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# A PILOT STUDY OF MOTIVATED SURVIVORS'

# ADJUSTMENT TO SUICIDE

By

Pamella Ann Montgomery

# A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

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and Human Performance

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Pamella Ann Montgomery

#### ABSTRACT

# A PILOT STUDY OF MOTIVATED SURVIVORS' ADJUSTMENT TO SUICIDE

By

#### Pamella Ann Montgomery

The subject of suicide has received a considerable amount of professional and scholarly interest in recent years. However, research concerning suicide survivors (individuals who have sustained the loss of a loved one through death by suicide) is severely lacking.

There are approximately 141,475 new suicide survivors in the United States each year. This number is very possibly a low estimate of the number of actual suicide survivors.

Information about the unique needs of suicide survivors is needed to help people who have survived the suicide of a loved one, as well as to educate therapists about these needs.

The purpose of this research was to assess the adjustment of suicide survivors as they compared with the survivors of death by accident, homicide, and natural causes; to assess the response to loss of the suicide survivors as they compare with the survivors of death by homicide, suicide, and natural causes; and to assess differences in adjustment which are related to the length of time since the death. In this research study, there were 224 individual participants (127 experimental subjects, 110 control subjects).

Analysis of covariance determined that the <u>home adjustment</u> and the <u>emotional adjustment subscales</u> of the Bell Adjustment Inventory determined that suicide survivors had a higher adjustment than the control group, however, the <u>social adjustment subscale</u> did not discriminate between the two groups. Adjusting for months since the loss, analysis of covariance also indicated the survivors of suicide had a lower adjustment than the control group on the Response to Loss subscales (emotional and cognitive).

The Pearson product moment coefficient indicated a significant positive relationship between the months since the death and the score on the emotional and cognitive subtests of the Response to Loss Instrument. However, a Z Test indicated that there was no significant difference in the correlation between the scores for the control and experimental group and the months since the loss. Hence, the control and experimental groups react are similarly to the passage of time.

# DEDICATION

This dissertation is dedicated to the memory of James Kelly Loftis and Michael Lyndell Hudson and to those who still love and miss them.

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## CHAPTER I

# INTRODUCTION

Research in the area of suicide survivors has been sparse. Most research on suicide has been on the prevention and on the intervention with suicidal or potentially suicidal individuals. The National Suicide Center Group, which is a division of the Center for Disease Control in Atlanta, reported that in 1983 there were 28,295 reported suicides in the United States. In Los Angeles, Hatton and Valente (1982) reported that 401 families were effected annually by young suicides in just one county in one year. Schuyler (1973) estimated that there are approximately five survivors for each Therefore, the United States population of successful suicide. suicide survivors would include several million individuals (McIntosh & Milne, 1986). However, this is probably an underestimate. It seems likely that adolescent suicide is underreported because many suicides can be disguised as accidents (Davidson, 1979). The numbers which have been reported are, therefore, possibly a low estimate of the number of actual suicides and resulting suicide survivors. Perhaps if the extent of underreporting were corrected, suicide may rank even higher among the leading causes of death.

The literature review covering suicide since the original writing of Durkheim in 1897 revealed little conclusive data about

suicide survivors and their needs. Although Durkheim is viewed as the father of suicidology, he did not write about survivorship per se, but did discuss suicide in relation to the family. Durkheim proposed that people with children will have a lower suicide rate than married individuals without children. His rationale was that married life provided cohesiveness and support which is not available to single individuals. Although marriage per se tended to reduce the probability of suicide, Durkheim proposed that it was the family which was the major factor immunizing people against suicide. His data indicated the presence of children in the marriage tended to increase the coefficient of preservation. The larger the family, the more interactions there will be with significant others. Thus, the constraints against suicide will be greater (Kozak & Gibbs, 1979).

Wenz (1979) conducted a study which affirmed Durkheim's theory that married men and women are protected against suicide in direct proportion to the number of children they have. In like fashion, Davidson (1979) also affirmed that adolescent suicide must be seen within the context of family problems. Shneidman and Ortega (1969) reported frequent disruption and family discord prior to and after a suicide. Therefore, it appears warranted to investigate family survivors.

The research on suicide survivors has tentatively suggested that social isolation, incomplete grief, social stigma, guilt, and a unique sense of abandonment are expressed by survivors (Calhoun, Abernathy, & Selby, 1986; Calhoun, Selby, & Faulstich, 1980; Cantor, 1975; Schuyler, 1973; Yolles, 1968). Unfortunately, no unequivocal

findings have been reported since none of the investigations to date has utilized control groups in their research designs. Calhoun and Selby have cogently demonstrated, in their series of studies, that survivors are avoided by others. However, their studies did not measure survivors, but rather, individuals in a mall who responded to a questionnaire asking how they felt and how they perceived themselves behaving toward survivors. Calhoun and Selby found that others felt more discomfort around survivors and tended to avoid them.

#### Purpose

The purpose of this study was to measure the adjustment of suicide survivors. There is a need for such empirical research in the area of suicide survivors. As was mentioned earlier, one of the problems in the research about suicide survivors is the absence of control groups (Calhoun et al., 1982; McIntosh & Milne, 1986). This investigation has utilized a control group. Clinical observation may indicate that suicide survivors have more difficulty with adjustment than individuals who have survived the death of a significant person by natural causes, accident, or homicide. However, these deductions can only remain tentative until suicide survivors are compared with other control survivors (McIntosh & Milne, 1986).

## General Hypotheses

Three general hypotheses were investigated. The statistical hypotheses are stated in Chapter III.

- <u>Hypothesis 1</u>: The emotional, home, and social adjustment of motivated survivors of suicide is lower than that of survivors of death by natural causes, accident, or homicide.
- <u>Hypothesis 2</u>: The emotional and cognitive responses to loss is a higher level of distress for survivors of suicide than for survivors of death by natural causes, accident, or homicide.
- <u>Hypothesis 3</u>: Suicide survivors and the survivors of death by other circumstances will show greater adjustment as the loss becomes more distant.

#### Overview

This is a study of the adjustment of suicide survivors. Three general assessments were made: (1) an assessment of the adjustment of suicide survivors as they compare with the survivors of death by other circumstances; (2) an assessment of the response to loss of the suicide survivors as they compare with the survivors of death by other circumstances; and (3) an assessment of differences in adjustment which are related to the length of time since the death.

Chapter II contains the pertinent literature related to survivors of suicide in the following five areas: (1) perspectives of survivors; (2) general theoretical perspectives, (3) psychodynamic perspectives of survivors; (4) family variables associated with suicide; and (5) child/adolescent suicide.

Chapter III contains the research design, methodology, population, and a review of the literature regarding the use of the measures adopted in this research.

Chapter IV contains the description and analysis of the data collected in this research.

Chapter V contains a summary of findings, conclusions, and recommendations for future research.

#### CHAPTER II

#### **REVIEW OF THE LITERATURE**

The purpose of the present study was to investigate suicide survivors' levels of adjustment. There is cogent empirical evidence suggesting that friends and acquaintences do indeed tend to avoid survivors after the death of a significant other by suicide (Cain & Fast, 1972; Calhoun, Selby, & Abernathy, 1984; Calhoun, Selby, & Faulstick, 1980; Calhoun, Selby, & Gribble, 1979; Budestam, 1977). However, it is unclear as to what extent this social isolation is experienced by survivors during a time when social outlets are desperately needed. Unfortunately, previous research has not been able to address the problem of social isolation because appropriate controls were not part of the research designs.

A survivor of suicide is defined as one who has sustained the loss of a significant person through death by suicide (Schuyler, 1973). The Center for Disease Control's National Suicide Center Group reported that 28,295 people died in the United States in 1983 as a result of suicide. If only five survivors are intimately effected by each loss, 141,475 new suicide survivors are added to a special interest group each year (Schuyler, 1973). With such a large group of people experiencing a unique loss, it is imperative that empirical studies be addressed to their special needs.

The sparse literature review related to survivors of suicide clusters in the following areas: (a) perspectives of survivors, (b) general theoretical perspectives, (c) psychodynamic perspectives of survivors, (d) family variables associated with suicide, and (e) child/adolescent suicide. Each of these areas are presented in detail.

# Perspectives of Survivors

Schuyler (1973) presented a case of the psychotherapy of a family subsequent to the suicide of one of its members. The problems Schuyler explored are unique to the survivors of suicide who are often subjected to investigations by police, coroners, and insurance agents. The social stigma associated with suicide often results in a lack of support for the survivors. In some instances, suicides were refused burial on religious grounds. The suddenness of the loss precludes prior working through of feelings. The deliberateness of purpose in suicide intensifies the feelings of involvement in a survivor. In suicidal death, there is a tendency for survivors to blame themselves, especially if there had been conflict. There is also a tendency for the survivor to be angry at the deceased for his/her deliberate desertion. Suicidal death raises many questions for survivors. For example, (a) Was the suicidal victim in his/her right mind? (b) Will my children be more likely to suicide because of his/her death? (c) Was the suicidal death a sin? (d) Was a The suicide survivor often searches for a murder committed? scapegoat. The survivor may distort reality in an effort to seek

meaning for the suicide. Consequently, the survivor may adopt a distorted view of him/herself which will pathologically alter relationships with others. Social isolation is common for the survivors of suicide. Often, mourning is incomplete due to the survivor's preoccupation with the suicidal nature of the death.

Schuyler concluded that the following elements seem to be an integral part of the adjustment to the suicidal death of a significant person.

1. The survivor needs to reach an understanding of the suicidal death that preserves his/her own self-worth and satisfies his/her search for meaning.

2. The survivor needs an opportunity to express his/her feelings in a nonrejecting atmosphere.

3. The survivor should be encouraged to mourn the loss and consider life without the deceased, in addition to dealing with the suicidal nature of the death.

4. The survivor should be monitored by a therapist for possible suicidal behavior.

5. The counselor must help the survivor identify and encourage areas of support from the survivor's environment.

Finally, Schuyler felt it is important for mental health professionals to be alert to the needs of this neglected group of suicide survivors.

Rudestam (1977) used the psychological autopsy method of studying the physical and psychological responses to suicide in 39

surviving family members. Rudestam used structured interviews with 39 family members which focused on the immediate impact of the death; current understanding; and social, vocational, physical, and psychological effects seven months after the death.

The subjects were selected consecutively from the Montgomery County, Ohio, coroner's files of suicides occurring between May 1, 1973, and April 20, 1974. The closest living survivor was contacted by mail and were asked to voluntarily participate in a research project concerning the after effects of suicidal death. A follow-up telephone call was made in an attempt to secure an interview appointment. The interviewers were trained in clinical interviewing and they received specific training to conduct the interviews for this study.

Rudestam found that individual family members suffer a great deal from suicidal loss, particularly from bodily and emotional symptoms which are still evident at least six months after the suicide.

Relationships within the family appear to be strengthened within six months of the suicide as values are reexamined and as the members share a common burden. The author recommended that the family relationships should be explored by methods of testing which overcome denial and deception, such as controlled observations of the family.

Calhoun, Selby, and Gribble (1979) conducted a study on the reactions to the family of the suicide. Calhoun et al. selected a population of 127 adults who were members of a large urban protestant

church responded to a newspaper account of a suicide in which the following aspects were systematically altered: sex of the suicide, apparent cause of the suicide, and whether the apparent cause occurred in the immediate or more distant past in relation to the time of the actual suicide.

The study was an attempt to investigate the potential effects on how individuals would perceive the family survivors of a suicide. The four items of interest were sex of the respondent, sex of the suicide victim, if the causal factor of the suicide were in the distant or immediate past and whether the cause of the suicide were internal or external to the individual.

The design for the study was a 2 (sex of respondent) x 2 (sex of suicide) x 2 (internal or external cause) x 2 (remote or immediate cause). The respondents were given a photocopy of the newspaper account and was asked to read it and then to rate the surviving family of the suicide on several items.

A multivariate analysis of variance was used to analyze the sum of the five social acceptance items, the rating of expected embarrassment on a visit to the family, and the rating of expected tenseness with the family.

The male respondents anticipated being more relaxed with the surviving family of a male suicide than with the family of a female suicide. The female respondents anticipated being more relaxed with the surviving family of a female suicide than with the family of a male suicide. A multivariate effect indicated that the males were

more accepting of the surviving spouse of suicide victims than were female respondents.

Calhoun, Selby, and Faulstick (1980) and Hatton and Valente (1981) studied reactions to the parents of a child who committed suicide as compared with reactions to the parents of a child who died from natural causes. The participants in this  $2 \times 2$  study were 119 adults. Four versions of a newspaper story describing the death of a 10-year-old child were prepared. The article described the child as either a boy or girl and as having died from a viral illness or suicide by hanging. Twelve 7-point Likert-type items were designed to assess the following areas: (1) how psychologically disturbed was the child, (b) how psychologically disturbed each of the parents were before the child's death, (c) how each parent would be liked if the respondent were to meet him/her in person, (d) the blame attributed to each of the parents for their child's death, (e) whether the newspaper account should have mentioned the cause of death, (f) how long each of the parents would remain very sad and depressed, (g) how tense the respondent would feel during a visit with the family, and (h) how difficult it would be to express sympathy to the parents.

Potential participants were approached at a shopping mall. Twelve individuals indicated that they did not wish to participate and 120 agreed. One response sheet was mislabeled and, therefore, was not used. The authors found that when the death was suicide, the child was viewed as having been more emotionally disturbed than when the death was caused by illness. The mother and father were liked more when the death was the result of illness than when the death was

suicidal. Both parents were blamed more when the death of the child was suicidal. The respondents were more likely to feel that the newspaper account should not have revealed the cause of death when the child committed suicide than when the child died of an illness.

The authors concluded that the parents of a child suicide can face specific psychological stress in addition to the normal stress felt by the death of a child due to natural causes. The surviving parents of the child suicide receive less social support and a greater degree of negative impressions that have a potentially psychologically damaging impact. The authors recommended that intervention with parents should include external support and a means of helping parents cope with the negative social feelings directed toward them.

The next contribution to this body of research was by Calhoun, Selby, Tedeschi, and Davis (1981) who conducted three separate studies for the purpose of developing a research instrument to measure the reactions to the family surviving a suicide.

# Study 1

The subjects were 201 male and 224 female undergraduate students enrolled in a southeastern United States university. The subjects responded to a 55-item survey instrument with a six-point Likert format in group testing sessions. The test items reflected the following five areas: social discomfort and acceptance, perceived causal role of the family in the suicide, expected reactions of the family, evaluate feelings toward the family, and perceived

consequences of the suicide for the family. A factor analysis was performed on the data using a principle axis solution with a varimax rotation.

<u>Results of Study 1</u>. Forty-two items were retained. The factors of blame toward the family and social discomfort felt for the family of the suicide victim corresponded with the perceived causal role of the family and social discomfort and acceptance. The expected family reactions were reflected in the factors of family suffering and family affective reaction.

## Study 2

Study 2 was performed to cross validate the results of the first study and to add items which might increase the reliability of the instrument.

The subjects were 47 male and 86 female undergraduate students. They completed a revised scale of 57 items. A principal axis solution with a varimax rotation with an eigenvalue cut-off at 1.70 yielded a 7-factor solution which accounted for 44% of the common variance.

Four of the seven factors cross-validated with factors obtained in the first study. These four factors were interpreted to be identical to that made of corresponding factors in Study 1. Factor 1 measures social rejection of survivor's family. Factor 2 measures personal affective reaction toward surviving family. Factor 3 measurers the disclosure of suicide. Factor 4 measures funeral discomfort. Study 3

The split-half reliabilities for the four factors and the total scale were assessed and compared with two other scales, the Rotter Locus of Control Scale and the Marlowe-Crowne Social Desirability Scale. The subjects consisted of 15 males and 26 females. The instrument developed in Study 2 (The Aftermath of Suicide Scale) consisted of 57 items in a six-point Likert format. The Rotter Locus of Control Scale and the Marlowe-Crowne Social Desirability Scale were also administered to test the discriminant validity of the Aftermath of Suicide Scale. Demographic information was also obtained (i.e., religion, age, sex, and marital status).

The split-half reliability was assessed for each scale factor and for the total scale. An odd-even split of the items was used with the Spearman-Brown Correction. Correlations were computed between the suicide scale and the two personality measures to test for discriminate validity. One-way analysis of variance were computed for the suicide scale where marital status and religious preference were independent variables. In addition, correlations with age, sex, and reported knowledge of individuals or families of persons who have committed suicide were computed.

The split-half reliability for the total suicide scale was .78. The correlation between the total suicide scale and the Rotter Locus of Control Scale was .09 and the correlation with the Social Desirability Scale was .20. Although the Aftermath of Suicide scale was not correlated to either locus of control or social desirability,

there were some low, but significant relationships between the factor scores and each of the personality scales. Factor 1 (Social Rejection of Survivors) was correlated with the Marlowe-Crowne Social Desirability Scale as was Factor II (Personal Reaction Toward Family). Factor III (Disclosure of Suicide) is correlated with locus of control.

The only correlation between demographic variables, the factor scores, and the total suicide scale score was the relationship between the scores on Factor II (Personal Reaction Toward Family) and sex. The correlation indicated that males were more likely to respond positively to the family of a suicide victim than females.

Calhoun et al. found their Aftermath of Suicide Scale to be a reliable research instrument for assessing the way in which family survivors of suicide are likely to be viewed. The authors concluded that the total scale scores probably reflect the overall social climate or social sympathy toward the families of suicide victims.

Calhoun, Selby, and Selby (1982) examined available studies regarding six areas of survivor reactions from suicide: affective reactions, cognitive reactions, behavioral reactions, physical reactions, family interaction, and social reactions to the survivors.

#### Survivor Reactions

#### Affective Reactions

A small percentage of survivors report feeling relief after the suicide. Other survivors reported feeling angry at the deceased.

Finally, depression appeared to be a predominant part of the response to suicide.

# **Cognitive Reactions**

Shock and disbelief are the predominant reactions in the weeks following the suicide. The search for an explanation for why the death occurred is an important component of post-suicide bereavement. Denial takes on a different form in suicidal grief because what is sometimes denied is the suicidal nature of the death. The authors found that guilt is often experienced with greater intensity by suicide survivors than by nonsuicide survivors.

#### Behavioral Reactions

The reactions which followed suicide were: sometimes an increase in smoking for individuals who smoked; and sleep difficulty; and occasionally an increase in the use of tranquilizers.

#### Physical Reactions

The research suggested that a greater number of suicide survivors visit a doctor following a death than do those bereaved after a nonsuicidal death.

#### Family Interaction

The findings are very inconsistent regarding family interaction after the suicide. Some authors found family interaction much improved, while others found that family members had a great deal of difficulty discussing their feelings with family members after the suicide.

#### Social Reaction to the Survivors

Suicide survivors report feeling blamed and isolated. The reported feeling stigmatized and avoided by friends.

#### Conclusions

Calhoun, Selby, and Selby observed that much of the research in the literature they reviewed had been collected from interviews and specially constructed questionnaires which lack the possibility of numerical summary. Thus, it is difficult to reliably determine the interrelationship of various factors, changes over time, and difference between groups. Control groups were absent in the studies which were reviewed. Since more stringent methodological approaches are needed in the area of suicide survivor research, existing published information is limited. However, the trends which appear in studies and in the experience of clinicians may serve as useful guidelines for the practitioner.

Similarly, Calhoun, Selby, and Abernathy (1984) investigated the reactions of persons to specified individuals who had actually experienced suicidal bereavement. The subjects were 12 male and 23 female undergraduate students who volunteered to participate and who, in the last three years, had known someone who had experienced the death of a friend or relative. The participants were grouped into categories based on the type of death with which the survivors coped. The groups consisted of suicide, accident, and natural causes. A structured interview was used which included variables identified from previous research on suicide, grief, and social perception.

Four 7-point rating scales asked each respondent to rate the amount of difficulty that they thought anyone might have in coping with death from homicide, suicide, accident, or natural causes.

The effects of the death on survivors as described by the 12 male and 23 female respondents were examined by an analysis of variance on the 13 7-point rating scales and on the number of negative adjectives selected to describe the survivor. The authors found that suicide is a type of death for which participants expected to experience more discomfort in interactions with survivors. Respondents indicated that if they were in the survivors' places, they felt they would have more difficulty coping with death by accident than with death by suicide. However, when they were asked to rate the difficulty of types of death in general, respondents rated suicide as significantly more difficult than accidental or natural causes, and more respondents indicated that suicidal death was more difficult to cope with when they discussed suicidal death. The authors speculated that this contradiction may be due to the fact that some survivors actually experience a certain amount of relief following a suicidal death.

The authors concluded that cause of death may have a limited impact on the way others describe a survivor. The impact of the cause of death in studies with hypothetical cases may be less important when the respondent is a personal acquaintance of the survivor.

Pennebaker and Heeron (1984) examined the degree to which confiding in others was correlated to the incidence of health

problems of surviving husbands and wives in the year following to the death of a spouse. The subjects were suicide survivors and motor vehicle accident survivors. It was hypothesized that spouses of suicide victims would be less likely to discuss the death of their spouse because of the stigma of the death. Thus, it was hypothesized that the spouses of suicide victims would have higher illness rates. The study also sought to learn if there were a relationship between ruminating about the spouse and the illness rate as well as a link between ruminating and confiding.

The subjects' names were obtained from the coroner's files of all suicides and accidental deaths which occurred during the calendar year of 1982 in a large, metropolitan county in the southwest.

The sample was restricted as follows: (1) all deaths occurred within 24 hours of the accident or suicide attempt; (2) the victim was (a) married and living with his/her spouse, (b) between the ages of 25 and 45, (c) Caucasian and without a Spanish surname, and (d) residing within the county at the time. The motor vehicle accident deaths were restricted to those where the spouse was not involved in the accident. The sample included 20 suicides and 19 accidental deaths.

The questionnaires were mailed to the 39 surviving spouses in November, 1983. The overall return rate was 61.3%.

The subjects completed a two-page questionnaire. The questions were focused on coping strategies, rumination, reliance on religion, confiding in others, somatic concerns, and demographic data.

Pennebaker and Herron found that the sudden death of a spouse is correlated with increased somatic problems regardless of the cause of death. The act of confiding in others was correlated with a reduction in rumination and stress.

Calhoun, Abernathy, and Selby (1986) also studied if and how rules for interacting with the survivors of suicide may be different from those regarding other types of death. In the first study, the authors designed a 1 (sex of respondent) x 2 (surviving husband/wife) x 3 (cause of death--car accident, leukemia, suicide) test. There were 237 (120 females and 117 males) undergraduate students who participated with the study. Subjects were given a list of 37 possible rules, each followed by two rating scales and a list of demographic information. The subjects were asked to imagine that they were observing the interactions of a visitor at the funeral home with the surviving spouse of a middle-aged neighbor who had died in a two-car automobile accident, of leukemia, or by a self-inflicted gunshot wound. One of the 9-point rating scales asked subjects to rate the appropriateness or inappropriateness of specific behaviors, and the second scale asked subjects whether people should or should not perform specific behaviors.

The two rating scales for each of the 28 rules were compared. Cause of death, sex of respondent, and sex of spouse were the independent variables. Post hoc tests were used to ascertain specific differences between causes of death. Calhoun et al. found that the respondents anticipated feeling more constrained in the

presence of a suicide survivor than if the respondent were in the presence of a survivor of a death from a two-car automobile accident or of leukemia. The authors also found that females were more certain about what behavior would be appropriate with a bereaved family.

In the second study, 126 adults participated (62 males and 64 females). These 126 were part of 170 potential subjects approached in a shopping mall. Subjects were given 10 of the rules identified in the first study and three additional items. The same scenario was used, and subjects were asked to rate behaviors on only a 9-point should do/should not do scale. The research design was 2 (sex of surviving spouse) x 2 (sex of respondent) x 3 (death by suicide, leukemia, or car accident) test. All the subjects gave the lowest rating to the rule "laughs about how the person died." Therefore, only the 12 remaining rules were included in the three-way multivariate analysis of variance.

Calhoun et al. found that the subjects felt that interaction with the survivors of a suicidal death was seen as more awkward and as having a greater number of rules to regulate behavior. The authors speculated that females may feel more certain about how to conduct themselves in the presence of a suicide survivor.

The authors concluded that survivors of suicide will encounter greater difficulties in interacting with others than will survivors of death from accidents or natural causes. The family surviving a suicide faces grief unique to a suicide, as well as social situations

with implicit social rules, which may serve to isolate the family further when they need the support of others.

#### General Theoretical Perspectives of Suicide

Durkheim (1951), the father of suicidology, contended that suicide rates increased with the onset of the industrial revolution. The advent of the industrial revolution brought with it a flood of people who left their extended families and small communities and support systems, in order to move to the centers of industry for This dissolution of the extended family gave birth to the iobs. nuclear family. Durkheim contended that the nuclear family (a single set of parents and children) without the support of the extended family (grandparents, aunts, uncles, etc.) did not provide adequate emotional support to the nuclear family members. This study was repeated by Halbwachs (1938) and was reconfirmed. They felt that the loss of cohesiveness and support contributed to the increasing suicide rate. He also observed that single people are more likely to suicide than married people, with the possible exception of very young married people being less immune from suicide than their single counterparts. Durkheim contended that suicide is much more prevalent in countries which permit divorce.

The author said that individuals experience depression and disillusionment which express society's state of disintegration. These feelings reflect the relaxation of social bonds. When a person is detached from society or when social integration is too strong, the person encounters less resistance to suicide in him/herself. For
instance, the notion of a captain going down with the ship has caused some believers of that principle to refuse rescues from their ships and thus perform altruistic suicide.

The author contended that the egoistic suicide is characterized by a general depression and requires a high development of knowledge and reflective intelligence. As the individual reflects on him/herself, the person becomes detached from the outside world. Gradually, the will to live is weakened and suicide becomes a possibility.

Durkheim described a third type of suicide as anomic suicide. The anomic suicide is characterized by anger and all of the emotions customarily associated with disappointment. The unregulated emotions do not adjust to the conditions of the situation and, therefore, cause a painful conflict which can erupt in an outburst of violence toward others as well as toward oneself. Unfortunately, survivors of suicide were omitted from even the earliest of writings on the subject.

Wenz (1982) designed a study to examine Durkheim's proposition that married men and women are protected against suicide risk in direct proportion to the number of children they have. The sample consisted of 145 families in which a parent thought of suicide, threatened suicide, and suffered self-inflicted damage, usually resulting from a desire to kill oneself. These 145 family units were comprised of 243 parents and 392 children.

Wenz reported that the zero-order correlation coefficient revealed that family size was significantly associated with lethality

for married males (-.45) and females (-.51), and that family the density index was significantly associated with the lethality rate of both sexes (males, -.29; females, -.37). The suicide potential rates were highest among married females where family size, family density, and sibling compactness were lowest.

The author concluded that the findings affirm that family size and density are important factors in parent suicide potential and suggest that the relationship between family constellation and parent suicide risk merits further research.

In a similar study, Kozak and Gibbs (1979) analyzed the effects of dependent children on married suicides. The data were collected from statistic sheets and inquest transcript reports located at the Cook County coroner's office. The sample consisted of all officially-recorded married and single suicides in Chicago and Cook County for the years 1970 and 1974.

Kozak and Gibbs found that suicide rates tended to be highest among parents who were either too old to have young children or too young to have children. The presence of school-aged children between 6 and 14 seems to have especially deleterious effects on parents who are in their upper and middle 30s. The mean numbers of dependents per suicide couple is considerably higher than the average number of children per married household in the Chicago-Cook County region. Their data indicate the inhibiting effect dependent children have tends to decrease as the number of children increases.

The authors concluded that young couples with young children already have sufficient strain with marital adjustment and the

establishment of careers. Having young children at middle age requires a large commitment of time and economic resources at a point emphasis is on disengagement from such additional when responsibilities. For the third group, young parents with older children, the parents have to cope with the problems and expenses of older children, while the parents are beginning and consolidating careers. Despite their small sample size, the data seemed to indicate that the effects of dependent children on parental suicide may be of greater complexity than previously considered.

Shneidman (1981) presented a different theory of the sudden suicide act. He said that sudden suicide has the following characteristics: (a) it is meant to be fatal and usually entails jumping, shooting, burning, or hanging; (b) it is decided upon suddenly, a few days or minutes before the event; and (c) it is communicated only indirectly. These indirect cries for help are either disregarded or not heard by potential rescuers. According to Shneidman, the sudden suicide has three main components and a catalyst which include (a) heightened inimicality. Inimicality refers to those qualities within an individual which are unfriendly or even destructive toward oneself; (b) exacerbation of perturbation. This refers to negative emotional states, such as (1) forlornness, deprivation, distress, grief; (2) blaming others, hate, anger, physical aggressiveness; (3) leaving the scene, desertion; (4) remorse, guilt, depression, need for punishment; and (5) mute withdrawal that includes disgust, bitterness, and sardonic humor; (c)

increased construction of intellectual focus; with a tunneled vision, the suicidal person focuses on the unbearable emotion and ways to escape from it; and (d) cessation; the insight that it is possible to stop consciousness and end the suffering.

In the inimical, perturbed, constricted person, the idea of cessation is the turning point in the suicidal drama. The author stressed that the idea of cessation is often not communicated by the suicidal person. Therefore, it is important that the lines of communication be kept open because suicidal people need to know that their suffering is appreciated.

#### Psychodynamic View of Survivors

Richman (1977) approached family variables from a psychodynamic perspective. He discussed the central role and tenacity of symbiosis in suicidal behaviors, the disturbances of empathy and its rootedness in family dynamics and functioning. He refers to symbiosis as a kind of relationship in which the uniqueness or individuality of one member is seen as a threat and is, therefore, denied or disconfirmed.

Richman mentioned case examples to demonstrate that families with suicidal members appeared to alternate between two extremes of merging and isolation. The reasons for this, according to Richman, are as follows: (a) the symbiotic partners are not able to satisfy each others' needs, (b) this instability serves the major function of keeping an old symbiosis alive by the failure to establish enduring, intimate, and mature new ties by the repetition of old patterns and a belief that the establishment of new relationships represents on act of disloyalty to the old, and (c) closeness cannot be tolerated, in part due to the threat of the loss of identity. Distance is untenable due to the threat of loss of symbiosis. Therefore, the partners vacillate and engage in a series of escalating crises. Empathy is incompatible with symbiosis because it requires the capacity to be attuned to the feelings of another while maintaining separateness and autonomy.

Because the symbiotic bond is a life and death matter in these families, Richman recommended the following eight treatment suggestions: (a) family therapy is the treatment of choice; (b) let the family move at its own pace rather than risking the premature elimination of the pathological relationship; (c) symbiosis may be necessary for survival if both partners are in the same symbiotic position; (d) hostile and destructive interactions can be encouraged initially to help initiate the process of moving from complaints to sharing among family members; (c) after the aggression and hostility are aired, empathy should be taught and encouraged within the family; (f) rather than trying to break the symbiosis directly, the therapist should help the suicidal individual become more differentiated in his/her roles. Thus, the therapist can avoid putting the suicidal person in a position of being sabotaged by the family; (g) the therapist should recognize the positive aspects of symbiosis and that transformation or sublimation of the wish for fusion may be the goal: and (h) the therapist needs to deal with his/her own symbiotic needs. Recognition that family members are individuals and accepting them as

they are is the best expression of the therapist's empathy and individuation.

# Psychodynamic View of Survivors of Adolescent Suicide

Looking at adolescent suicide, Davidson (1979) speculated that it is underreported because many suicides can be disguised as accidents. Regardless, the adolescent suicide rate is rising. According to the National Center for Health Statistics, the rate in 1970 was 2.4 adolescent suicides per 100,000 and the 1976 estimated rate was 10.5 adolescent suicides per 100,000.

The psychodynamic view of suicide describes suicide as the Developmental theorists relate murder of the introjected object. adolescent suicide to puberty and related tendencies toward depression. Social isolation and family disorganization are often cited as extremely important predisposing conditions. Family disorganization is sometimes seen as a precursor to social Family disruption is measured in several ways: maladjustment. family conflict, absence through death. divorce. or institutionalization of one or both parents, frequent moves, alcoholism, child abuse/negligence, financial problems, and illegitimacy.

Some theorists believe that there are several interrelated causes rather than any single cause of adolescent suicide. A threestage process that suicidal adolescents go through was described as follows: (a) a long-standing history of problems, (b) a period of escalation of problems by the introduction of the problems of

adolescence within the last five years, and (c) a recent onslaught of problems characterized by a dissolution of any remaining meaningful social relationships.

Davidson stressed the importance of post-suicide treatment being directed toward the survivors of the suicide. Davidson (1979) pointed out that suicide survivors need help to cope with the loss, the manner in which it occurred, and society's attitude toward the event. The author concluded that the problems of adolescence must be seen within the context of family and society.

Pfeffer (1981) studied the effects of parental suicide for five psychiatrically hospitalized children, ages 6 to 12 years. The children seen for this study experienced chronic family turmoil and were stressed by previous losses of their parents due to marital discord, divorce, and parental hospitalization. The children were sensitized to actual parental loss and deprivation of adequate parenting at the time of their lives when they had not adequately developed their separation and attachment to their parents.

The author pointed out that special significance may be placed on parental suicide occurring during the child's latency phase of development since it is during this time that ego functioning is rapidly maturing and the superego is developing. As a result, the parental suicide has a profound influence on the child's ego development and character formation. Pfeffer also concluded that the five children were capable of mourning when appropriate intervention was offered within the family or by a therapist.

To investigate psychiatric studies, Conroy and Smith (1983) studied 19 consecutive inpatient suicides in a long-term psychiatric hospital. The authors reviewed each case, participated in psychological autopsies, reviewed hospital therapists' notes, social work records, nursing notes, letters, records of phone calls, etc. The two areas investigated in this study included: (a) had the loss of the family or hospital support system been threatened or occurred? or (b) was there a communication of such a loss from the family or hospital support system prior to the suicide? Conroy and Smith found that 18 of 19 cases (95%) were judged to have had significant family loss issues effecting the suicide. For these 18 chronically ill patients, the following issues preceded the suicide: (a) threatened loss of the institution, (b) events which estranged the patient from the family, (c) divorce or separation issues with a spouse, (d) death or illness of a significant other, and (e) family members who insisted on continued treatment or growth.

These authors concluded that given the impaired ego organization of most of the patients in this study, the impact of loss is best understood in the context of separation-individuation. The patient would view a loss in a narcissistic fashion, i.e., the loss of the significant other might be experienced as the loss of the nurturing relationship. When loss is suspected in those individuals already identified as prone to suicide, the specific issue surrounding loss needs to be clarified so that appropriate interventions can be made. Not only do clinicians need to be aware of the more traditional suicidal messages, but also to communications and events which may precipitate a suicide from a suicide prone individual.

#### Family Variables Associated with Suicide

Tuckman, Youngman, and Leifer (1964) measured family disorganization in relation to suicide. The population consisted of 172 people who were classified as suicides in 1961 by the office of the medical examiner of the Philadelphia Department of Public Health. Compared with the general population of Philadelphia, the sample had an overrepresentation of males, white, older individuals, and of widowed an separated or divorced people.

Tuckman et al. hypothesized that family disorganization could be represented by the increased need of the disorganized family to turn to community agencies for help. Information concerning agency contacts was obtained through the Social Service Exchange (the community's clearing house for registration of persons known to health and welfare agencies). They obtained information regarding agency contacts prior to the actual suicide for suicide, spouse, parents, children, and siblings. Health and welfare agencies were classified as (a) health: in- or outpatient care for a physical condition; (b) psychiatric: in- or outpatient care; (c) economic: public assistance; (d) protective: care and placement of neglected children; (e) delinquency: police, court, correctional institution, probation; (f) domestic relations: Municipal Court for Domestic Relations; (g) counseling: family, school, marriage; and (h) other: Red Cross, legal aid society, day care center, etc.

The data showed that family disorganization characterizes the life experience of suicide. The agency contacts presented a wide range of interrelated social and personal problems involving not only the suicide, but other members of the family. For example, (a) 22% of the families had contacts with the Municipal Court of Domestic relations for problems of financial support or marital incompatibility; (b) 20% of the families had contacts with child protective agencies, (c) 13% of the families required economic assistance; (d) 12% had contacts with health agencies; (e) 12% of the families had contact with agencies concerned with delinquency or adult criminality, (f) 99% of the families had psychiatric care; and (g) 8% of the families used counseling agencies.

The authors concluded that the developmental background of suicide is characterized by economic and emotional deprivation, neglect, rejection, marital conflict of parents, and other unfavorable influences. Such damaging factors in early childhood contribute to intrapsychic conflict which, in turn, leads the individual to resort to maladaptive behavior in coping with day-today living. It appears that suicide was used when other modes of adjustment had proven unsuccessful.

Lester (1966) summarized studies of completed and attempted suicide lending support to the Adlerian hypothesis that suicidal behavior has a greater frequency among first or last borns as compared to middle borns. Lester notes that although the data summarized were scanty and inconsistent in results, none showed an

excess of middle borns among suicidal individuals. In addition, he concluded that suicide in first borns appeared to be affected by age, sex of the subject, degree of psychological disturbance, alcoholism, criminality, etc. Lester indicated that the number of siblings or sex of siblings per se did not seem to be related to suicidal behavior, yet may be related in combination with sibling position.

Yolles (1968) stated that if the survivors of a suicide are not treated, there are long-range, deleterious, mental health effects in these survivors, especially in a young person whose parent has committed suicide.

Goldberg and Mudd (1968) reported via case examples that family suicide survivors react to suicide with considerable anger, guilt, or a mixture of both. Feelings of abandonment and desertion tend to be strong for the surviving children and spouse. These strong feelings of abandonment and resentment may be communicated to the children by the surviving spouse in an indirect fashion since open discussion of the suicide with the children is generally avoided. The authors went on to say that guilt may be so strong after a mate's suicide that the surviving spouse may punish him/herself by never allowing him/herself a further close relationship. They concluded that if the surviving partner can talk freely with someone about his/her feelings, some of these problems will be alleviated.

Davis and Spellman (1968) assisted survivors of suicide. They explained that after a suicide has been investigated, the bereaved family and associates are left uninvolved and uncared for. Their

lack of understanding and frustration are compounded by their feelings of loss, guilt, remorse, and hostility. After a period of one to three years, survivors rarely discuss the suicide because it is too threatening and painful. Consistent with Calhoun, Selby, and Abernathy (1984), Davis and Spellman explained that emotional disruption is usually more severe and prolonged than after death from accident or natural causes.

The authors concluded that suicide survivors need solace and a competent explanation of suicide which can hasten acceptance of the facts and alleviate some of the guilt and remorse. Professional help is often needed because families can be torn apart by accusations, recriminations, or strong remorse. Unconscious identification with a suicide victim may lead certain survivors to take their own lives.

Shneidman and Ortega (1969) studied seven families, demonstrating that they were socially isolated due to their refusal to think of the deaths as suicide. The parents exhibited hostility toward people who designated the deaths as suicides. The authors also noted that parents of adolescent suicides feel a long-lasting guilt about the deaths of their children. They found frequent disruption and family discord prior to the suicide, and they speculated that immediate parental response to sudden suicidal loss appeared to be overwhelming hostility and denial, followed by guilt and depression. Projection of their hostility upon the police, medical examiner, and physician was common. The more they projected their guilt, the less they faced it, and thus, the grief work was excessive and prolonged.

Shepherd and Barraclough (1976) conducted a longitudinal study of 36 children who survived the suicide of a parent. The authors looked especially at the stability of the family, how the surviving parent handled the immediate consequences of the suicide, and the long-term effects on health and on behavior.

The sample we studied comprised the 36 children aged between 2 and 17 years of age. The data were obtained from two interviews with the surviving parents. The information obtained was about the suicide's health (physical and mental) and that of his/her immediate relatives, household composition, family composition, social class, employment, recent life events (i.e., marital problems, financial difficulties, and trouble with the police).

Two psychiatric social workers used a precoded questionnaire and a semi-structured interview technique and completed a separate questionnaire for each child. The first interview took place within a few weeks of the death. The second interview occurred five to seven years after the suicide, and was focused on the surviving children and the spouse.

The 94% reliability was determined by nine joint interviews in which one interviewer asked the questions and both interviewers independently coded the responses.

Children orphaned by suicide were more than three times as likely to lose fathers as mothers. Seventeen out of 18 of the deceased parents who were assessed immediatley prior to the suicide were suffering from some sort of psychiatric disorder. Ten parents had been ill for more than two years.

In this study, 45% of the families had had marital separations, whereas only 4% of the controls had separated. Seven parents had been in trouble with the police compared with none of the controls.

Eleven parents died at home with the children in the house in seven cases. None of the children orphaned by shooting and drowning were told that the cause of death was suicide. Eleven children were given explanations for the death which omitted the fact of the suicide. Seven children were given no explanation.

The death of a parent forced life-style changes on many children. Those living with their mother was 56%, where only 14% had done so prior to the suicide.

In a partially controlled study, Shepherd and Barraclough concluded that it is impossible to isolate death by suicide as a variable. The authors stated that evidence of a stressful life experience before the suicide demonstrates that the suicide should be seen not as a sudden isolated disaster, but as a major event in an unfortunate series of events, bringing with it grief as well as relief.

Farber (1977) addressed why suicide tends to repeat in some families. The six major reasons for suicides in families are: (a) social and economic; i.e., natural disasters, extreme poverty, loss of status, and social isolation; (b) vulnerable personality; e.g., dependent personality who was abandoned by a "strong" mate who suicided might despair and suicide; (c) adaptive and imitative behavior patterns; family members may adopt and imitate behavior

patterns of parents or others whom they may have respected or admired; (d) characteristics within a family; e.g., the availability of succorance in a family has been shown to be negatively correlated with suicidal behavior; (e) characteristic child rearing styles within a family; any procedures which built helplessness and hopelessness are suicidogenic; and parental behavior which devalues the child in his/her own eyes will diminish the child's sense of competence; and (f) innate characteristics within a family; inherited deformities or inherited psychiatric disorders may predispose some people to suicide. Thus, it seems important to understand these family variables.

## Child/Adolescent Suicide

It has been recognized that young people are killing themselves with an alarming frequency. The death of a young person is tragic and difficult for the survivors to understand. While there has been an increase in the general literature on suicide among youth in the last two decades, there has been a paucity of research done on the loved ones left behind (Thomas & Duszynski, 1974).

Parents often feel rejected and misunderstood by family and friends who could not offer an informed perspective. Thomas and Duszynski (1974) measured closeness to parents and the family constellation in relation to suicide and four other disease states. The population consisted of 1337 Johns Hopkins medical students registered in classes graduating between 1948 and 1964. A questionnaire concerning family attitudes was administered, and

historical family data were gathered from precursor study records, the dean's office, and hospital records.

Thomas and Duszynski reported that the suicide group had a lower mean scale score than the other disease statistics on the closenessto-parents scale. This would indicate a lack of closeness to parents. The emotional demonstrativity score was low for suicides. The mean matriarchal dominance scores was highest for the suicide group. Father's age at subject's birth tended to be significantly older for the suicide group, and mother's age at subject's birth showed a similar, but less striking, trend. The authors concluded that the suicide group showed psychological differences from their unaffected classmates one to twenty-three years before the onset of disease or death. The authors felt that this was a challenging finding because it was based on data obtained prior to suicide, rather than data obtained after suicide.

Cantor (1975) attempted a study of parental response to youthful suicide with the cooperation of the medical examiner of the state of Maryland. More than 500 cases were collected representing a fiveyear period. Simultaneously, data were collected on all youthful suicides coming to the attention of the medical examiner of the city of New York. The questionnaire was composed and mailed to 100 of these families chosen at random. Fewer than 10% of the questionnaires were returned, and many of the returned questionnaires had questions left unanswered. Further follow-up revealed that the majority of responses were from families in which the suicides were

drug related and had occurred very recently. Cantor stated that such findings yield little information beyond demonstrating that the major problem the professional has in helping the family of a completed suicide is the difficulty in communication. The longer the time lapse between suicide and postvention, the more difficult communication will become. Follow-up interviews yielded the following observations.

1. <u>Problems Approaching the Family</u>: Therapists are often defensive about patients who suicide. Families sometimes want to blame the therapist for the death of an adolescent. An additional aspect of a family's unwillingness to accept help from a professional may be the family's fear of being blamed for the suicide.

2. <u>Problems the Family Encounters Trying to Cope</u>: The author contends that the grief process for those who are mourning a suicide is different from the grief process to those who mourn for someone who died of natural causes. Cantor described the grief process as follows: Stage one is characterized by shock and denial of the suicide, but on acceptance of the death. Stage two brings anger at what the suicide victim did, which is followed by a sense of guilt for not having loved the victim enough. The guilt and self-reproach are followed by love and tenderness and a senses of shame for having felt angry. The last stage is characterized by self-pity and longlasting depression.

3. <u>Therapeutic Goals for the Family</u>: Early contact by a therapist will increase the likelihood that the therapist will be

seen as an ally, rather than as a censor. The therapist's task is to furnish support and provide reality testing. Then the survivors should be encouraged to work through their anger, guilt, and shame in order to be able to express their sorrow. The therapist will then be available to identify and treat any extreme (pathological) forms of grief which are common to survivors of suicide. The survivors need to be helped through the stage of depression, to assimilate the grief and continue with their own personal development.

Parents and siblings should be included in the therapy so all family members are helped to succeed in the completion of mourning and to reduce the risk of subsequent suicidal behavior (Cantor, 1975).

The March 15, 1975, issues of the <u>British Medical Journal</u>, in an article entitled "Suicide in Children," there was a report on a study of all suicides occurring under the age of 14 years between 1962 and 1968 in England and Wales. Shaffer (1979) surveyed information from school medical and social records. There were 31 suicides in this group which represented an incidence of one child in 800,000 of the population. No child under the age of 12 years killed him/herself. Personality profiles found commonly among the suicides included solitary children of superior intelligence who were culturally distant from less well educated parents; often the mothers were mentally ill and the children depressed, in conflict and withdrawn, having absences from school. The article entitled "Suicide in Children" concluded that suicides tended to have disturbed family backgrounds and divorce and families where parents or siblings

provide models by having attempted or succeeded in committing suicide.

It is important to investigate counselors' attitudes toward suicide, particularly when they are involved in the prevention treatment of survivors. Bascue, Lawrence, and Sessions (1978) completed a survey of the death attitudes and experiences of 54 rehabilitation counselors. A 10-item biological questionnaire and a 45-item, multiple choice death attitude and experience inventory developed by Shneidman (1971) were administered to 65 counselors employed by the Maryland Division of Vocational Rehabilitation. The death inventory asked counselors to provide information about their childhood, as well as their current attitudes and experiences in such areas as terminal illness, suicide, and grief and mourning rituals.

Completed materials were returned by a total of 54 (83%) of the counselors. Half of them acknowledged that at some time in their lives, they had wanted to die, and 37% stated they had considered suicide. Moreover, 74% reported knowing someone who had committed suicide, with four counselors indicating that a family member had done so.

Further, 35% acknowledged that they might be motivated to suicide to avoid physical pain, while 9% cited loneliness or abandonment as possible motives. Finally, 30% of the counselors thought suicide should always be prevented, but 70% thought there are some suicides which should not be prevented. Bascue, Lawrence, and Sessions concluded that a counselor's attitude and beliefs can potentially influence the rehabilitation process.

Hence, counselors need to be very aware of how their own attitudes and beliefs will impact on bereaved parents or other family members.

Hatton and Valente (1981) described the bereavement of parents who suffered a suicidal loss of a child and on how they used the group process to gain a more realistic perception of the suicide, and the impact it was having on their lives. There were six individuals in the group. One woman dropped out after the first session, while the rest attended weekly meetings for eight weeks.

Hatton and Valente found four family reactions.

1. <u>Prohibition of Mourning by Social Networks</u>: Friends or family who avoided the topic of suicide left parents feeling the outside world was hostile and incapable of understanding their grief. Parents blamed themselves more as they felt blamed.

2. <u>Disruption and Inadequacy of Usual Coping Devices</u>: The usual ways of coping were found to be inadequate. Attempts to find new coping mechanisms were often disrupted by themselves, the environment, and their interpersonal networks. For example, they felt guilty burdening their spouses with their pain. Their ability to perform at work was impaired by their tears and poor concentration. Communication about suicide was often cut off. Religion was often a disappointment because families could not find the answers they sought.

3. <u>Isolation of Bereaved Family from Friends and Family</u>: Families felt deserted as friends and families cut them off. Sometimes family members did directly blame the parents for the suicide.

4. <u>Crisis in Parental Identity and Personal Control</u>: Each confrontation parents had with surviving children left the parents fearful of provoking another suicide. Such fears blocked problem solving. Parents speculated that guilt may be a defense against the helplessness and hopelessness they felt. In reality, they could not live for their children nor will the children to live.

The authors concluded that the need for supportive therapy is clear. They also recommended group therapy as an effective method.

Calhoun, Selby, and Faulstick (1982) investigated the influences on the perception of the parent after that parent's child dies as the result of suicide.

The subjects were 148 adults from a large southeastern city in the United States. Each subject was approached in a shopping mall given one of four specially prepared descriptions of a child's death. The stories gave a newspaper account description of a 10-year-old boy who died either by hanging himself or from a viral disease. The child was described as either experiencing school success or school failure. Thus, the design was 2(male or female respondent) x 2(suicidal or viral) x 2(school success or school failure).

A three-way multivariate analysis of variance was performed on the 12 rating scales using Pellai's Trace criterion.

Calhoun, Selby, and Faulstich found that the parents of children who died by suicide will face relatively more negative impressions and opinions than parents of children who died of a viral illness. When the death was suicidal, the parents were expected to determine that the child had serious problems and were viewed as being somewhat responsible for the child's death.

#### Summary

Research in the area of the adjustment of the survivors of suicide is limited. However, the nature of suicide continues to be thoroughly studied. Research has consisted primarily of descriptive case studies producing unempirical anecdotal results. In addition, some studies have consisted of the research about the attitudes of individuals <u>toward</u> the suicide survivor. Hence, there is little evidence to confirm the actual effect(s) of suicide on those who loved the individual who died as a result of suicide.

In a review of the literature, there was evidence that people tend to avoid the individuals who have suffered the death of a loved one due to suicide (Cain & Fast, 1972; Calhoun, Selby, & Abernathy, 1984; Calhoun, Selby, & Faulstick, 1980; Calhoun, Selby, & Gribble, 1979; Rudestam, 1977). There is also evidence that the deliberateness in purpose of suicide intensifies the feelings of involvement in a survivor. Thus, a suicide survivor tends to blame themself, as well as feeling angry at the deceased for the deliberate desertion (Schuyler, 1973). Rudestam (1977) found that individual family members suffer particularly from bodily and emotional symptoms which are still evident six months after a suicide.

Definitive characteristics of the adjustment of suicide survivors need to be established, although some conclusions can be drawn from the existing literature. To date, none of the existing literature includes direct research with suicide survivors and control subjects. Thus, the value of previous research is limited by this circumstance.

Several conclusions can be drawn from the literature:

1. From the perspective of suicide survivors, there are common difficulties in adjustment which are unique to the survivors of suicide.

A. The social stigma of suicide is enhanced by the investigations by police, coroners, and insurance agents.

B. Suicide survivors have to cope with concerns about the suicidal victim's sanity and whether the suicide will increase the likelihood of other family members becoming suicidal.

C. Suicide survivors tend to feel rejected and blamed and isolated because of the suicide.

2. General theoretical perspectives on suicide conclude that a lack of cohesiveness and support of the extended family contribute to an increasing suicide rate.

3. From a psychodynamic view, suicide survivors need immediate post-suicide intervention to help them cope with the loss, the manner in which it occurred, and society's attitude toward the event (Davidson, 1979).

4. There are family variables which are associated with suicide.

A. Family disorganization characterizes the life experience of the suicide.

B. Unconscious identification with the suicide victim may prompt some survivors to take their own lives (Divas & Spellman, 1968).

5. There are unique variables associated with child and adolescent suicide

A. The child or adolescent suicide victim felt a lack of closeness to one or both parents.

B. The parents are viewed by others as being somewhat responsible for the child's death, thus leaving the families feeling deserted.

C. The parents become fearful of provoking a suicide in a surviving child (Hatton & Valente, 1981).

The present study attempts to continue the investigation into the area of suicide survivors by avoiding some of the methodological problems of earlier research: uncontrolled samples, small samples, and case studies based on interviews. Therefore, this study looks directly at suicide survivors while also using a control group of survivors of death by means other than suicide.

#### CHAPTER III

# METHODOLOGY

The purpose of this study was to measure the adjustment of suicide survivors by using a posttest only control group design (Campbell & Stanley, 1963). A survivor of suicide was defined as one who had sustained the loss of a significant person through death by suicide (Schuyler, 1973).

# Subjects

The original sample of subjects consisted of 150 randomly selected individuals (and as many of his/her immediate family members who were available and willing) who had contacted or attended at least one group meeting of the Minneapolis-St. Paul Suicide Survivors' Group since January, 1980. The subjects experienced the suicide between August 1980 and February 1986. The subjects completed the Adjustment Inventory (Bell, 1962). The home, emotional, and social adjustment subscales of the Adjustment Inventory and the emotional and cognitive subscales of the Response to Loss Instrument (Deutsch, 1982; Roberts, 1984) were used. For descriptive purposes, the questionnaire included questions regarding pertinent biographical data (i.e., age, gender, religious background, previous experience with the death of a significant other, etc.).

	Su: Su:	Suicide Survivors		Natural Causes Survivors	
	N	7	N	7	
Gender					
Male	34	26.8	37	38.1	
Female	93	73.2	60	61.9	
Age					
17-24	21	16.5	12	12.4	
25-44	52	40.9	34	31.1	
45-64	46	36.2	37	38.1	
65+	8	6.3	14	14.4	
Marital Status					
Single	32	25.2	29	29.9	
Married	64	50.4	39	40.2	
Widowed	18	14.2	24	24.7	
Separated/Divorced	13	10.2	5	5.2	
Annual Income					
0 - 10,000	22	18.2	18	19.6	
\$10,001 - 25,000	38	34.4	32	34.8	
\$25,001 - 40,000	34	28.1	22	23.9	
\$40,001 - 65,000	15	21.4	14	15.2	
Above \$65,000	11	9.1	4	4.3	

Table 1. Distribution of the Suicide and Natural Causes SurvivorsGrouped by Demographic Variables

Table 1. Continued

	N	7	N	7
Religion				
Jewish	0	7	7	7.3
Catholic	53	41.7	44	45.8
Protestant	55	43.3	40	41.7
Atheist	2	1.6	1	1
Other	17	13.4	4	4.2
Educational Achievement				
Less than High School	4	3.4	2	2.1
High School	46	39.0	36	37.9
Some College	32	27.1	23	24.2
College Graduate	30	25.4	25	26.3
Master's Degree	4	3.4	7	7.4
Professional Degree	2	1.7	2	2.1

The suicide survivors' age distribution showed 16.5% 17 to 24 years of age, 40.9% between 25 and 44, 2% between 45 and 64, and 6.3% were age 65 and older. There were 34 males and 93 females. The distribution by marital status showed 25.2% where single, 50.4% were married, 14.27 were widowed, and 10.27 were separated or divorced. The annual income distribution showed that 18.2% were between \$0 and 10,000; 31.4% between \$10,001 - 25,000; 28.1% between \$25,001 -40,000; 21.4% between \$40,001 - 65,000; and 9.1% were above \$65,000. The distribution by religion showed 0% were Jewish, 41.7% were Catholic, 43.3% were Protestant, 1.6% were Atheist, and 13.4% were classified as "other." The distribution by educational achievement showed that 3.4% had less than a high school education, 39% had a high school education, 27.1% had some college training, 25.4% were college graduates, 3.4% had master's degrees, and 1.7% had professional degrees (i.e., M.D., Ph.D., D.D.S.).

The original sample of the control group of 150 individuals was randomly selected from the records of deaths recorded between August 1980 and February 1986 at the Minneapolis-St. Paul coroner's office. The control group was comprised of individuals (and as many of his/her immediate family members who were available and willing) who had survived the death of a significant person by natural causes, accident, or homicide. The control group was also asked to complete the home, emotional, and social adjustment subscales of the Adjustment Inventory, the cognitive and emotional subscales of the Response to Loss Inventory, as well as the seven demographic questions.

In order to control for geographical differences, the control group was also selected from the St. Paul-Minneapolis area.

Of the original sample of 150 control subjects, who were survivors of death by natural causes, 21.4% were 17 to 24 years of age. 31.1% were between 25 and 44. 38.1% were between 45 and 64, and 14.4% were over the age of 65. The subjects included 37 males and 60 females who were survivors of death by natural causes. The marital status included 29.9% single, 40.2% married, 24.7% widowed, and 5.2% separated or divorced. The annual income distribution showed that 19.6% were between 0 -10,000; 34.8% were between 10,001 - 25,000;23.9% between \$25,001 - 40,000; 15.2% between \$40,001 - 65,000; and 4.3% were over \$65,000. The distribution by religion showed 7.3% were Jewish, 45.8% were Catholic, 41.7% were Protestant, 1% were Atheist, and 4.2% were classified as "other." The distribution of educational achievement showed that 2.1% has less than a high school education, 37.9% had a high school education, 24.2% had some college training, 26.3% were college graduates, 7.4% had master's degrees, and 2.1% had professional degrees (i.e., M.D., Ph.D., D.D.S.).

The control subjects also included three males and seven females who were survivors of death by accident. The age distribution was as follows: 30% were 17 - 24 years of age, 50% were between 25 and 44, 20% were between 45 and 64, and 0% were over the age of 65. The marital status included 30% single, 60% married, 0% widowed and 10% separated or divorced. The annual income distribution showed that 30% were between \$0-10,000; 60% were between

\$10,001-25,000; 0% were between \$25,001-40,000; 10% were between \$40,001-65,000; and 0% were over \$65,000. The distribution by religion showed 0% were Jewish, 40% were Catholic, 30% were Protestant, 0% were atheist, and 30% were classified as "other."

Finally, the control subjects also included two males and one female from the same family unit who were survivors of death by homicide. The age distribution was as follows: 33.3% were 17 - 24years of age, 0% were between 25 and 44, 66.7\% were between 45 and 64, and 0% were over the age of 65. The marital status included 33.3\% single, 66.7\% married, 09% widowed, and 0% divorced. The annual income distribution showed that 0% were between \$0-10,000; 33.3\% were between \$10,001-25,000; 66.7\% were between \$25,001-40,000; 9% were between \$40,001-65,000; and 0% were over \$65,000. The distribution by religion showed that 100% were Protestant. The distribution by educational achievement showed that 50% had a high school education, and 50% had some college.

Packets of completed questionnaires were returned by 159 family units. Sixty-seven experimental family units and 59 control family units returned questionnaire packets. One family unit which survived a homicide and four family units which survived accidents returned completed questionnaire packets. Three family units returned questionnaires in which the individual family members had each survived different types of death. Two family units returned incomplete questionnaires which, therefore, could not be used in the study. Five family units returned packets of questionnaires which

# Table 2

	Circumstances of Death				
	Suicide	Natural Causes	Homicide	Accident	Mixed
	N	N	N	N	N
Usable Responses	127	97	3	10	0
Number family units					
Responding with					
Usable Questionnaires	67	59	1	4	3
Unused Questionnaires				_	_
Outside Time Parameters	9	7	0	2	0
Unused Questionnaires					
Respondent too Young	3	5	0	1	0
Returned Address					
Unknown	11	2			
Subject Died	2				
Incomplete Questionnaire	es 1	1			
Family Units Returned	10		E Dooth II-1		

Number of Individual and Family Unit Responses

# Table 3

# Percent of Family Units Responding to the Study with Usable Questionnaires

Suicide (N = 150)	Nonsuicide (N = 150)	
44.6%	44.6%	

•

could not be used because nine suicide survivors and one survivor of death by natural causes reported that the deaths occurred outside of the time parameters defined in this study. Some family units returned packets with usable and unusable completed questionnaires. Of these families, there were six survivors of death by natural causes and two survivors of death by accident who reported that the deaths occurred outside of the time parameter defined in the study. In addition, three suicide survivors, five survivors of death by natural causes, and one survivor of death by accident had their questionnaires excluded from the study because the respondents were below the age of 17. The age of 17 is the minimum age required in order to take the adult form of the Adjustment Inventory. Eighteen family units returned the unused questionnaire packets and indicated that they were returning the materials because they did not wish to participate in the study.

Thirteen questionnaire packets were returned to the experimenter by the United States Post Office indicating that the individuals had moved and that there was no forwarding address. Of these 13 packets, 11 had been sent to suicide survivors and two had been sent to nonsuicide survivors. Two packets which had been sent to suicide survivors were returned to the experimenter because the subjects had died.

The Suicide Survivors Grief Group provides support and education to survivors of suicide. Wrobleski (1984) reported that people ranging in age from mid 20's to 50 tend to attend six meetings

over a period of three to six months. The group meets twice monthly. Nine women to every man attend the meetings with an even distribution of survivors grieving a spouse, child, parent, or sibling. The group leaders are fellow suicide survivors, not professionals. The group is not anonymous because it was felt that anonymity would promote the problems of taboo and stigma related to suicide death.

According to Wrobleski (1984) suicide survivors may be different in their motivation to adjust after the suicide than survivors of death by other means. Wrobleski felt that suicide survivors are motivated to find people to talk to about their grief because often their usual support systems are closed to them. Suicide survivors have a great need to vent their feelings and to overcome denial and guilt about the nature of the death. Also, suicide survivors are often fearful that someone else in the family may become suicidal and, therefore, there is a great urgency to solve any family and personal problems.

# Procedure

The subjects were given cover letters which explained the purpose and intent of the study. The letter also served as the informed consent document for the subjects. It was made clear to all subjects that their participation was completely anonymous and voluntary, that they could withdraw at any time, and that their responses would be strictly confidential. Respondents were also sent a postcard which offered them the opportunity to make one or two of the following three choices:

 I have returned \_\_\_\_\_ (indicate number) questionnaires and wish to be reimbursed.

2. I would like to request that the results of this research be sent to me.

3. I do not wish to participate in this research; please do not contact me again.

Each family unit received a packet which included four copies of the questionnaire, a cover letter, a return postcard, and a stamped return envelope.

Follow up was not done for three reasons: (1) The study was anonymous. So, a follow-up would have required the examiner to send follow-up letters to all 300 family units; (2) Suicide survivors are sometimes difficult to approach and resist responding to professionals because they fear being blamed (Cantor, 1975); (3) There was no way to determine the number of individuals who survived the death in each family unit.

#### Adjustment Inventory

The Adjustment Inventory was developed by Hugh M. Bell (1938). There are four forms of this inventory: the Revised Student Form, Research Edition; the Adult Form; and the (original) Student Form. For the purpose of this research, the Adult Form was used. It has five adjustment scores: home, occupational, health, social, and emotional. However, only the home, social adjustment, and emotional subscales were utilized because health and occupational variables are not part of this study.

This study uses Bell's definition of the constructs social adjustment emotional adjustment and home adjustment as delineated in Bell's Adjustment Inventory. The Adjustment Inventory measures social adjustment by obtaining information from the subject about what s/he thinks and feels about family, friends, and acquaintances, how much s/he feels trusting of others, and how well s/he can perform the roles expected of the individual. The Adjustment Inventory measures emotional adjustment by obtaining information from the subjects about their tendency to fantasize, to have volatile anger, fear or excitement, to feel depressed or inferior, to feel helpless, guilty, overly sensitive, and to worry and feel anxious. The Adjustment Inventory measures home adjustment by the use of questions about an individual's ability to live up to family expectations about role reversals, family rejection, family tension, and divorce or separation in the home.

The <u>home subscale</u> was utilized because reseachers have found that there is considerable family disruption surrounding suicide (Davis & Spellman, 1968; Goldberg & Mudd, 1968; Tuckman et al., 1964). This subscale provided some insight as to the measurable extent of such disruption.

The <u>social subscale</u> was administered in order to ascertain the degree to which survivors feel socially adjusted after the event. The administration of the social subscale follows the Calhoun et al. line of research which states that others do indeed avoid survivors. The suicide survivor study helped determine to what extent survivors

feel this social isolation. The <u>emotional subscale</u> was utilized because researchers have found suicide survivors to be emotionally maladjusted (Calhoun et al., 1980; Calhoun et al., 1986; Cantor, 1975; Pfeffer, 1981; Schuler, 1973). Tuckman (1946) found that selfratings on the subscales correlate highly enough with the scores of the Adjustment Inventory that these ratings can be substituted for the total inventory. Thus, it seems justified to use only those subscales which are congruent with previous research.

The items for each of the sections in the Adjustment Inventory were selected based on the degree to which they discriminated between the upper and lower 15% of individuals in the distribution of adult scores. A variety of validity studies ascertained that the Adjustment Inventory measures what it is purporting to measure (Bartlett & Harris, 1936; Clark, 1942; Cottle, 1949, 1950; Darley, 1936; Das, 1961; Ellis, 1946; Jones, 1949; Mallett, 1936, 1937; Peters, 1940; Powell, 1950; Ray-Chowdbury, 1962; Tuckman, 1946; and Van Der Merwe, 1974).

### Reliability

The coefficients of reliability for each of the five sections of the Adjustment Inventory and for its total score can be seen in Table 4 (Bell, 1962). These were determined by correlating the oddeven items and applying the Spearman-Brown prophecy formula. The subjects were employed men and women between the ages of 23 and 28 (Bell, 1962).
Coefficients of Reliability (N = 84)

	Percent
a. Home Adjustment	. 91
b. Health Adjustment	.81
c. Social Adjustment	.88
. Emotional Adjustment	.91
e. Occupational Adjustment	.85
TOTAL SCORE	.94

A variety of reliability studies have determined that the Adjustment Inventory is reliable (Altus & Clark, 1949; Ancona, 1973; Arsenian, 1942; Cattle, 1948; Domrin, 1947; Gould, 1947; Ray-Chowdbury, 1962; Robers & LeUnes, 1979; Traxler, 1941; Williams, Kephart, Newell, & Houtchens, 1936).

The coefficients of reliability for each of the Adjustment Inventory subscales used in this study can be seen in Table 5. The <u>emotional adjustment subscale</u> reliability coefficient was within the acceptable .80 range. Due to the exploratory nature of the study of suicide survivors, the lower values of .77 (<u>home adjustment subscale</u>) and .63 (<u>social adjustment subscale</u>) were accepted with the caution that Type II errors might be increased.

Chronbach's Alpha for Adjustment Inventory Subscales (N = 214)

		<u> </u>
Scale	Alpha	•
Home Adjustment	.77	
Social Adjustment	.63	
Emotional Adjustment	.88	
Social Adjustment Emotional Adjustment	. 63 . 88	

### Validity

The Adjustment Inventory has been validated in two ways. First, the items for each of the sections in the Adjustment Inventory were selected in terms of the degree to which they differentiated between the upper and lower 15% of the individuals in a distribution of adult scores. Only those items which clearly differentiated between these extreme groups are included in the present form of the Adjustment Inventory (Bell, 1962).

Second, the Adjustment Inventory has been validated through the selection of "very well" and "very poorly" adjusted groups of individuals by specialists in adult counseling and a determination of the degree to which the Adjustment Inventory differentiates among them (Bell, 1962).

### Intercorrelations

Table 6 shows the coefficients of intercorrelation of the five sections of the inventory.

					•
	Home	Health	Social	Occupational	Emotional
Home		.96	06	.22	.35
Health			.10	.10	. 50
Social				.04	.51
Occupational					.35
Emotional					
					•

Intercorrelation Coefficients of the Adjustment Inventory Subtests

Darley (1937) found that about one-third of the individuals diagnosed by a therapist were picked up by the social and emotional scales and that nearly one-half of the individuals diagnosed by the test as maladjusted were confirmed in clinical study. The subtest scores were found to be more useful than the total score.

Bartlett and Harris (1936) administered the Bell Adjustment Inventory and compared 119 delinquents with 148 school children and found no differences on the social scale, but found marked differences in home and emotional adjustment in the expected direction (Buros, 1976).

Rogers and LeUnes (1979) investigated the responses of the abused and nonabused juvenile delinquents to Bell's Adjustment Inventory and the Gough's California Psychological Inventory. The subjects wee 26 males and 26 females, ages 14 to 18. The subjects were assigned to four groups: abused males, nonabused males, abused females, and nonabused females. A 2 x 2 analysis of variance (ANOVA) design was used to analyze the psychometric and behavioral data. Roger's and LeUnes found that the abused delinquents were characterized by poorer home adjustment, relative intolerance, suspicion, inflexibility and by deficient socialization.

Hanawalt reviewed the Adjustment Inventory for Buros (1976) and observed that there appeared to be no doubt concerning the correlations published in the manual of the Adjustment Inventory. Hanawalt commented that the validity seems to be as good as any of the other paper and pencil adjustment inventories and is better established than most of them. The subtests provide valuable information concerning adjustment. This instrument has proven itself to be valuable in research, schools, and clinical work. Its popularity over the years seems justified.

Hanawalt continued by commenting that the Adjustment Inventory's concurrent validity is demonstrated by correlations with other inventories. The relationships presented in the manual are extremely high with the exception for masculinity-femininity. The relationships range from .72 between the Adjustment Inventory's submissiveness and Allport's ascendance-submission to an impressive .93 between the Adjustment Inventory's emotionality and the related score on Thurstone's Personality Schedule. Naturally, with this validity information, the reported reliabilities of the Adjustment Inventory are high.

The correlations in the Adjustment Inventory manual appear to be well substantiated. Damrin (1947) gave the Adjustment Inventory

to 153 high school girls first by name and again anonymously, but identified the subjects with a unique system. The correlatins between the two administrations were high. They ranged from .75 to .97. Thus, Damrin interpreted these results as evidence for the reliability of the test and dependability of its answers.

### Response to Loss Scale

The Response to Loss Scale was developed from the theoretical work of several writers (Bowlby, 1969; Deutsch, 1982; Engel, 1962; Freud, 1917; Lindeman, 1944; Parkes, 1965; Schneider, 1981). The original instrument, a 268-item scale, was judged by researchers as too long. Thus, a shorter form was developed based on the original 268-item instrument on the grieving phase of mourning and titled the Response to Loss Instrument.

The Response to Loss Scale was developed to measure grief. The variables are organized along six dimensions of the mourning process: physical, emotional, cognitive, spiritual, behavioral, and imaginative. The revised instrument is a 46-item paper and pencil test. For purposes of this research, only the <u>emotional</u> and <u>cognitive subscales</u> will be utilized because the other variable measures are not pertinent to this study.

### Reliability

Roberts (1984) found that reliability, as measured by Cronbach's alpha, to be .95 for the total scale, between .88 and .73 for the subscales. Split-half reliability was .95 for the Response to Loss Scale. Interscale correlation ranged from .55 to .80.

Deutsch (1982) found that reliability as measured by Chronback's Alpha and split half reliability to be .95 for the total scale and between .88 and .73 for the subscales.

The coefficients of reliability for the Response to Loss Inventory subscales used in this study can be seen in Table 7. The <u>emotion subscale</u> reliability coefficient was within the acceptable .80 range. Due to the exploratory nature of the study of suicide survivors, the lower value of .78 (cognitive subscale) is accepted.

Table 7

Chronbach's	Alpha	for	Response	to	Loss	Inventory	Subscales	(N	= 2	214	<u>)</u>
Scale							Alpha				
Emotion							.86				
Cognitive							.78				

## Validity

The validity and reliability of the Response to Loss Instrument have enough support in terms of psychometric properties to justify its use in this investigation. The Response to Loss Scale has construct validity. In addition, the instrument has demonstrated validity in dealing with groups who have experienced severe depression, who defend against loss by separating emotionally and not cognitively, and who respond equally with both emotional and cognitive defenses (Deutsch, 1982).

### Item Development

Schneider (1980) developed items for the Response to Loss Instrument. He proposed five dimensions of the mourning process: physical, emotional, intellectual, spiritual, and imaginative. The instrument was developed to differentiate grief from depressives response to loss.

The five dimensions used to organize the phases of the mourning process proposed by Schneider et al. are as follows: <u>cognitive</u>: aspects of response to loss which involve information processing about any experiences associated with the loss; (b) <u>physical</u>: the vegetative response of appetite for food and sex are included here, in addition to responses affecting sleep patterns and energy levels; (c) <u>imaginative</u>: all responses involving the use of imagination; (d) <u>emotional</u>: all emotions associated with the loss are included in this dimension; and (e) <u>spiritual</u>: including beliefs in life after death experiences and existential concerns of responsibility and human limitations.

For the purpose of this research, only the emotional and cognitive subscales were utilized. The emotional subscale was utilized because previous research has found suicide survivors to have problems adjusting emotionally to the suicide (Calhoun et al., 1980, 1986; Cantor, 1975; Pfeffer, 1981; Schuyler, 1973). The cognitive subscale was utilized to assess aspects of response to loss which involve information processing about any experiences associated with the loss (Deutsch, 1982; Roberts, 1984; Schneider, 1981).

### Hypotheses

The following hypotheses and subhypotheses were tested in the study.

Hypothesis 1: Prediction of the social adjustment subscale.

<u>Null Hypothesis</u>: There are no differences in social adjustment of suicide survivors and the survivors of death by natural causes, accidents, or homicide.

<u>Alternative Hypothesis</u>: Suicide survivors report higher scores (lower social adjustment) than survivors of death by natural causes, accidents, or homicide. <u>Hypothesis 2</u>: Prediction of the <u>home adjustment</u> subscale.

<u>Null Hypothesis</u>: There are differences in the home adjustment of suicide survivors and the survivors of death by natural causes, accidents, or homicide.

<u>Alternative Hypothesis</u>. Suicide survivors report higher scores (lower home adjustment) than survivors of death by natural causes, accidents, or homicide. <u>Hypothesis 3</u>: Prediction of the <u>emotional adjustment</u> subscale.

Null Hypothesis: There are no differences in the emotional adjustment of suicide survivors and the

survivors of death by natural causes, accidents, or homicide.

<u>Alternative Hypothesis</u>: Suicide survivors report higher scores (lower emotional adjustment) than survivors of death by natural causes, accidents, or homicide.

## Hypothesis: Response to Loss Instrument

Hypothesis 4: Prediction of the cognitive subscale.

<u>Null Hypothesis</u>: There are no differences in the <u>cognitive subscale</u> of suicide survivors and the survivors of death by natural causes, accident, or homicide.

<u>Alternative Hypothesis</u>: Survivors of suicide report higher scores on the <u>cognitive subscale</u> than survivors of death by natural causes, accidents, or homicide. Hypothesis 5: Prediction of the emotional subscale.

<u>Null Hypothesis</u>: There are no differences in the emotion score of suicide survivors and the survivors of death by natural causes, accidents, or homicide.

<u>Alternative Hypothesis</u>. Survivors of suicide report higher scores on the <u>emotion subscale</u> than survivors of death by natural causes, accidents, or homicide.

# Hypotheses: Length of Time Since the Death

Hypothesis 6: Interaction between the score and time

<u>Null Hypothesis</u>: There are no significant interactions between the score and months since loss for the experimental and control group.

Alternative Hypothesis: Individuals show greater adjustment as their loss becomes more distant.

Hypothesis 7: Prediction of differences between groups

<u>Null Hypothesis</u>: There is no significant difference in correlation between months since loss and scores for the experimental and control groups.

<u>Alternative Hypothesis</u>: There is a significant difference in the correlation between months since loss (the control group has lower scores as the loss becomes more distant) and the scores for the experimental and control group.

### Analyses

Overall, the experimental group (survivors of suicide) was compared to the control group (survivors of death by natural causes) on the basis of the dependent measures (i.e., Adjustment Inventory subscales of home, emotional, and social adjustment and the emotional and cognitive subscales of the Response to Loss Scale). The responses from the three survivors of homicide and the ten survivors of accidents were not used in the analyses of the data because there

were too few of these individuals to be of statistical value as independent groups. The data from the homicide and accident survivors could skew the results if included with the larger sample of survivors of death by natural causes. Both the experimental group and the control group subjects had experienced the loss of their lives one more than six months ago and less than six years ago. Thus, subjects were likely to recall there reactions to the deaths. Also, according to Schneider's work on grief, it is worked through and resolved in an average time of six months. Therefore, the subjects had at least six months to make adjustments to their losses.

Analyses of covariance were used to determine if there were experimental and control group differences after adjusting for differences in months since loss. The five subscale scores (Hypotheses 1-5) were used as dependent variables, and months since loss were used as a covariate.

The Pearson product moment correlation coefficient was used to test Hypothesis 6 because it is the most appropriate test for examining the relationship between internal level variables.

The z test for the difference in the correlations between two variables for two groups was used to test Hypothesis 7.

The level of significance is .05 because the researcher is willing to take five chances in 100 that the observed differences are due to chance and that there are no true differences. Increasing the alpha would increase the chance of rejecting a null hypothesis when, in fact, there were no significant differences. Decreasing the alpha would increase the probability of a Type II error (accepting a null hypothesis when it is false).

The control group and experimental group were compared on the basis of demographic variables to determine if there are systematic differences between the groups. Both intergroup and intragroup comparisons were made on the basis of the demographic variables.

### Summary

The purpose of this study was to measure the adjustment of suicide survivors. The original sample of subjects consisted of 150 randomly selected suicide survivors (and as many of their immediate family members who were available and willing) and 150 randomly selected survivors of death by natural causes, homicide, and accident (and as many of their immediate famiy members who were willing and available). In order to control for geographical differences, the control and experimental groups were selected from the St. Paul-Minneapolis area.

All of the subjects were asked to complete the <u>home</u>, <u>social</u>, and <u>emotional subscales</u> of Bell's Adjustment Inventory, the <u>cognitive</u> and <u>emotional subscales</u> of the Response to Loss Inventory, as well as seven demographic questions. One hundred fifty-nine family units returned 214 usable questionnaires. The subjects were also given cover letters which explained the purpose and intent of the study while also serving as the informed consent document. The respondents were also sent a return postcard and a stamped return envelope.

The Adjustment Inventory was utilized in the study of suicide survivors to examine home, social, and emotional adjustment after the death of a loved one. The Response to Loss Inventory was used to examine the subject's level of distress after experiencing the death of a significant person.

Hypotheses 1-5 were tested to determine if these were experimental and control group differences after controlling for months since loss on the five adjustment subscales. Hypothesis 6 and 7 were tested to determine if there were any inter- and intragroup differences due to time since the death.

### CHAPTER IV

### ANALYSIS OF THE RESULTS

This chapter describes the analysis of the research data. Each hypothesis is stated and the relevant data and results are discussed. The hypotheses about the result of the Adjustment Inventory are described first, followed by the results of the Response to Loss Scale, and then the hypotheses regarding the length of the time since the death.

#### Adjustment Inventory Analysis

The data regarding the survivors of death by homicide and accident were not used because there were too few to be from groups which could be treated statistically.

Hypothesis 1: Prediction of the social adjustment subscale.

<u>Null Hypothesis</u>. There are no differences in the social adjustment of suicide survivors and the survivors of death by natural causes.

<u>Alternative Hypothesis</u>: Suicide survivors report higher scores (lower social adjustment) than survivors of death by natural causes.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death

by natural causes indicated that there was no significant difference on the social adjustment score of the Adjustment Inventory (see Table 8). Therefore, the null hypothesis was accepted.

## Table 8

ANCOVA Results Comparing the Social Adjustment of Survivors by Circumstance of Death Controlling for Months Since Loss (N = 214)

Circumstance	N	x	SD	F	P(f)
Suicide	127	51.7	4.7	.63	.42
Natural Causes	97	52.2	5.0		

NOTE: Significant at  $\alpha$  = .05 level.

Hypothesis 2: Prediction of the home adjustment subscale.

<u>Null Hypothesis</u>. There are no differences in the home adjustment of suicide survivors and the survivors of death by natural causes, accidents, or homicide.

<u>Alternative Hypothesis</u>: Suicide survivors report higher scores (lower home adjustment) than and the survivors of death by natural causes.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance of the <u>home adjustment</u> <u>subscale</u> of the Adjustment Inventory at the .04 level (see Table 9). However, the survivors of death by natural causes (not the suicide survivors) reported the higher scores on the <u>home adjustment</u> subscale. Therefore, the null hypothesis is accepted.

Table 9

ANCOVA Results Comparing the Home Adjustment of Survivors by Circumstance of Death Controlling for Months Since Loss (N = 214)

Circumstance	N	x	SD	F	P(F)
Suicide	127	80.0	5.3	4.2	.04*
Natural Causes	97	82.3	5.7		

\*Significant at  $\alpha$  = .05 level.

Hypothesis 3: Prediction of the emotional adjustment subscale.

<u>Null Hypothesis</u>. There are no differences in the emotional adjustment of suicide survivors and the survivors of death by natural causes.

<u>Alternative Hypothesis</u>. Suicide survivors report higher scores (lower emotional adjustment) than survivors of death by natural causes.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the <u>emotional adjustment</u> <u>subscale</u> of the Adjustment Inventory at the .001 level (see Table 10). However, the survivors of death by natural causes (not the suicide survivors) reported the higher scores on the <u>emotional adjustment</u> subscale. Therefore, the null hypothesis is accepted.

Table 10

ANCOVA Results Comparing the Emotional Adjustment of Survivors by Circumstance of Death Controlling for Months Since Loss (N = 214)

Circumstance	N	x	SD	F	P(f)
Suicide	127	146.5	7.0	9.8	.001*
Natural Causes	97	149.4	6.3		

\*Significant at the  $\alpha$  = .05 level.

Response to Loss Instrument Analysis Hypothesis 4: Prediction of the Cognitive Subscale.

<u>Null Hypothesis</u>: There are no differences in the cognitive scores of suicide survivors and the survivors of death by natural causes.

<u>Alternative Hypothesis</u>: Survivors of suicide report higher scores on the <u>cognitive subscale</u> than survivors of death by natural causes.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the <u>cognitive subscale</u> of the Response to Loss Instrument at the .007 level (see Table 11). Therefore, the null hypothesis is rejected and the alternative hypothesis is supported.

ANCOVA Results Comparing the Cognitive Response of Survivors by Circumstances of Death Controlling for Months Since Loss (N = 214)

					•
Circumstances	N	x	SD	F	(P)f
Suicide	127	17.4	4.2	7.3	.007*
Natural Causes	97	15.8	4.5		
					•

\*Significant at the  $\alpha$  = .05 level.

Hypothesis 5: Prediction of the Emotional Subscale.

<u>Null Hypothesis</u>: There are no differences in the emotion scores of suicide survivors and the survivors of death by natural causes.

<u>Alternative Hypothesis</u>: Survivors of suicide report higher scores on the <u>emotion subscale</u> than survivors of death by natural causes.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the <u>emotional subscale</u> of the Response to Loss Instrument at the .0000 level (see Table 12). Therefore, the <u>null</u> hypothesis is rejected and the alternative hypothesis is supported.

ANCOVA Results Comparing the Emotional Response of Survivors by Circumstance of Death Controlling for Months Since Loss (N = 124)

Circumstance	N	x	SD	F	(P)F
Suicide	127	24.4	6.5	27.7	.000*
Natural Causes	97	19.7	6.6		

\*Significant at the  $\alpha$  = .05 level.

The Length of Time Since Death Analysis

<u>Hypothesis 6</u>: Prediction of the correlation between the score and time.

<u>Null Hypothesis</u>. There is no significant correlation between the score and months since loss for the experimental and control group.

<u>Alternative Hypothesis</u>. There is a significant correlation between the score and months since loss for the experimental and control group.

There is a significant relationship between the score and months since the loss for the experimental and the control group on the subscales of the Response to Loss Instrument. Hence, the null hypotheses is rejected and the alternate hypothesis is accepted (see Table 13) for the Response to Loss Instrument. The Pearson product moment correlation coefficients indicated that there is not a

<u>Pearson Product Moment Correlation Coefficients Comparing the</u> <u>Correlation Between Score and Months Since Loss for the Experimental</u> <u>and Control Groups (N = 214)</u>

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	Months	Scale A	Scale C	Scale D	Emotional	Cognitive
Months		035	.081	.060	192	240
		p=.296	p=.107	p=.176	p=.001*	p=.001*
Scale A			. 303	.345	159	053
			p=.001	p=.001	p=.007	p=.205
Scale C				.571	235	245
				p=.001	p=.001	p=.001
Scale D					596	550
					p=.001	p=.001
Emotional						.828
					p=.001	p=.001
Cognitive						

\*Significant at  $\alpha$  = .05 level.

significant relationship between the score and time since the death for the experimental and control group on the Adjustment Inventory. Therefore, the null hypothesis is accepted for the Adjustment Inventory. These findings are consistent with the Pearson correlation coefficient which indicated that the correlation coefficients of the Adjustment Inventory are inversely related to the correlation coefficients of the Response to Loss Instrument (see Table 13).

Hypothesis 7: Prediction of difference between groups.

<u>Null Hypothesis.</u> There is no significant difference in correlation between months since loss and scores for the experimental and control groups.

<u>Alternative Hypothesis</u>. There is a significant difference in the correlation between months since loss and the scores for the experimental and control group.

Z comparisons for significant differences in the correlation between months since loss and score for the experimental and control groups found no significant differences in the correlations between the Z variables for the two groups (see Table 14).

# Summary of Adjustment Variables

The hypothesis testing of the Adjustment Inventory indicated two of the three subscales discriminated between suicide survivors and the survivors of death by natural causes. These subscales were the <u>home</u> and <u>emotional</u> subscales. The <u>social subscale</u> did not display significant differences.

<u>Z Comparisons for Significant Differences in the Correlations Between</u> <u>Months Since Loss and the Five Subscales for the Suicide and</u> <u>Nonsuicide Groups (N = 214)</u>

Months Corre- lated with	Suicide	Nonsuicide r	Zr Suicide	Zr Non- Suicide	Z Difference	Critical Value
Scale A	0122	0904	01	09	. 59	1.97
Scale C	.1581	.0221	.16	.02	1.02	1.97
Scale D	.1211	.0014	.12	.00	.88	1.97
Emotional	2326	1997	24	20	29	1.97
Cognitive	e2729	2222	28	23	37	1.97

Significant correlational differences at  $\alpha$  = .05.

Z = .95 or .05 must reach critical levels of 1.97 or -1.97.

The hypothesis testing of the Response to Loss Instrument indicated the two scales used (emotional and cognitive) to be significant in discriminating between suicide survivors and the survivors of death by natural causes.

The hypothesis testing related to the length of time since death disclosed that there is a significant relationship between the subject's score on the Response to Loss Instrument and months since the loss for the experimental and the control groups, whereas there was not a significant relationship between the score and time for the experimental and control group on the Adjustment Inventory. Thus the subjects' adjustment on the <u>emotional</u>, <u>social</u>, and <u>home subscales</u> of the Adjustment Inventory did not change with the passage of time.

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# CHAPTER V

# SUMMARY OF ADJUSTMENT

### Summary

In Chapter V a summary of the study is presented. The findings of the study are discussed and conclusions presented. The limitations of the study and implications for future research are discussed.

## The Problem

The subject of the survivors of suicide has received little professional and scholarly interest. The research on suicide has been principally on prevention and intervention with suicidal or potentially suicidal individuals. The research on suicide survivors tentatively suggests that social isolation, incomplete grief, social stigma, guilt and a unique sense of abandonment are expressed by survivors (Cahoun, Abernathy, & Selby, 1986; Calhoun, Selby, & Faulstich, 1980; Cantor, 1975; Schuyler, 1973; Yolles, 1968). Notably lacking are studies utilizing control groups in their research designs.

The purpose of this study was to measure the adjustment of suicide survivors as there is an obvious need for empirical research on suicide survivors. This investigation utilized a control group

consisting of individuals who had survived a death due to any circumstance other than suicide.

#### Design and Method

The purpose of this investigation was threefold: (1) to assess the adjustment of suicide survivors as they compare with the survivors of death by other circumstances; (2) to assess the response to loss of the suicide survivors as they compare with the survivors of death by other circumstances; and (3) to assess differences in adjustment which are related to the length of time since the death.

A suicide survivor was defined as one who had sustained the loss of a significant person through death by suicide (Schuyler, 1973). This study measured the adjustment of suicide survivors by using a posttest only control group design (Campbell & Stanley, 1963).

A one-way analysis of variance (ANOVA) was used to determine if there were experimental and control group differences. The five subscale scores were the dependent variables. Analysis of covariance (ANCOVA) was used to determine if there were experimental and control group differences after adjusting for months since the loss. The five subscale scores (Hypotheses 1-5) were used as dependent variables and months since the loss were used as the covariate. The independent variables were the circumstances of death (suicide, homicide, natural causes, and accident).

The Pearson product moment correlation coefficient was used to test Hypotheses 6 (correlation between time and the subject's scores on the emotional, social, and home subscales of the Adjustment

Inventory, as well as the emotional and cognitive subscale scores of the Response to Loss inventory). A Z Test was used to test Hypothesis 7 (Prediction of difference between the experimental and control groups) because it was the most appropriate test for examining the correlation coefficients of the experimental and control groups.

A cross tabulation of the demographic data was done to indicate how the demographic information related to the circumstances of death in order to better define the sample studied.

### Results

The analysis of variance and the analysis of covariance (adjusting for months since the loss) yielded similar results. The analysis of variance and the analysis of covariance supported the null hypothesis for Hypothesis 1 and rejected the null hypothesis for Hypotheses 2 and 3.

The Adjustment Inventory hypotheses indicated that there were significant differences between the control and the experimental groups on the <u>home adjustment subscale</u> and on the <u>emotional</u> <u>adjustment subscale</u>. The survivors of suicide reported lower scores (higher social adjustment) than the survivors of death by natural causes. However, the Adjustment Inventory hypothesis indicated that there were no significant differences between the suicide survivors and the survivors of death by natural causes on the <u>social adjustment</u> subscale. The hypotheses related to the Response to Loss Instrument (4 and 5) indicated that there were significant differences between the experimental and control group on the <u>emotional</u> and <u>cognitive</u> <u>subscales</u>. The survivors of suicide scored higher (were more disturbed about their loss) than the survivors of death by natural causes on these two subscales.

The hypothesis related to length of time since death indicated that there was a relationship between the emotion and cognitive subscale score and the months since the loss. The more months since the loss, the lower the score on the Response to Loss subscales (emotion and cognitive). Therefore, the respondents were less distressed about their loss with the passage of time.

The Pearson product moment correlation indicated that the Adjustment Inventory, <u>home adjustment subscale</u> scores and the Response to Loss <u>emotional</u> and <u>cognitive subscale</u> scores are lower as the months since the loss increase for both the suicide survivors and the survivors of death by natural causes (negative correlation between subscale scores and months since loss).

The hypothesis related to a difference in the correlation between months since loss and the scores for the experimental and control groups indicated that there was no significant difference in the correlation between the months since the loss and the scores for the experimental and control groups. Therefore, there were no significant differences in how the passage of time affected the experimental and the control groups.

A summary of the results of the hypotheses tests is presented as follows:

Hypothesis 1: Prediction of the social adjustment subscale.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated that there was no significant difference on the social adjustment score of the Adjustment Inventory. Social adjustment was defined as individuals' self-report of their thoughts and feelings about family, friends, and acquaintances, how much they feel trusting of others, and how well they can perform the roles expected of them for the purpose of this study.

Hypothesis 2: Prediction of the home adjustment subscale.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance of the <u>home adjustment</u> <u>subscale</u> at the .04 level. However, the survivors of death by natural causes (not the suicide survivors) reported the higher scores (lower adjustment) on the home adjustment subscale.

Hypothesis 3: Prediction of the emotional adjustment subscale.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the <u>emotional adjustment</u> <u>subscale</u> of the Adjustment Inventory at the .001 level. However, the survivors of death by natural causes (not the suicide survivors) reported higher scores (lower adjustment) on the emotional adjustment subscale. Hypothesis 4: Prediction of the cognitive subscale.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the cognitive subscale of the Response to Loss Instrument at the .007 level. Thus, the survivors of suicide reported higher scores (more cognitive distress) than the survivors of death by natural causes.

Hypothesis 5: Prediction of the emotion subscale.

The analysis of covariance (ANCOVA) of the hypothesis of no difference between the suicide survivors and the survivors of death by natural causes indicated significance on the <u>emotion subscale</u> of the Response to Loss Instrument at the .000 level. Thus, the survivors of suicide reported higher scores (more emotional distress) than the survivors of death by natural causes.

Hypothesis 6: Prediction of the correlation between the score

and time.

There is a significant relationship between the score and months since the loss for the experimental and the control group on the subscales of the Response to Loss Instrument. Thus, the respondents were better adjusted and were less distressed with the passage of time. The Pearson product moment correlation coefficients indicated that there is not a significance between the score and time since the death for the experimental and control group on the Social Adjustment Inventory. These findings are consistent with the Pearson correlation coefficient which indicated that the correlation

coefficients of the Adjustment Inventory are inversely related to the correlation coefficients of the Response to Loss Instrument.

Hypothesis 7: Prediction of difference between groups.

Z comparisons for significant differences in the correlation between months since loss and score for the experimental and control groups found no significant differences in the correlations between the Z variables for the two groups. Hence, the adjustment of suicide survivors and the survivors of death by natural causes are similarly effected by the passage of time.

# Discussion

The survivors of death by natural causes received significantly higher scores (lower adjustment) than the suicide survivors on the <u>home adjustment</u> and the <u>emotional adjustment subscales</u> of the Bell Adjustment Inventory, whereas the suicide survivors received significantly higher scores on the <u>emotion</u> and <u>cognitive subscales</u> of the Response to Loss Instrument. The higher scores on the <u>emotion</u> and <u>cognitive subscales</u> of the Response to Loss Instrument indicate that the suicide survivors were thinking about the loss, searching for the meaning of the loss, and examining the consequences of the loss and were experiencing strong feelings of grief (i.e., guilt, anger, sadness, yearning, and sobbing) (Deutch, 1982).

Since the suicide survivors were selected from individuals who had contacted the Minneapolis-St. Paul Suicide Survivors Group, and the control group was selected from death certificates, it is probable that the suicide survivors were more disturbed by their loss

(as indicated by the Response to Loss Instrument Cognitive and Emotional Subscales) than the control group. This would be consistent with the research which indicates that the deliberate nature of suicide intensifies the feelings of involvement in a survivor (Schuyler, 1973; Calhoun, Abernathy, & Selby, 1986; Calhoun, Selby, & Selby, 1982; Richman, 1977; Pfeffer, 1981; Godlberg & Mudd, 1968). However, one reason the suicide survivors probably scored lower (better adjusted) than the control group on the home adjustment and emotional adjustment subscales of the Adjustment Inventory may be because the suicide survivors probably were better able to express their feelings due to contact with the Suicide Survivor Group. The option of the Suicide Survivor Group offered suicide survivors an opportunity to have an outlet for what they understood and felt about their loss. Thus, the experimental group had an opportunity for help to aid them in their home and emotional adjustment that the control population was not perceived to have had. According to the research, suicide survivors typically feel cut off from their usual interpersonal networks and as a result, have a uniquely difficult time trying to mourn their loss (Cantor, 1975; Calhoun, Selby, & Faulstick, 1982; Schneidman & Ortega, 1969; Davis & Spellman, 1968; Goldberg & Mudd, 1968; Richman, 1977; Calhoun, Abernathy, & Selby, 1986; Pennebaker & Herron, 1984; Calhoun, Selby, & Faulstick, 1980; Calhoun, Selby, & Gribble, 1979). The unusual opportunity to attend a Suicide Survivor Group may have helped the suicide survivors cope with their loss in a truly understanding

environment, thereby enabling them to adjust to their loss (Schuyler, 1973).

A second possible explanation for the suicide survivors' scoring lower (better adjusted) than the control group on the <u>home adjustment</u> and <u>emotional adjustment subscales</u> of the Adjustment Inventory may be that the experience of losing a loved one by a suicidal death may have influenced the suicide survivors to make a deliberate attempt to improve deliberately significant relationships because of the painful awareness of what the suicidal loss has cost them emotionally. Rudestam (1977) found that relationships within the family appear to be strengthened within six months of the suicide as values are reexamined and as the members share a common burden.

A third possible explanation could be that the deeper an individual explores existential issues, the more one is able to adjust and adapt. Freud (1917) explained that grief is resolved by recalling every thought, hope, and meaning of the deceased and by experiencing all the feelings associated with these memories. The social adjustment subscale indicated no discrimination between the suicide survivors who had contacted the Suicide Survivor Group and the control group which is perceived to have not had the help of a grief group. Perhaps the suicide survivors might not have scored comparably with the control group had the suicide survivors not had the Suicide Survivor Group as an outlet where they could channel their understanding and feelings about their loss.

In this study there was a significant relationship between the months since the death and the score on the <u>emotional</u> and <u>cognitive</u>

<u>subtests</u> of the Response to Loss Instrument. (The subjects experienced the death between August 1980 and February of 1986). This would indicate that time is a factor in a survivors' awareness and emotions regarding their loss. Therefore, the survivor was less distressed by the loss as time passed.

Deutsch (1982) found that the Response to Loss scores changed in the expected direction over time when the respondent was not depressed. However, Deutsch found that time was not as important a predictor of response to loss as the impact of the loss and the level of depression experienced by the survivors. Another finding indicated that subjects in Deutsch's Severe Depression group defended against the loss by separating emotions from cognitions, whereas the subjects in the No Depression group responded equally to their loss with both cognitions and emotions. The cognitive scale was found to be a significant discriminator between subjects in the Severe and No Depression groups and between subjects in the Death and Separation groups. Deutsch speculated that the Severe Depression group may get no respite from the loss if the cognitive awareness of the loss is constant. The emotion scale was not a significant discriminator. So, Deutsch speculated that emotions may have been channelled elsewhere by the subjects.

In this study of suicide survivors, there was no significant difference in the correlation between the months since the loss and the scores for the control and experimental groups. Therefore, there was no significant difference in how the passage of time affected the

experimental and control groups. Research indicates that as people go through their grief process, they eventually link the emotional and intellectual awareness of the loss (Schneider, 1981). This study indicates that the nature of the loss was not a factor in the gradual adjustment of the sampled survivors.

In summary, there is strong evidence that suicide survivors have more existential awareness regarding their distress due to their loss than the survivors of death by natural causes. The specific subscale items are as follows.

# Summary of the Cognitive and Emotional Dimensions of the Response to Loss Instrument

# Cognitive Response to Loss Items

1. When I focus on my life, I feel that I have nothing to look forward to.

2. I think about what I have lost, and I think about how my life is being affected.

3. I am aware of what will never again be a part of my life because of my loss.

4. I think about the loss a lot.

5. I know that what I have lost will never return.

6. I spend time sifting through past experiences related to what I have lost.

7. I know I am helpless to change the situation and bring back what is lost.

# Emotional Response to Loss Items

1. I have many feelings about the loss.

2. I often weep or sob about the loss.

3. I feel angry about some of the consequences of the loss.

4. I feel sadness whenever I am reminded about my loss.

5. I am angry with some people associated with my loss.

6. When I admit it to myself, I feel sad most of the time about my loss.

7. The tears have been hard to stop this week.

8. I feel guilty about the loss.

9. I find myself longing for what or who I lost.

10. Many more people irritate me now than did before the loss. In spite of the intensity of the grief which the emotional and cognitive subscale items describe, the suicide survivors manage to have a better emotional and home adjustment than survivors of death by natural causes. The possible explanations for this better emotional and home adjustment could be: (1) because they were helped by the Suicide Survivor group, or (2) because the survivors' family bonds were strengthened due to a reevaluation of values as the members shared a common burden (Rudestam, 1977), or (3) because the deeper an individual explores existential issues, the more one is able to adjust and adapt.

# Limitations

There were two major limitations to this research. These concern the subject selection and the nature of the measure.

# Subject Selection

All of the subjects survived the loss of a loved one. However, only the Suicide Survivors were selected from a survivor's support group. The control group was chosen from randomly selected death certificates. Therefore, the impact the Suicide Survivor Group had on the suicide survivors' responses on the five subscales cannot be determined. The suicide support group may have influenced the differences in the groups. However, the amount of help the survivors received is not known.

In addition, the individuals who would contact a survivor support group may be different in their ability to be socially adjusted than individuals in the general population. Hence, the findings may be influenced by a personality difference of those who would contact a survivor group vs. those who would not. Therefore, the findings can only be generalized to individuals who contacted a survivor support group.

Those who contact a survivor support group may have a different home adjustment than those who do not contact a survivor group. Therefore, the findings may be effected by the family's influence on an individual to seek help from a survivor support group.

There may be differences in the emotional adjustment or emotional response to loss of those who seek help from a suicide survivor support group than individuals who do not. The research findings may be influenced by the emotional state of the individual who would seek help from a survivor group.
Finally, it is possible that the cognitive distress resulting from the loss of a loved one may be different for an individual who seeks out a suicide support group than favor those who do not. The extent of cognitive distress experienced by those who would contact a survivor group ay effect the research findings.

#### Measure

The dependent variables of emotional adjustment, social adjustment, home adjustment, emotional response to loss, and the cognitive response to loss had specific limitations. The data were all gathered by self-report from the survivors. Differences in the way the experimental and control groups responded may not reflect the way the survivors actually have adjusted. For example, the desire to be evaluated as socially and emotionally adjusted may have influenced how individuals responded to the questionnaire.

The Response to Loss Inventory is a relatively new measure. Hence, it has not had much use to date. This fact indicates that the Response to Loss Inventory may still have issues of reliability and validity. However, the Response to Loss subscales (emotional and cognitive) did discriminate on two hypotheses.

### Implications for Future Research

A number of implications for future research can be drawn from this study. First, it is clear that suicide survivors experience more existential awareness of conflict than the survivors of death by natural causes. It would be a useful addition to the body of suicide

survivor research to have a study using a split-half design with an experimental and a control group where one half of both groups had received intervention from a grief support group and where the remaining half of each group received no professional or peer group intervention.

In addition, personality inventories (i.e., MMPI) could be administered to determine if there are fundamental differences in the personalities of those who seek help with their grief vs. those who do not seek help.

It would be useful to examine the individual behavior, family interactions and nonfamily interactions of suicide and nonsuicide survivors to determine what the unique needs and feelings of a suicide survivor may be immediately after the suicide and how those needs and feelings change as time elapses after the death.

Another question which would be helpful to clinicians if it were studied is whether or not people who show approach behaviors toward dealing with any loss will demonstrate greater existential awareness and greater adjustment than those who do not demonstrate approach behaviors.

It is possible that the type of suicide (i.e., hanging, carbon monoxide, overdose, gunshot without disfigurement, gunshot with disfigurement to the head) may effect survivors sense of guilt, anger, or ability and willingness to approach others. Additional research with survivors regarding their adjustment to the loss could be explored by using the type of suicide as an independent variable.

The review of literature revealed that many more women than men seek support for dealing with their loss. This phenomena could be examined to determine what fundamental differences there are which could account for men's showing less approach behavior than women when dealing with the issue of loss.

Another question which could be investigated in future research is whether a survivor's search for an understanding of suicidal death effects the survivors' personal adjustment after the suicide.

Relevant research could also show how some suicide survivors may be more inclined than others to become suicidal themselves after experiencing a suicidal loss.

APPENDICES

# APPENDIX A

COVER LETTER AND INFORMED CONSENT FORM

FOR SUICIDE SURVIVORS

MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION • SCHOOL OF HEALTH EDUCATION. COUNSELING PSYCHOLOGY AND HUMAN PERFORMANCE . S13 FRICKSON HALL

EAST LANSING . MICHIGAN . 48824-1034

August 31, 1986

Dear

You have been selected to participate in this research on suicide survivors. Your name was given to my by Adina Wrobleski of the Minneapolis-St. Paul Suicide Survivors Group because of her awareness of the tremendous need for research in the area of suicide survivors.

Your participation is needed to help people who have experienced the pain of suicide grief, as well as to educate therapists about the unique needs of people in similar situations. The need for this research is very great because 143,000 people are surviving suicide every year in the United States.

The purpose of this study is to examine the social adjustment of individuals who have survived the death of a significant person. Your contribution to this research would involve you (and/or any interested family members completing the enclosed demographic questions, Social Adjustment and Response to Loss inventories, and returning them to me in the enclosed stamped envelope no later than September 21, 1986. In order to preserve anonymity, please do not write your name on the survey. You will receive five dollars for each of the completed enclosed inventories which are returned to me.

Your participation in this study is completely voluntary. You are also free to withdraw your participation at any time. Responding to the enclosed questions may lead to negative and unpleasant emotions. Your participation does not guarantee any beneficial results to you other than reimbursement of five dollars for each completed returned form.

The results of the study will be treated in strict confidence, and you will remain anonymous. Within these restrictions, the results and an additional explanation of the study will be made available to you at your request.

Please return the enclosed stamped postcard to me after you have filled it out. The postcard will indicate where I can send your check, whether or not you wish to receive the results of the research, or whether you do not wish to participate. Your returned completed postcard and completed questionnaire(s) will indicate your informed consent to participate in this research.

Thank you,

Pamella a. Montgomery Pamella A. Montgomery, Ph. F. Candidate

Research supervised by William C. Hinds, Ed.D. Director, School of Health Education, Counseling Psychology, and Human Performance

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## APPENDIX B

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COVER LETTER AND INFORMED CONSENT FORM FOR SURVIVORS OF DEATH BY ACCIDENT, NATURAL CAUSES, OR HOMICIDE MICHIGAN STATE UNIVERSITY

COLLEGE OF EDUCATION • SCHOOL OF HEALTH EDUCATION, COUNSELING PSYCHOLOGY AND HUMAN PERFORMANCE • 513 ERICKSON HALL EAST LANSING . MICHIGAN . 48824-1034

August 31, 1986

Dear

You have been selected to participate in this research on individuals who survive the death of a loved one. Your name was obtained from the Minnesota Department of Health.

Your participation is needed to help people who have experienced the loss of a significant person, as well as to educate therapists about the unique needs of people in a similar situation.

The purpose of this study is to examine the social adjustment of individuals who have survived the death of a significant person. Your contribution to this research would involve you (and/or any interested family members) completing the enclosed demographic questions, the Social Adjustment and Response to Loss inventories, and returning them to me in the enclosed stamped envelope no later than September 21, 1986. In order to preserve anonymity, please do not write you name on the survey. You will receive five dollars for each of the completed enclosed inventories which are returned to me.

Your participation in this study is completely voluntary. You are also free to withdraw your participation at any time. Responding to the enclosed questions may lead to negative and unpleasant emotions. Your participation does not guarantee any beneficial results to you other than reimbursement of five dollars for each completed returned form.

The results of the study will be treated in strict confidence, and you will remain anonymous. Within these restrictions, the results and an additional explanation of the study will be made available to you at your request.

Please return the enclosed stamped postcard to me after you have filled it out. The postcard will indicate where I can send your check, whether or not you wish to receive the results of the research, or whether you do not wish to participate. Your returned completed postcard and completed questionnaire(s) will indicate your informed consent to participate in this research.

Thank you,

Pomeila a. Montgemery

Pamella A. Montgomery, Ph.D. Candidate

Research supervised by William C. Hinds, Ed.D. Director, School of Health Education, Counseling Psychology, and Human Performance

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APPENDIX C

RETURN POST CARD

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## RETURN POST CARD

### Side One

Name of Respondent Address of Respondent

> Pamella A. Montgomery 1448 Old Mill Road East Lansing, MI 48823

### Side Two

Please check the appropriate box(es) which reflect your preference(s) and return the postcard to the experimenter.

- 1. I have returned \_\_\_\_\_ (indicate number) questionnaires and wish to be reimbursed.
- 2. Please send the results of this research to me when your study is completed.
- 3. I do not wish to participate.

APPENDIX D

DEMOGRAPHIC INFORMATION

# DEMOGRAPHIC INFORMATION

1.	Age:									
2.	Sex:									
3.	Marital status:									
4.	Religion:									
5.	Annual income (circle one)									
	<ul> <li>a. \$9 0 10,000</li> <li>b. \$10,001 - 25,000</li> <li>c. \$25,001 - 40,000</li> <li>d. \$40,001 - 65,000</li> <li>e. \$65,001 and above</li> </ul>									
6.	Education:									
7.	I have had a loved one die of (circle all that apply)									
	a. accident									
	b. natural causes									
	c. suicide									

- d. homicide
- 8. The death occurred \_\_\_\_\_(month/year).

APPENDIX E

THE ADJUSTMENT INVENTORY

### THE ADJUSTMENT INVENTORY

Your answers to the questions will be treated in the strictest confidence. Therefore, feel free to give candid replies. There are no <u>right</u> or <u>wrong</u> answers. Indicate your answer to each question by drawing a circle around the "yes," the "no," or the "?" Use the question mark <u>only</u> when you are certain that you cannot answer "yes' or "no." There is o time limit, but work rapidly.

la	Yes	No	?	Does the place in which you live now in any way interfere with your obtaining the social life which you would like to enjoy?
2d	Yes	No	?	Do you have ups and downs in mood without apparent cause?
4c	Yes	No	?	Do you feel self-conscious when you have to ask an employer for work?
7a	Yes	No	?	Do you feel that your present home environment allows you enough opportunity to develop your own personality?
8c	Yes	No	?	Do you like to participate in festival gatherings and lively parties?
10d	Yes	No	?	Have you ever been extremely afraid of something which you knew could do you no harm?
11a	Yes	No	?	Is any member of your present home very nervous?
14d	Yes	No	?	Do you worry too long over humiliating experiences?
15c	Yes	No	?	Do you find it difficult to start a conversation with a stranger?
16a	Yes	No	?	Did you disagree with your parents about the type of occupation you should enter?

Does it upset you considerably to have someone ask you to speak when you have had not time to prepare your talk? 18d No ? Yes Does some particular useless thought keep coming into your mind to bother you? 21c Yes No ? Do you keep in the background on social occasions? 22a Yes No ? Have you had unpleasant disagreements over such matters as religion, politics, or sex with the person or persons with whom you live? 23d Yes No ? Do you get upset easily? 25a Yes No ? Has there ever been a divorce among any members of your immediate family? 28d Yes No ? Are you often in a state of excitement? 29c Yes No ? Do you feel embarrassed if you have to ask permission to leave a group of people? 31a Yes No ? Have any of the members of your present home made you unhappy by criticizing your personal appearance? 32c Yes No ? Do you find that you tend to have a few close friends rather than many casual acquaintances? 34d Yes ? No Does criticism disturb you greatly? 35a Yes No ? Are you happy and contented in your present home environment? 37c Yes No ? Are you often the center of favorable attention at a party? 40a Yes No ? Do you feel a lack of affection and love in your present home? 43d Yes No ? Are you bothered by the feeling that people are reading your thoughts? 44c Yes No ? Do you make friends readily? 46a ? Yes No Do the person or persons with whom you now live understand you and sympathize with you?

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17c

Yes

No

?

47d	Yes	No	?	Do you day-dream frequently?
50c	Yes	No	?	Do you hesitate to enter a room by yourself when a group of people are sitting around talking together?
51a	Yes	No	7	Do you feel that your friends have happier home environments than you?
52c	Yes	No	?	Do you often hesitate to speak out in a group lest you say and do the wrong thing?
54d	Yes	No	?	Do ideas often run through your head so that you cannot sleep?
55 <b>a</b>	Yes	No	?	Does any person with whom you live now become angry at you very easily?
58d	Yes	No	?	Do you worry over possible misfortunes?
59c	Yes	No	?	If you come late to a meeting, would you rather stand or leave than take a front seat?
60c	Yes	No	?	Is your present boss or employer an individual whom you feel you can always trust?
62a	Yes	No	?	Are the members of your present home congenial and well-suited to each other?
63c	Yes	No	?	At a reception or a tea, do you seek to meet the important person present?
65d	Yes	No	?	Are your feelings easily hurt?
67a	Yes	No	?	Do you dislike intensely certain people with whom you live now?
68c	Yes	No	?	Are you sometimes the leader at a social affair?
70d	Yes	No	?	Are you bothered by the feeling that things are not real?
71a	Yes	No	?	Do you occasionally have a conflicting moods of love and hate for members of your immediate family?
72c	Yes	No	?	Do you feel very self-conscious in the presence of people whom you greatly admire but with whom you are not well acquainted?

74d	Yes	No	?	Do you blush easily?
75a	Yes	No	?	Have the actions of any person with whom you now live frequently caused you to feel blue and depressed?
77c	Yes	No	?	Do you ever cross the street to avoid meeting somebody?
79d	Yes	No	?	Do you often feel self-conscious because of your personal appearance?
81a	Yes	No	?	Is the home where you live now often in a state of turmoil and dissension?
82d	Yes	No	?	Do you consider yourself rather a nervous person?
83c	Yes	No	?	Do you greatly enjoy social dancing?
85a	Yes	No	?	Did either of your parents frequently find fault with your conduct when you lived with them?
87c	Yes	No	?	Do you find it very difficult to speak in public?
90d	Yes	No	?	Are you troubled with feelings of inferiority?
91a	Yes	No	?	Do the personal habits of some of the people with whom you now live irritate you?
92c	Yes	No	?	Do you often feel just miserable?
94c	Yes	No	?	Have you had a number of experiences in appearing before public gatherings?
96a ,	Yes	No	?	Does any member of your present home try to dominate you?
99c	Yes	No	?	When you are a guest at an important dinner, do you do without something rather than ask to have it passed to you?
100d	Yes	No	?	Does it frighten you to be alone in the dark?
101a	Yes	No	?	Did your parents tend to supervise you too closely when you lived with them?

102c	Yes	No	?	Have you found it easy to make friendly contacts with members of the opposite sex?
105d	Yes	No	?	Have you ever, when you were on a high place, been afraid that you might jump off?
106a	Yes	No	?	Do you find it easy to get along with the person or persons with whom you live now?
107c	Yes	No	?	Do you have difficulty in starting conversations with a person to whom you have just been introduced?
109c	Yes	No	?	Are you often sorry for the things you do?
111a	Yes	No	?	Do you have frequent disagreements with the individual or individuals where you live now concerning the way things are to be done about the house?
112d	Yes	No	?	Do you get discouraged easily?
114c	Yes	No	?	Have you had experience in making plans for and directing the actions of other people such as committee chairperson, leader of a group, etc.
119c	Yes	No	?	Would you feel very self-conscious if you had to volunteer an idea to start a discussion among a group of people?
120d	Yes	No	?	Have you frequently been depressed because of the unkind things others have said about you?
121a	Yes	No	?	Are any of the members of your present household very easily irritated?
123d	Yes	No	?	Are you easily frightened by lightning?
124c	Yes	No	?	Are you troubled with shyness?
127a	Yes	No	?	At home did your parents frequently object to the kind of companions you went around with?
128c	Yes	No	?	Do you find it easy to ask others for help?
130d	Yes	No	?	Do things often go wrong for you from no fault of your own?

131a	Yes	No	?	Would you like very much to move from the place where you now live so that you might have more personal independence?
132c	Yes	No	?	When you want something from a person with whom you are not very well acquainted, would you prefer to write a note or letter to the individual than go and ask him or her personally?
134d	Yes	No	?	Do you dread the sight of a snake?
137a	Yes	No	?	Does the lack of money tend to make your present home life unhappy?
140d	Yes	No	?	Are you easily moved to tears?
142a	Yes	No	?	When you lived with your parents did either of them frequently criticize you unjustly?
143d	Yes	No	?	Does the thought of an earthquake or a fire frighten you?
144c	Yes	No	?	Do you feel embarrassed when you have to enter a public assembly by yourself after everyone else has been seated?
147a	Yes	No	?	Is there anyone at the place where you live now who insists on your obeying him or her regardless of whether or not the request is reasonable?
148c	Yes	No	?	Did you ever take the lead to enliven a dull party?
150d	Yes	No	?	Do you often feel lonesome even when you are with people?
153d	Yes	No	?	Have you ever felt that someone was hypnotizing you and making you act against your will?
157a	Yes	No	?	Do you sometimes feel that you have been a disappointment to your parents?
158c	Yes	No	?	Do you take responsibility for introducing people at a party?
160d	Yes	No	?	Do you frequently have spells of the blues?

APPENDIX F

RESPONSE TO LOSS INSTRUMENT

### **RESPONSE TO LOSS INSTRUMENT**

**INSTRUCTIONS:** The items below consist of possible responses to events experienced as a loss. Indicate the degree to which you are having these response according to the following scheme. Circle the number which reflects your thoughts and feelings.

- 0 = does not describe me
- 1 = sometimes describes me
- 2 = most of the time describes me
- 3 = accurately describes me

1.	When I think about my loss, I feel that I have nothing to look forward to.	0	1	2	3
2.	I have many feelings in my life about the loss.	0	1	2	3
3.	I think about what I have lost and I think about how my life is being affected.	0	1	2	3
4.	I often weep or sob about the loss.	0	1	2	3
5.	I am aware of what will never again be a part of my life because of the loss.	0	1	2	3
6.	I feel angry about some of the consequences of the loss.	0	1	2	3
7.	I think about the loss a lot.	0	1	2	3
8.	I feel sadness whenever I am reminded of my loss.	0	1	2	3
9.	I know that what I have lost will never return.	0	1	2	3
10.	I am angry with some people associated with my loss.	0	1	2	3
11.	When I admit it to myself, I feel sad most of the time about the loss.	0	1	2	3

12.	I spend time sifting through past experiences related to what I have lost.	0	1	2	3
13.	The tears have been hard to stop this week.	0	1	2	3
14.	I now I am helpless to change the situation and bring back what is lost.	0	1	2	3
15.	I feel guilty about some things I did or did not do just before the loss.	0	1	2	3
16.	I find myself longing for what or who I have lost.	0	1	2	3
17.	Many more people irritate me now than did before the loss.	0	1	2	3

## Summary of the Cognitive and Emotional Dimensions of the Response to Loss Instrument

### Cognitive Response to Loss

- 1. When I focus on my life, I feel that I have nothing to look forward to.
- 2. I think about what I have lost, and I think about how my life is being affected.
- 3. I am aware of what will never again be a part of my life because of my loss.
- 4. I think about the loss a lot.
- 5. I know that what I have lost will never return.
- 6. I spend time shifting through past experiences related to what I have lost.
- 7. I know I am helpless to change the situation and bring back what is lost.

- 1. I have many feelings about the loss.
- 2. I often weep or sob about the loss.
- 3. I feel angry about some of the consequences of the loss.
- 4. I feel sadness whenever I am reminded about my loss.
- 5. I am angry with some people associated with my loss.
- 6. When I admit it to myself, I feel sad most of the time about my loss.
- 7. The tears have been hard to stop this week.
- 8. I feel guilty about the loss.
- 9. I find myself longing for what or who is lost.
- 10. Many more people irritate me now than did before the loss.

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