen in daughters of divorced parents. Daughters of widowed parents appear to develop a dependent and perhaps a more socially acceptable style than daughters of divorcees who tend to be more assertive. As will be demonstrated, similar tendencies have been seen in bereaved males. This evidence and that which will be presented in the next section indicates that there is little evidence showing sex differences in children's behavior following the death of a parent.

Males

In the general parent absence literature, there has been more emphasis on the subsequent behavior of male rather than of female subjects. The interest among researchers in father absence relative to mother absence may be one reason for this pattern, as there is more concern about boys growing up without a father than about girls in this situation (Herzog and Sudia, 1973). Studies specifically on bereavement have not been weighted in this direction as the behavior of the effects on parent death on both sexes has been the topic of a nearly equal number of investigations. Where death of the father has been the focus of research, the concern about paternal absence on boys has been supported. However, studies have also linked behavioral differences with the death of mothers or of either parent. The analysis which follows will deal with studies on male subjects and with investigations on both sexes yielding findings specific to males.

As can be seen in Table 23, fourteen studies were located in which parental bereavement was linked with subsequent behavior in male children. Six of these studies were rated within the top two categories, representing all of the areas of behavior previously discussed. Parental bereavement in males has thus been associated with a wider range of behaviors than in females in methodologically adequate studies, including delin-

TABLE 23: Ratings and outcome data on studies of parentally bereaved males.

Reference	Behavior measured	Subjects	Outcome Measure	Outcome	Rating
Archibald et al., 1962	Emotional disturbance	Male & female psychiatric patients	Psychiatric diagnosis	Males paternally bereaved: masculine identification problems Males maternally bereaved: dependency & hostility problems	III
Clarke, 1961	Sex role	Age matched boys, father separated for various reasons	It scale	Father separated boys showed less masculinity on the IT scale, especially those with permanent separation or who had been bereaved	II
Dennehy, 1966	Emotional disturbance	Male & female psychiatric patients	Psychiatric diagnosis, case history of attempts	Excess of male depressives lost mothers before 15	III
Dietrich, 1979	Emotional disturbance	Male & female college students from intact & parent absent families	MMPI, TAT, Rosenweig Picture Frustration, Lester & Templer Death Fear	Early childhood loss of parent associated with MMPI scores indicating pathology in males	II
Gay & Tonge, 1967	Emotional disturbance, marital	Male & female psychiatric inpatients	Case history	Reactive depression associated with death of mother in males, other neuroses with loss of father	IV
Glueck & Glueck, 1950	Juvenile delinquency	Male identified delinquents	Court records	Paternal bereavement, as well as father absence in general, higher than would be expected in delinquents	I
Hilgard & Newman, 1963	Emotional disturbance	Male & female psychiatric inpatients	Psychiatric diagnosis	Young alcoholic patients differed in maternal or paternal bereavement from others	III

TABLE 23 continued

Reference	Behavior measured	Subjects	Outcome Measure	Outcome	Rating
Hilgard, Newman & Fisk, 1960	Academic success	Bereaved males	Interview	Men who had lost their fathers during childhood were academically successful	III
Jacobson & Ryder, 1969	Marital adjustment personality	Bereaved males & females	Interview	Marital difficulty, immaturity associated with paternal bereavement in males	V
Martindale, 1972	Emotional disturbance, poetic eminence	Male poets	Listing in Oxford Anthology of Verse, Life histories	Psychopathology, cross sex identification, & parental bereavement found characteristic of eminent poets	V
Moran & Abe, 1969	Sexuality	Male psychiatric inpatients	Psychiatric diagnosis	No difference in family background of homosexuals	III
Parish & Copeland, 1980	Locus of control	Male & female college students	Rotter Internality Externality Scale	Males from father bereaved families were more externally oriented than males or females from divorced & females from bereaved families	II
Santrock, 1972	Cognitive, academic functioning	Jr. and senior high school boys	Stanford Achievement Test, Otis Quick IQ	Father absent -- lower cognitive & academic scores, less so for bereaved; Ages 6-9 = critical period for bereavement	II
Santrock & Wohlford, 1970	Aggression, gratification delay	5th grade boys	Gratification delay task, doll play interview	Father bereaved boys = less aggressive, more able to delay gratification	II

quency and cognitive-academic functioning, in addition to emotional disturbance, personality and marital and sexual functioning. This pattern is more related to the diversity of topics investigated with respect to each sex, rather than results showing sex differences.

One level II study yielded sex specific findings in relation to parental bereavement and emotional disturbance. Dietrich's 1979 research on college students, which was discussed with regard to findings on females, showed that male college students bereaved early in childhood showed more indications of disturbance than men and women from intact families. Less extreme scores on measures of psychopathology were attained by women bereaved later in childhood, but these scores were still significantly higher than those of non-bereaved subjects.

Findings on personality variables have been relatively consistent for male and female subjects who have been bereaved, showing a passive, dependent personality pattern. Findings specific to males were yielded in studies by Parish and Copeland (1980), and Santrock and Wohlford (1970). Parish and Copeland found that paternally bereaved males had a more external locus of control than did females who had lost fathers through death and males and females from other family backgrounds. The authors could not explain the sex difference obtained. Santrock and Wohlford's study of boys with absent fathers

showed bereaved subjects to be less aggressive and better able to delay gratification than subjects whose parents were divorced. External locus of control, lack of aggressiveness, and the ability to delay gratification are all consistent with the general personality pattern seen in bereaved children of both sexes. Clarke's study (1967) on sex role identification might also be considered as support for these findings. Studying male subjects, he found less traditionally masculine identification in father absent than father present boys. Those who were bereaved or permanently separated from their fathers showed especially strong indications of this pattern.

Glueck and Glueck's data (1950) on juvenile delinquency might be viewed as less consistent with the findings presented above. They found that father absent boys, including those who had been bereaved, were over-represented among juvenile delinquents. This extreme form of behavior might be viewed as over-compensation in reaction to doubts about masculinity. Also, as has been observed by Biller (1971), father absence without the presence of a mother able to compensate for this loss, may be associated with susceptibility to the indiscriminate influence of gangs. Such behavior would be consistent with a passive-dependent orientation.

Santrock's 1972 study has indicated that there may be some connection between paternal bereavement and their

sons' cognitive-academic functioning. Studying father absent boys, he found lower test scores in those father absent for reasons other than death than in boys who had been bereaved or were from intact families. Bereavement between ages six and nine, when children are in the earlier grades of school, was associated with less adequate performance, however.

Parental bereavement, and especially loss of the father, has thus been associated with a number of behavioral outcomes in boys. Most of the sex linked findings have come from studies in which only one sex was studied, however. The data on both sexes, where similar types of behavior has been studied, has not shown major sex differences. Exploration of a wider range of behaviors in bereaved females could possibly alter these conclusions.

Summary of research on characteristics of the child
related to behavior following a parent's death

The most significant findings resulting from research on characteristics of the child appear to be related to cognitive development and age. It has been demonstrated that comprehension of death is developed in age-related stages. In addition, younger children appear to be more adversely affected by a parent's death than are older children. Whether the latter finding is due to the inability of younger children to understand death, to their greater need for parental involvement, to the lack of accumulated benefits of being part of a two parent home, or to a combination of these factors, has yet to be investigated and resolved. Sex of the child seems to make little difference in the effects of parental bereavement, although isolated studies comparing males and females have found some variations in performance. Investigation of a wider range of variables with respect to female subjects as well as more systematic attempts to explore sex of child by sex of deceased parent differences are needed before more definitive statements can be made on this issue. Also needed are studies on functioning prior to bereavement on the numerous areas of behavior to which differences subsequent to a parent's death have been attributed.

6. Summary of the analysis of the literature

The preceding literature analysis included consideration of numerous studies concerned with the behavioral correlates in children of loss of a parent through death. Fewer than half of the studies reviewed were found to meet minimal standards of methodological adequacy. Among the studies of relatively sound methodology, almost all were able to demonstrate the existence of differences between parentally bereaved and non-bereaved subjects.* These differences were evidenced both a short time after the parent's death and many years later, when the early bereaved subjects reached adulthood.* Long term longitudinal studies have not been conducted, however, so that statements about duration and changes in intensity of symptoms within the same individuals cannot be made.

Areas of functioning in which dissimilar behaviors have been found in parentally bereaved and non-bereaved subjects include emotional disturbance, personality, sex role and related behavior, delinquency and criminal activity, and cognitive, academic, and creative performance.* These general topics are the only ones which have been explored, and it has seemed that choice of subject matter has been guided by researchers' assumptions about the way in which bereaved children are likely to behave. Most of the findings have related to adverse consequences of parental bereavement, although some conditions which

facilitate positive adaptations to a parent's death have been identified. Adjustment of and relationship to the surviving parent is one factor which may be particularly important to the child's subsequent functioning.*

Most of the empirical research has been consistent in showing parentally bereaved children to be more submissive, dependent, and introverted, and less aggressive than children from other family backgrounds, including children whose parents were divorced.* Sex role adoption has thus been more feminine or less masculine in these bereaved children. Other specific correlates of parental death seen when bereaved children were compared with those from other family backgrounds have included emotional disturbance, specifically suicidal behavior, general maladjustment and, to a lesser degree, psychosis, juvenile delinquency, and criminal activity, and both deficiencies and superior performance in cognitive, academic, and creative areas. All types of parent loss, not just bereavement have been connected to delinquent and criminal behavior and to depressed cognitive and academic functioning.

When family and situational variables have been analyzed in conjunction with behavioral outcome data, they have often been found to be of great significance. The error in inferring causation from parental bereavement to maladaptive behavior based on simple correlational data

has thus been demonstrated. Unfortunately, even in the studies which were rated highly in the previous research analysis, consideration of family and situational variables has been minimal. [Some of the family and situational characteristics which have been associated with behaviors seen in children subsequent to bereavement include sex of the parent and reason for the loss.] It has been shown that death of either a father or a mother may make a difference to the child's subsequent adjustment and development. Paternal bereavement has been studied in relation to a wider range of variables than has death of the mother, perhaps because the former is a more frequent occurrence. Emotional disturbance, personality variables, sex role and related functioning, juvenile delinquency and criminal activity, and deficits in cognitive-academic functioning have been associated with death of the father. Maternal bereavement has been related to emotional disturbances exclusively. Children of divorced parents have been found to differ from bereaved children in that the latter are less assertive and independent. Other family and situational variables have not been studied extensively enough to permit specific conclusions to be drawn about their significance.

Less thoroughly explored than family and situational characteristics have been factors specific to the individual child. For example, prior functioning on the

behavior outcome variables shown to be related to parental bereavement has seldom been studied. [Thus it is somewhat difficult to determine whether differences in bereaved and non-bereaved subjects are due to changes in behavior following a parent's death or to differences in prior functioning of subjects in the two groups.] It has been shown that children of different ages and levels of cognitive functioning do differ in their comprehension of the concept of death, and that the development of understanding of the concept follows a predictable, age- and Piagetian stage-related pattern. Level of comprehension of death has not been directly related to the consequences of parental bereavement, but it has been shown that children who are under seven when the death occurs, and therefore are less likely to have attained a full understanding of death, adjust less adequately subsequent to bereavement. These children have also suffered a longer period of parental deprivation than children who are older when the death occurs. ➤ In addition to age, sex of the child has been studied in relation to potential differences in the effects of a parent's death. No sex differences were found, but this finding may reflect more the minimal exploration of this possibility with regard to a variety of topics than the fact that no differential effects occur. Characteristics of the child should be explored in more detail as it would seem that such

variables, along with family and situational factors, would indicate more specifically which children are particularly vulnerable to potentially adverse consequences of a parent's death.

→ The analysis of the literature has thus demonstrated that parental bereavement may be a significant event in a child's life which will result in the individual behaving in ways that he/she would not if the family were not disrupted in this fashion. The relationship between parental bereavement and subsequent behavior is complex, however. It is not the simple fact of a death having occurred, but rather the variables associated with the loss of the parent as well as characteristics specific to the child, that will predict the child's subsequent adjustment and development. *

PART IV. IMPLICATIONS OF THE ANALYSIS OF THE LITERATURE

7. Research Considerations

The foregoing analysis of the literature on the child's adjustment and development following the death of a parent indicates that changes in the nature and course of a child's behavior may result from variables involved in parental bereavement. Emotional adjustment, personality, sex role related behavior, anti-social tendencies, cognitive and academic functioning, and creativity are areas which may be influenced by a parent's death and the environmental changes associated with it. Research has in many cases oversimplified the situation, however. As has been demonstrated, when multiple environmental, family, and child-specific variables are considered, complex relationships between variations on these factors and behavioral outcomes are seen. A model indicating the range of variables which must be considered is presented in Figure 2. The model reveals the early stage of development of research in this field. Very few of the potential factors involved in behavioral correlates of parental bereavement have been examined by researchers. That nearly every variable which has been investigated has

FIGURE 2: Predictive model of factors
influencing a child's adjustment and development
subsequent to a parent's death.

Parent Characteristics	Family Characteristics	Child Characteristics
*sex age and life stage occupation personality cognitive level, skills emotional adjustment relationship with child & involvement	parent's marital situation siblings: #, age, ordinal position other household members *quality of interactions role distribution previous family deaths religion ethnicity *SES belief system residence	*sex *age level of understanding of death cognitive level, disabilities academic status creativity and special talents -- divergent thinking, talents in art, music, writing, scientific research physical development social behavior: social skills, sex role, aggression, conscience development Personality, temperament: introversion-extroversion, locus of control, egocentrism, dependence, maturity, self concept emotional and behavior problems: clinic/hospital admission, school evaluation referral, court evaluation referral symptoms of: juvenile delinquency, character disorder, depression, hyperkinesis, schizophrenia, substance addiction, paranoia, anxiety, psychosomatic disorder
<u>Parent Death</u>		
Type - illness (sudden, prolonged, genetically based) *suicide homicide war related accidental Attitude of dying parent Degree and type of preparation the child is provided Rituals & degree to which child participates		
<u>Situational Changes</u>		
*Reactions of family members (short, long term) Role redistribution Changes in behavior towards & expectations of the child *Addition of surrogate parent(s) *Change in residence, school SES change		
<u>Child's behavior during childhood:</u>		
*Immediate mourning responses: depression, anger, denial, self abuse, regression, positive adaptive behavior Academic status: *achievement, level of attainment, truancy *IQ, specific cognitive abilities, learning disability Creativity, special talents: divergent thinking, talent in art, music, *writing, *scientific research Physical development: health, maturity, ability Social behavior: social skills, friendships, *sex role, conscience development, *aggression Personality/temperament: *introversion/extroversion, *locus of control, egocentrism, *dependence, maturity, self concept Behavior problems, psychopathology: *clinic, hospital admission, *school evaluation, *court referral. Symptoms of: *delinquency, character disorder, hyperkinesis, *depression, *schizophrenia, substance addiction, paranoia, anxiety, psychosomatic disorder.		
<u>Behaviors as adult:</u>		
Achievement and level of attainment in higher education Creativity, special talents Social-sexual behavior: friendships, *marital adjustment, parenting behavior, aggression, social skills Physical health, skills Personality, temperament: introversion-extroversion, locus of control, egocentrism, dependence, maturity, self concept Behavior problems, psychopathology: *clinic, hospital admissions *court referral symptoms of: character disorder, *criminal behavior, *depression, *schizophrenia, substance addiction, paranoia, anxiety, psychosomatic disorder Career development: level of attainment, choice of field, work record, SES *Association with parental bereavement/outcome have been demonstrated.		

been shown to be related to outcome should support further efforts in this regard.

Research on additional variables related to parental bereavement should include consideration of potential benefits of what is usually viewed as an unfortunate family background. It has been asserted in previous discussions, the death of a parent may well have favorable effects on process and overcome characteristics. A parent involved in an unhappy marriage who is released through a spouse's death may, as a result, have more time, energy, and resources to devote to his/her child. The death of a parent who has been sexually or physically abusive, rejecting, or merely disinterested may positively influence a child's self concept and emotional adjustment. Even if the parent's death does actually represent a loss, a child's development could be enhanced. S/he could become, of necessity, more independent and develop superior problem solving skills. S/he could be prompted to work towards higher achievement in order to better serve the parent's memory. The few studies which have attempted to link parental bereavement with achievement indicate the potential for this line of research.

Also neglected and needed in order to more fully understand how a child is affected by parental bereavement have been longitudinal inquiries. Research following a child, ideally from before a parent's death through

adulthood would indicate whether immediate effects will endure, whether they change in nature, and the environmental factors which interact with the outcomes. Bendickson and Fuller's 1975 work suggests that the intensity of effects may lessen with age. Following a number of groups of children who are bereaved at different ages would provide even more complete data, indicating critical ages for parent loss relative to different areas of functioning.

Finally, in future research, adherence to procedures basic to scientific investigation must be emphasized. Due to failure to employ appropriate comparison groups, insufficient description of subjects and procedures, and inadequate methods of measuring outcome, many of the studies reviewed in this analysis could not be interpreted with confidence. Research utilizing more methodologically sound techniques on hypotheses which have not yet been supported due to the omissions and errors should be encouraged.

Most needed in the field appears to be a study following a large group of parentally bereaved children over time. Subjects would be selected from general parentally bereaved populations, rather than special groups, and would represent a diversity of characteristics with regard to ethnicity, religion, socioeconomic status, sex, age and intellectual level. This selection process

would insure inclusion of subjects from various family backgrounds; family and other situational variables would then be extensively studied. Assessment, ideally prior and subsequent to the parent's death, utilizing standardized instruments, could be conducted with regard to a wide range of abilities, interests, affective tendencies, adjustment, and social and sexual patterns. Long and short term effects of parental bereavement could be assessed by following the different aged children through adulthood. Individual, family and situational factors which mediate the potential negative effects of parental bereavement could also be determined. Information about children who would be particularly vulnerable following a parent's death would also become evident. Such a large scale study would undoubtedly yield data which could be applied to programs for prevention and treatment of disorders related to experiencing a parent's death during childhood.

8. Treatment and Prevention

A number of adverse consequences of parental bereavement have been identified in the literature that has been reviewed, suggesting the need for the development of methods for intervention with the bereaved child, his/her family, and more general populations. Direct and specific causal relationships have not been established, so that the most clear implications are not for the treatment of conditions resulting from bereavement but rather for preventative efforts aimed at preparing children for dealing with death and for crisis intervention immediately following a death.

Kirkpatrick (1965) suggested that children should be given complete and accurate information about a parent's impending or recent death. Support for this recommendation comes from a number of case studies documenting the adverse emotional effects of concealing the circumstances surrounding the death (for example, Ilan, 1973; Warren, 1972). Also advocated has been encouragement of and assistance in the expression of feelings about the death in the presence of other family members. Providing a 'corrective mourning' experience of this type might be necessary in a therapeutic situation, according to Paul and Grosser (1965). The purpose of such a process would be for family members to witness each others' grief in order to decrease guilt for negative feelings and en-

courage the development of family cohesiveness during the crisis. Facilitation of the expression of emotions may be particularly important for parentally bereaved children, based on the findings of the literature review. It was consistently demonstrated that children who had lost a parent through death showed signs of affective constriction, lack of assertiveness, submissiveness, dependency, and suicidal behavior, which may represent anger turned inward or unexpressed guilt. Assisting parentally bereaved children, with expressing emotions may prevent the development of this pattern of functioning. Intervention at a family level would be most efficient due to the tendency of adults to deny unpleasant thoughts and feelings, especially in the presence of children (Silverman and Englander, 1975).

Following the immediate period of crisis, when intervention should be directed primarily at restoring equilibrium (Waldfogel and Gardner, 1961), efforts might be directed at helping the child and the family to adjust to their new situation. Help in reorganization of family roles might be required (Burgess, 1974, Volman et al., 1971, Warren, 1972). Providing support to the surviving parent who is now in a position to more extensively influence the child could be indicated (Kirkpatrick, 1965). In this regard, encouragement of input from individuals outside the family system could be useful

(Klein and Lindemann, 1961). If no surrogates for the absent parent are readily available, involvement of extra-familial members on a long term basis to fill some of the roles left vacant by the parent's death may be of benefit to the child (Biller, 1981). As has been mentioned, mother surrogates are more often sought and found than father surrogates. The research would indicate that replacement of the father's parental functions would be equally important, however, as both maternal and paternal bereavement seem to have negative consequences for some children. When father surrogates are employed, they are usually for older boys (as the Big Brother programs). Again, the research would dispute this practice as younger children of both sexes appear to be particularly vulnerable to the effects of the loss of either parent through death.

Primary prevention techniques would involve education about death in order to decrease the mystery and anxiety surrounding the topic (Hart, 1971; Irish, 1971; Leviton, 1971). Some authors have suggested that this early 'immunization' is necessary today because the young have less experience with death due to the segregation of the dying and dead in contemporary life (Irish, 1971; Krupp, 1972). Perhaps the attitude that has led to our current 'death free' way of life is the same perspective that has been involved in resistance to death education in schools.

Arguments against death education programs have included:

1) Education about death should be the province of the church and the family; 2) There is no need for death education as death is a natural event and thus is inappropriate for formal instruction; 3) Such a morbid topic is inappropriate for children who should be 'carefree'; 4) Death is a topic only for the elderly who must deal with it directly (Irish, 1971; Leviton, 1971).

Those who purport that death education is necessary view it as a way of helping children face rather than deny reality. Model programs have included classroom instructions and exploration of feelings raised by death in students and parallel education for teachers and parents (Hart, 1976; Leviton, 1971). Use has been made of empirical data on stages of development of the concept of death in devising curricula for such programs as well as in texts written for the same purpose (Aradine, 1976; Maurer and Muro, 1979). Few of these programs have been put into practice, and systematic investigations of those that have been explored are lacking. One researcher who designed a death education program for preschoolers who had lost a classmate through death did report on the outcome. Berman (1978) found that his subjects improved in their ability to differentiate between separation and death, came to accept death as finite, were more able to express feelings about death, and were less anxious about

it. Further research on such programs should be encouraged in order to determine whether they are in fact useful in helping to prepare children for death. In addition, more needs to be known about the nature of the experience of childhood bereavement so that such programs can be developed on the basis of sound theory and empirical evidence. The intuitive notion that preparation for death would benefit children is not a sufficient reason for exposure of groups of students to such programs.

PART V. REFERENCES

- Adam, K. Childhood parental loss, suicidal ideation, and suicidal behavior. In E.J. Anthony and C. Koupernik (Eds.) The Child in his Family: The Impact of Disease and Death. N.Y.: J. Wiley, 1973.
- Adams, V. The sibling bond. Psychology Today. 1981, 15, 6, 32-47.
- Abrahams, M. & Whitlock, F. Childhood experience and depression. British Journal of Psychiatry. 1969, 115, 883-888.
- Albert, R. Cognitive development and parent loss among the gifted, the exceptionally gifted and the creative. Psychological Reports. 1971, 29, 19-26.
- Alexander, I. and Adlerstein, A. Affective responses to the concept of death in a population of children and early adolescents. Journal of Genetics and Psychology. 1959, 93, 167-177.
- Anthony, E.J. Mourning and psychic loss of the parent. In E.J. Anthony and C. Ksupernik (Eds.), The Child in his Family: The Impact of Disease and Death. N.Y.: J. Wiley, 1973.
- Anthony, S. The Child's Discovery of Death. London: Kegan, Paul, Trench Traubner, and Co., 1940.
- Aradine, C. Books for children about death. Pediatrics. 1976, 57, 372-378.
- Archibald, H., Bell, D., Miller, C. and Tuddenham, P. Bereavement in childhood and adult psychiatric disturbance. Psychosomatic Medicine. 1962, 4, 343-351.
- Baggett, A.T. The effect of early loss of father upon the personality of boys and girls in late adolescence. Dissertation Abstracts International. 1967, 28(1-B), 356-357.

- Bandura, A. and Walters, R. Social Learning and Personality Development. New York: Holt, Rinehart, and Winston, 1963.
- Bank, S. and Kahn, M. In M. Lamb and B. Suttanmeth (Eds.), Sibling Relationships: Their Nature and Significance Across the Lifespan. In press. Cited in Adams, V. The sibling bond. Psychology Today. 1981, 15(6), 32-47.
- Barry, H. and Lindemann, E. Critical ages for maternal bereavement in psychoneurosis. Psychosomatic Medicine. 1960, 22, 366-381.
- Beck, A.T., Sethi, B.B., and Tuthill, R.H. Childhood bereavement and adult depression. Archives of General Psychiatry. 1963, 9, 295-302.
- Bendiksen, R and Fulton, R. Death and the child: an anterospective test of the childhood bereavement and later behavior disorder hypothesis. Omega: Journal of Death and Dying, 1975, 6, 45-49.
- Benson, L. Fatherhood. A Sociological Perspective. New York: Random House, 1968.
- Berman, D.B. The facilitation of mourning: A preventative mental health approach. Dissertation Abstracts International. Ann Arbor, MI, Univ M-films #78-10684, 1978.
- Billar, H. Father, Child and Sex Role. Lexington, Mass.: Lexington Books, D.C. Heath and Company, 1971.
- Billar, H. The mother-child relationship and the father absent boy's personality development. In U. Bronfenbrenner (ed.) Influences on Human Development. Hinsdale, Ill.: Dryden, 1972.
- Billar, H. Paternal Deprivation. Lexington: Lexington Books, 1974.
- Billar, H. Father absence, divorce, and personality development. In M.E. Lamb (ed.) The Role of the Father in Child Development. 2nd edition. New York: Wiley, 1981, in press.
- Birtchnell, J. Depression in relation to early and recent parent death. British Journal of Psychiatry. 1966, 112, 1035-1042.

- Birtchnell, J. Relationship between attempted suicide, depression, and parent death. British Journal of Psychiatry. 1970, 116, 307-313.
- Birtchnell, J. Early parent death and mental illness. British Journal of Psychiatry. 1970, 116, 281-287.
- Birtchnell, J. Early parent death and psychiatric diagnosis. Social Psychiatry 1972, 7, 202-210.
- Birtchnell, J. The personality characteristics of early bereaved psychiatric patients. Social Psychiatry 1975, 10, 97-103.
- Bluestein, V. Loss of loved ones and the drawing of dead or broken branches on the HTP. Psychology in the Schools. 1978, 15, 364-366.
- Boss, P. A clarification of the concept of psychological father presence in families experiencing ambiguity of boundary. Journal of Marriage and the Family. 1977, 39, 141-51.
- Bowerman, C.E. and Irish, D. Some relationships of step children to their parents. Marriage and Family Living. 1962, 24, 113-121.
- Bowlby, J. Grief and mourning in infancy and early childhood. In R. Eisler (ed.) Psychoanalytic Study of the Child. Vol 15, New York: International University Press, 1960.
- Bowlby, J. Pathological mourning and childhood mourning. Journal of the American Psychoanalytic Association. 1963, 11, 500-541.
- Brill, N. and Liston, E.H., Jr. Parental loss in adults with emotional disorders. Archives of General Psychiatry. 1966, 14, 307-314.
- Brown, F. Depression and childhood bereavement. Journal of Mental Science. 1961, 107, 754-777.
- Brown, F., and Eppos, P. Childhood bereavement and subsequent psychiatric disorder. British Journal of Psychiatry. 1966, 112, 1035-1042.
- Brown, F., Childhood bereavement and subsequent crime. British Journal of Psychiatry. 1966, 112, 1043-1048.
- Brown, G.W. and Harris, T. Social origins of depression: A reply. Psychological Medicine. 1978, 8, 577-588.

- Brown G., Harris, T., and Copeland, J. Depression and loss. British Journal of Psychiatry. 1977, 30, 1-18.
- Burgess, A.W. Family reaction to homicide. American Journal of Orthopsychiatry. 1974, 45, 391-396.
- Cain, A.C., and Fast, I. Children's disturbed reactions to parent suicide. American Journal of Orthopsychiatry. 1965, 36, 873-880.
- Caplan, G. Prevention of Mental Disorders in Children. New York: Basic Books, 1961.
- Caplan, M.G. and Douglas, V. Incidence of parental loss in children with depressed mood. Journal of Child Psychology and Psychiatry and Allied Disciplines. 1969, 10, 225-232.
- Chesler, P. Woman and Madness, New York: Avon, 1972.
- Clarke, P.A. A study of the effect upon boys of father absence in the home. Unpublished doctoral dissertation, University of Maryland, 1961.
- Cohen, R. Is dying being worked to death? American Journal of Psychiatry. 1976, 133, 575-577.
- Cox, C. Genetic Studies of Genius: The Early Mental Traits of 300 Geniuses. Stanford: Stanford University Press, 1926.
- Crook, T. and Raskin, A. Association of childhood parental loss with attempted suicide and depression. Journal of Consulting and Clinical Psychology. 1975, 43, 277.
- Crook T., and Eliot, J. Parental death during childhood and adult depression: A critical review of the literature. Psychological Bulletin. 1980, 87, 252-259.
- Dennehy, C.M. Childhood bereavement and psychiatric illness. British Journal of Psychiatry. 1966, 112, 1049-1069.
- Dietrich, D.R. Psychopathology and death fear. Dissertation Abstracts International. 1979, 40, Ann Arbor, University M-films #7918593.
- Dorpat, T. Psychological effects of parental suicide on surviving children. In A. Cain (Ed.). Survivors of Suicide. Springfield, Ill.: Charles Thomas, 1972.

- Earle, A. and Earle, B. Early maternal deprivation and later psychiatric illness. British Journal of Psychiatry, 1959, 109, 181-186.
- Eisenstadt, J. Parental loss and genius. American Psychologist. 1978, 33, 211-223.
- Epstein, G., Weitz, L., Roback, H., and McKee, E. Research on bereavement: A selective and critical review. Comprehensive Psychiatry. 1975, 16, 537-546.
- Felner, R., Stolberg, A., and Cowen, E. Crisis events and school mental health referral patterns of young children. Journal of Consulting and Clinical Psychology. 1975, 43, 305-310.
- Ferri, E. Characteristics of motherless families. British Journal of Social Work. 1973, 3, 91-100.
- Fleming, J. The problem of diagnosis in parent loss cases. Contemporary Psychoanalysis. 1974, 10, 439-451.
- Forrest, A., Fraser, R., and Priest, R. Environmental factors in depressive illness. British Journal of Psychiatry. 1965, 111, 243-253.
- Freud, A. and Burlingham, D. Infants without Families. New York: International Universities Press, Inc., 1944.
- Freud, S. Mourning and Melancholia. In J. Rivers (ed.) Collected Papers of Sigmund Freud. London: Hogarth, 152-170.
- Freud, S. The Ego and the Id. London: Hogarth, 1961.
- Freud, S. On narcissism. The Complete Psychological Works of Sigmund Freud. London: Hogarth, 1957.
- Fulton, R. and Markusen, E. Childhood bereavement and behavior disorders: A critical review. Omega. 1971, 2, 107-117.
- Furman, R. Death and the young child: Some preliminary considerations. The Psychoanalytic Study of the Child. 1964, 19, 321-333.
- Furman, R. A child's capacity for mourning. In E.J. Anthony and C. Kouprnik (eds.) The Child in his Family: The Impact of Disease and Death. New York: J. Wiley, 1973.

- Gay, M. Tongue, W. The late effects of loss of parents in childhood. British Journal of Psychiatry. 1967, 113, 753-759.
- Glass, G. Primary, secondary and meta-analysis of research. Educational Researcher. 1976, 5, 398-405.
- Glueck, S. and Glueck, E. Unraveling Juvenile Delinquency. Cambridge: Harvard University, 1950.
- Goldberg, S. Family tasks and reactions in the crisis of death. Social Casework. 1973, 54, 398-405.
- Granville-Grossman, K. Early bereavement and schizophrenia. British Journal of Psychiatry. 1966, 112, 1027-1034.
- Granville-Grossman, K. The early environment in affective disorder, in A Cappen and A. Walk (eds.) Recent Developments in Affective Disorders. London: British Journal of Psychiatry, 1968.
- Greer, S. Parental loss and attempted suicide: A further report. British Journal of Psychiatry. 1966, 112, 465-470.
- Greer, S. The relationship between parental loss and attempted suicide: A control study. British Journal of Psychiatry. 1964, 110, 698-705.
- Gregory, I. Studies of parental deprivation in psychiatric patients. American Journal of Psychiatry. 1958, 115, 432-442.
- Gregory, I. Retrospective data concerning childhood loss of a parent. Archives of General Psychiatry. 1966, 15, 362-367.
- Hainline, L. and Feig, E. The correlates of childhood father absence in college aged women. Child Development. 1978, 49, 37-42.
- Hamilton, M. Father's Influence on Children. Chicago: Nelson-Hall, 1977.
- Hart, E. Death education and mental health. Journal of School Health. 1976, 56, 407-412.
- Haworth, M. Parental loss in children as reflected in projective responses. Journal of Projective Techniques. 1964, 28, 31-45.

- Heckel, R. The effects of fatherlessness on the pre-adolescent female. Mental Hygiene. 1963, 47, 69-73.
- Herzog, E. and Sudia, C. Children in fatherless homes. In B. Caldwell and H. Ricciuti (Eds.). Review of Child Development Research. Chicago: U. of Chicago Press, 1973.
- Hetherington, E.M. Effects of father absence on personality development in adolescent daughters. Developmental Psychology. 1972, 7, 313-326.
- Hetherington, E.M., Cox, M. and Cox, R. Family interaction and the social, emotional, and cognitive development of children following divorce. Paper presented at the Johnson Conference on the Family. Washington, D.C., May, 1978.
- Hetherington, E. and Deur, J. Effects of father absence on child development. Young Children. 1971, 26, 233-248.
- Hetherington, E. and Parke, R. Child Psychology: A Contemporary Viewpoint. 2nd edition. New York: McGraw-Hill, 1979.
- Hilgard, J., Neuman, M., and Fisk, F. Strength of adult ego following bereavment. American Journal of Orthopsychiatry. 1960, 30, 788-798.
- Hill, O. The association of childhood bereavement with suicidal attempt in depressive illness. British Journal of Psychiatry. 1969, 115, 301-304.
- Hill, O. and Price, J. Childhood bereavement and adult depression. British Journal of Psychiatry. 1969, 113, 743-751.
- Hoffman, M. Father absence and conscience development. Developmental Psychology. 1971, 4, 400-406.
- Hopkinson, G. and Reed, G.F. Bereavement in childhood and depressive psychosis. British Journal of Psychiatry. 1966, 112, 459-463.
- Hornblum, J. Death concepts in childhood and their relationship to concepts of time and conservation. Dissertation Abstracts International. Ann Arbor, MI, University M-films #7817306, 1978.

- Huttunen, M. and Niskanen, P. Prenatal loss of father and psychiatric disorders. Archives of General Psychiatry. 1978, 35, 429-431.
- Ilan, E. The impact of a father's suicide on his latency son. In E. Anthony and C. Koupernik (Eds.), The Child in his Family: The Impact of Disease and Death. New York: J. Wiley, 1973.
- Illsley, R. and Thompson, B. Women from broken homes. Sociological Review. 1961, 9, 27-54.
- Irish, D. Death education: Preparation for living. In B. Green and D. Irish. Death Education: Preparation for Living. Cambridge: Schenkman, 1971.
- Jacobson, G. and Ryder, R. Parental loss and some characteristics of the early marriage relationship. American Journal of Orthopsychiatry. 1969, 39, 779-787.
- Jacobson, S., Fasman, J., and DiMascio, A. Deprivation in the childhood of depressed women. Journal of Nervous and Mental Disease. 1975, 160, 5-14.
- Johnson, M. Sex role learning in the nuclear family. Child Development. 1963, 34, 319-333.
- Kane, B. Children's concepts of death. Journal of Genetic Psychology. 1979, 134, 141-153.
- Kastenbaum, R. and Costa, P. Psychological perspectives on death. Annual Review of Psychology. 1977, 28, 225-249.
- Kastenbaum, R. The child's understanding of death: How does it develop? In E. Grollman (Ed.), Explaining Death to Children. Boston: Beacon, 1967.
- Kavanaugh, R. Facing Death. Middlesex, England: Penguin, 1972.
- Kirkpatrick, J., Samuels, S., Jones, H., and Zweibelson, I. Bereavement and school adjustment. Journal of School Psychology. 1965, 3, 58-63.
- Klein, D., and Lindemann, E. Preventive intervention in individual and family crisis situations. In G. Caplan (Ed.) Prevention of Mental Disorders in Children. New York: Basic Books, 1961.

- Kliman, G. Facilitation of Mourning During Childhood. Paper presented at American Orthopsychiatric Association. New York, 1969.
- Knobloch, H., Pasamanick, B., Harper, P., and Rider, R. Effect of prematurity on health and growth. American Journal of Public Health. 1959, 49, 1164.
- Koller, K. Parental deprivation, family background, and female delinquency. British Journal of Psychiatry. 1970, 116, 319-327.
- Koocher, G. Talking with children about death. American Journal of Orthopsychiatry. 1974, 44, 45-52.
- Krupp, G. Maladaptive reactions to the death of a family member. Social Casework, 1972, 53, 425-434.
- Kübler-Ross, E. On Death and Dying. New York: Mac-Millon, 1969.
- Kübler-Ross, E. The Final Stage of Growth. Englewood Cliffs, N.J.: Prentice Hall, 1975.
- Lamb, M. and Lamb, J. The nature and importance of the father-child relationship. The Family Coordinator. 1976, 25, 379-386.
- Lester, D. and Beck, A. Early loss as a possible sensitizer to later loss in attempted suicides. Psychological Reports. 1976, 39, 121-122.
- Leviton, D. The role of the school in providing death education. In B. Green and D. Irish, Death Education: Preparation for Living. Cambridge, Mass: Schenkman, 1971.
- Lifshitz, M. Long range effects of father's loss: The cognitive complexity of bereaved children and their school adjustment. British Journal of Medical Psychology. 1976, 49, 189-197.
- Lindeman, E. Symptomatology and management of acute grief. American Journal of Psychiatry. 1944, 101, 141-148.
- Lynn, D. The Father: His Role in Child Development. Monterey, California: Brooks/Cole, 1974.
- Lynn, D. Fathers and sex role development. The Family Coordinator. 1976, 25, 403-409.

- McDonald, N. A study of the reactions of nursery school children to the death of a child's mother. In R. Eisler (Ed.), Psychoanalytic Study of the Child. New York: University Press, 1964.
- Maher, B. A reader's, writer's, and reviewer's guide to assessing research reports in clinical psychology. Journal of Genetic Psychology. 1978, 46, 835-838.
- Marsella, A., Dubanaski, R., and Mohns, K. The effects of father presence and absence upon maternal attitudes. The Journal of Genetic Psychology. 1974, 125, 257-263.
- Martindale, C. Father's absence, psychopathology, and poetic eminence. Psychological Reports. 1972, 31, 813-847.
- Maurer, A. Adolescent attitudes toward death. The Journal of Genetic Psychology. 1964, 105, 75-90.
- Maurer, C. and Muro, J. Death education: Some issues and suggested practices. Archives of the Foundation of Thanatology. 1979, 7, 66.
- McCandless, B. Children: Behavior and Development. New York: Rinehart and Winston, 1967.
- Melar, J. Children's conceptions of death. The Journal of Genetic Psychology. 1973, 123, 359-360.
- Miller, Children's reactions to the death of a parent: A review of the psychoanalytic literature. Journal of the American Psychoanalytic Association. 1971, 19, 697-719.
- Monahan, T.P. Family status and the delinquent child. Social Forces, 1957, 35, 250-258.
- Moran, P. and Abe, K. Parental loss in homosexuals. British Journal of Psychiatry. 1969, 115, 319-320.
- Moriarty, D. The Loss of Loved Ones: The Effects of Death in the Family on Personality Development. Springfield, Ill.: Thomas, 1967.
- Moss, S. and Moss, M. Separation as a death experience. Child Psychiatry and Human Development. 1973, 3, 187-194.
- Munro, A. Paternal deprivation in depressive patients. British Journal of Psychiatry. 1966, 112, 443-459.

- Munro, A. and Griffiths, A.B. Some psychiatric non-sequelae of childhood bereavement. British Journal of Psychiatry. 1968, 114, 305-311.
- Murphy, L. Preventive implications of development in the preschool years. In G. Caplan (Ed.), Prevention of Mental Disorders in Children. New York: Basic, 1961.
- Naraja, J. Children's reaction to death. Child Psychiatry Quarterly. 1977, 10, 24-28.
- Nagy, M. The child's theories about death. Journal of Genetic Psychology. 1948, 73, 3-27.
- O'Brien, M. The effects of inclusion and exclusion in mourning rituals on the development of children's conceptual understanding and attitudes about death. Archives of the Foundation of Thanatology. 1979, 7, 74.
- Parish, T. and Copeland T. Locus of control and father loss. The Journal of Genetic Psychology. 1980, 136, 147-148.
- Parkes, C. Recent bereavement as a cause of mental illness. British Journal of Psychology. 1964, 110, 198-204.
- Paul, N. and Grosser, G. Operational mourning and its role in conjugal family therapy. Community Mental Health Journal. 1965, 1, 339-345.
- Pedersen, F. Does research on children reared in father absent homes yield information on father influence? Family Coordinator. 1976, 25, 458-464.
- Pedersen, F., Rubenstein, J., and Yarrow, L. Infant development in father absent families. The Journal of Genetic Psychology, 1979, 13, 51-61.
- Piaget, J. The Growth of Logical Thinking from Childhood to Adolescence. Translated by A. Parsons and S. Seagrin. New York: Basic Books, 1958.
- Pitts, F., Meyer, J., Brooks, M., and Winokur, G. Adult psychiatric illness assessed for childhood parental loss and psychological illness in family members. A study of 748 patients and 250 controls. Annual Journal of Psychiatry. 1965, 24, 121-135.

- Portz, A. The meaning of death to children. Unpublished Ph.D. dissertation. University of Michigan, Ann Arbor, 1964.
- Price-Bonham, S. Research on roles of fathers. Family Coordinator. 1976, 25, 489-513.
- Quay, H. Classification. In H. Quay and J. Werry (Eds.) Psychopathological Disorders of Childhood, New York: J. Wiley, 1979.
- Rheingold, H.L. The modification of social responsiveness in institutional babies. Monographs of the Society for Research in Child Development. 1956, 2, 63.
- Richmond, J. and Lipton, E. Studies on mental health of children with specific implications for pediatricians. In G. Caplan (Ed.). Prevention of Mental Disorders in Children. New York: Basic, 1961.
- Rochlin, G. How younger children view death and themselves. In E. Grollman (Ed.), Explaining Death to Children. Boston: Beacon, 1967.
- Roe, A. The Making of a Scientist. New York: Dodd, Mead, 1953.
- Roy, A. Vulnerability factors and depression in women. British Journal of Psychiatry. 1978, 133, 106-110.
- Roy, A. Correction to vulnerability and depression in women. British Journal of Psychiatry. 1979, 134, 552.
- Rudestam, K.E. Physical and psychological responses to suicide in the family. Journal of Consulting and Clinical Psychology. 1977, 45, 162-170.
- Santrock, J. Relation of type and onset of father absence to cognitive development. Child Development. 1972, 43, 455-469.
- Santrock, J. and Wohlford, P. Effects of father absence: Influences of, reasons for, and onset of absence. Proceedings of the 78th Annual Convention of the APA. 1970, 5, 255-266.
- Seligman, R. and Gleser, G. The effect of earlier parental loss in adolescence. Archives of General Psychiatry. 1974, 23, 475-479.

- Sethi, B. The relationship of separation to depression. Archives of General Psychiatry. 1964, 10, 486-496.
- Shepherd, D. and Barraclough, G. The aftermath of parental suicide for children. British Journal of Psychiatry. 1976, 129, 267-276.
- Shinn, M. Father absence and children's cognitive development. Psychological Bulletin. 1976, 85, 295-324.
- Silverman, P. and Englander, S. The widow's view of her dependent children. Omega. 1975, 6, 3-20.
- Smith, M. and Glass, G. Meta-analysis of psychotherapy outcome studies. American Psychologist. 1977, 32, 752-60.
- Spelke, E., Zelazo, P., Kagan, J., and Kotelchuck, M. Father interaction and separation protest. Developmental Psychology. 1973, 7, 83-90.
- Spitz, R. Anachitic depression. Psychoanalytic Study of the Child. New York: International Universities, 1946.
- Swain, H. Childhood views of death. Death Education. 1979, 2, 341-358.
- Trunnell, T. The absent father's children's emotional disturbances. Archives of General Psychiatry. 1968, 19, 180-188.
- Tuckman, J. and Regan, R. Intactness of the home and behavioral problems in children. Journal of Child Psychology and Psychiatry. 1966, 7, 225-333.
- United States Social Security Administration Statistics. In Statistical Abstract of the United States. 100th edition. Washington, D.C.: United States Bureau of the Census, 1979.
- Volman, R., Ganzert, A., Picker, L. and Williams, W. Reactions of family systems to sudden and unexpected death. Omega. 1971, 2, 101-106.
- Walton, H.J. Suicidal behavior in depressive illness. Journal of Mental Science. 1958, 104, 884-891.

- Waldfogel, S. and Gardner, G. Intervention in crises as a method of primary prevention. In G. Caplan (Ed.), Prevention of Mental Disorders in Children. New York: Basic, 1961.
- Warren, M. Some psychological sequelae of parental suicide in surviving children. In A. Cain (Ed.), Survivors of Suicide. Springfield, Ill.: Charles Thomas, 1972.
- White, E., Elsom, B., and Prawat, R. Children's conceptions of death. Child Development. 1978, 49, 307-310.
- Wilson, I., Alltop, L., and Buffaloe, W. Parental bereavement in childhood: MMPI profiles in a depressed population. British Journal of Psychiatry. 1967, 13, 761-764.
- Zilboarg, G. Considerations on suicide in particular reference to that of the young. American Journal of Orthopsychiatry. 1937, 7, 270-291.