THE RELATIONSHIP BETWEEN PERSEVERANCE IN SCHOOL AND CHILDHOOD LOSS OF PARENTS IN ONE MIDWESTERN SCHOOL DISTRICT

Dissertation for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
DONALD EUGENE SPOHN
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ABSTRACT

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Donald Eugene Spohn

The Problem

Each year increasing numbers of children suffer the loss of parents. The primary purpose of this study was to determine the relationship, if any, between the childhood loss of parents and perseverance in school. The secondary purpose of this study was to determine if relationships exist between perseverance in school and the following variables: age at loss; duration of loss; number of losses; sex of child; sex of parent; socioeconomic background of family; ability as perceived by mother; cause of loss; substitute parents; and substitute homes.

Methods and Procedures

Data were obtained in personal interviews with mothers of 142 subjects, 16 through 21 years of age, approximately 6 percent of the total number of possible subjects. The sample consisted of 40 dropouts and 102 perseverers. The sampling procedure included random selection of streets in the school district with all homes on the selected streets visited and revisited until every subject was identified. No subjects were lost.

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Analysis was conducted through the use of chi-square test of independence and the t-test for proportion. Significance was set at the .05 level of confidence.

Findings

Primary Hypothesis

The relative intactness of the family and the subjects' perseverance in school were found statistically dependent. Dropouts were more likely to have lost parents than to have come from intact homes, and subjects suffering losses of parents were even more likely to drop out than to persevere.

Secondary Hypotheses

- The age of subjects at the time of loss was found to be statistically independent of perseverance in school.
- 2. The duration of loss of parents was found to be statistically dependent of perseverance in school. Losses of parents spanning one or more years are more closely related to perseverance in school than are losses recorded as less than one year in duration.
- 3. The number of losses of parents experienced by subjects and perseverance in school were found to be statistically dependent. Subjects suffering more than one loss were less likely to persevere than were subjects suffering only one loss and subjects suffering no loss were most likely to persevere.

- 4. The proportion of subjects suffering no loss of parents and persevering in school exceeded the proportion of subjects suffering losses of parents and persevering in school.
- 5. The sex of subjects suffering losses of parents was found to be statistically independent of perseverance in school.
- 6. The sex of lost parents was found to be statistically independent of perseverance in school.
- 7. The socioeconomic background of subjects' families, as measured by family income, and perseverance in school were found to be statistically dependent. Subjects from lower income families were less likely to persevere in school than were subjects from families with average or above average incomes.
- 8. Mother's perception of subject's ability in school was found to be statistically dependent of perseverance in school. The more ability mothers perceived in subjects the more likely the subject was to persevere in school.
- 9. The cause of subjects' loss of parents and perseverance in school were found to be statistically dependent. While persevering subjects were seldom observed to have lost parents, those who did were more likely to experience that loss because of working mothers than because of separations.
- 10. The proportion of perseverance in school for subjects suffering no loss of parents exceeds the proportion of perseverance for subjects suffering a loss caused by divorce or desertion. While most subjects from intact families persevered in school, only a small number of those experiencing divorce or separation did so.

11. The proportion of perseverance in school for subjects suffering no loss of parents exceeds the proportion of perseverance for subjects experiencing a working mother.

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Ву

Donald Eugene Spohn

A DISSERTATION

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1978

This dissertation is dedicated to my family who in tolerance of my many demands supported me in love, patience, and strength, assuring my success. I am deeply indebted to my family:

My wife, Rita;
My daughter, Heidi; and
My son, Daniel.

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CHAPTER I

IDENTIFICATION OF THE PROBLEM

The purpose of this study is to measure the relationship between childhood loss of primary/secondary attachment objects and later failure to persevere in school. The family is one of the oldest human institutions. In its simplest form it is composed of mother, father, and child. Margaret Mead (1971), who has long studied families in various cultural and geographic settings, says of the mother-infant relationship, "During the long months of infancy, the child's tie to the mother is a bodily one, the child learns through its own body what the world is like and what is like to be a person." In terms of the father-child relationship, Mead (1971) states, ". . . without a recognized father, whether he is living or dead, and whether he is the child's biological father or another man who stands in his place, the child has no social existence."

Man has yet to plumb the depth and measure the breadth of the parent-child relationship. It is not known under what conditions and to what extent children can endure the loss of parents. Few pretend to know the effect of parental loss on children at any age. Research has yet to measure the effect of parental loss on social adjustment, school achievement, or success in later life and the consequence of separation, divorce, parental death, working mothers, absent fathers,

and birth out of wedlock on children. Of one thing we are certain, the number of children affected is growing year by year. Each year, our children are spending more of their time away from their parents. Of the primary causes of loss of parents listed above, divorce is one of the most common.

In 1900, only 8 percent of American marriages ended in divorce (Peterson, 1977). Twenty (20) years later, it was 13 percent and by 1950, it had grown to one out of every four, 26 percent. In 1970, it increased to one out of every three (U.S. Department of Health, Education, and Welfare, Vital Statistics of the U.S., 1972). In 1976, nearly one out of every two marriages ended in divorce, or 49 percent (U.S. Department of Health, Education, and Welfare, Vital Statistics Report, 1976). In the fifteen year period, 1961-75, inclusive, a total of 11,460,000 school children were affected by divorce.

Another large group of children are affected by working mothers. Not only do divorced mothers work away from home, but a greater proportion of them with children under the age of eighteen do so (85%), than do women without children (U.S. Department of Labor, Bureau of Labor Statistics, 1977). In 1940, only one out of ten mothers worked. Three out of ten worked in 1960 and four out of ten in 1971 (U.S. Department of Labor Handbook, 1975). By January 1976, roughly 60 percent of all women between the ages of seventeen and twenty-four were working (U.S. Department of Labor, 1977).

Then there are the fatherless homes. As might be expected, these, too, have increased from roughly 10 percent of the households in 1950 to nearly 24 percent in 1975 (U.S. Department of Commerce, Bureau of the Census, 1976). Approximately half a million illegitimate

births were recorded in 1975, an increase of 7 percent over 1974. Over 14 percent of the live births in 1975 were illegitimate (U.S. Department of Health, Education, and Welfare, Vital Statistics, 1975). Based on these two figures, divorces and live births, we know that close to 39 percent of our children lived in fatherless homes in 1977.

Death, too, takes its toll on the child-parent relationship.

Brown (1961) estimated 12 percent of our children suffer the loss of a parent by the time they reach the age of sixteen. Munro (1965) found that 10 percent of children in the general population have lost one or both parents by age sixteen.

The family is often considered society's giant shock absorber. Toffler (1971) believes the family is receiving and will continue to receive shocks which will tear it to pieces. Peterson (1977) feels the nuclear family is under pressure and it may be unable to survive. Mead (1971) tells us, "The closeknit relationship between parent and child has been altered. . . . " Mead (1956) poses the question, "How soon will all humans break down under the strain of modern life?" Skinner (1948) says educators themselves cannot save the situation as the causes are too deep and involve the whole structure of society. The family is sometimes likened to the soil which stabilizes our emotional roots. Before he died, Arnold Toynbee (1964) complained, "A human being has roots, like a tree and they tether him. . . . " He warned, too, we are "plowing the sands" and unless we retreat to some of our grandparents' practices in raising our children, our institutions of learning will become little more than social clubs for sexual mating.

Over the past twenty years, most recognized thinkers claim to have seen the writing on the wall, expressing concern for the nurturing practices of society. Sociologically, these undesirable characteristics have been associated with poverty. Costin (1972) expressed the feeling, children are not safe and happy if parents cannot protect them from poverty. The growing belief that poverty is the root of childhood problems has been taught by sociologists and acted on by our government. Unfortunately, however, over the past several years broken homes have increased about as fast as the increasing billions spent on welfare. We observe, too, that the educationally handicapped, dropouts, lower national test scores, drug abuse, childhood crimes, venereal disease, and childhood suicide have all increased over the years even as we have increased our billions in Federal aid to education.

What is the cumulative effect of the phenomena reflected in these statistics on our children? Does the increasing loss of parents affect children's performance in school? Has the effect been measured? Can it be measured? If one believes in prophecy, he might believe the problem and its solution were predicted thousands of years ago. "And he will turn the hearts of the fathers to their children and the hearts of the children to their fathers, lest I come and smite them with a curse" (Malachi 4:5). It is the purpose of this study to add some knowledge to that known about the relationship which may exist between perseverance in school and childhood loss of parents.

The Need for This Study

Data were collected in this study to provide insight into the nature of childhood loss of primary/secondary attachment objects,

hereafter referred to as P/SAOL as it is related to perseverance in school. The design provided for noting coincidence of certain conditions and certain apparent consequences, providing certain valuable clues as to the cause-effect relationship.

This study is important for the following reasons. First, childhood P/SAOL is a growing phenomenon and may be associated with another phenomenon, failure to persevere in school. Both phenomena are of great concern to parents and educators. A second is, although studies have related childhood P/SAOL to later adult abnormalities, few studies pretend to study its effect on perseverance in school. Many investigators have examined variables related to dropouts. Few studies claim to relate dropping out of school to P/SAOL. A third reason is parents have little knowledge concerning the effect of their absence from their child on their child's ability to persevere in school. It is important that parents and educators better understand this parent-child relationship to improve their ability to make decisions in this critical area. Finally, it is hoped that this study will provide a foundation upon which further studies in this area may be conducted.

Definitions

Definitions for key terms used in this study will provide a common basis for understanding.

<u>Dropout</u>--This term refers to the student who withdraws from school, failing to persevere through graduation. The terms withdrawing and dropping out will be used interchangeably.

<u>Intact Family</u>—In this study, the term refers to families in which subjects have not experienced the loss of a parent.

Loss of Primary or Secondary Attachment Object (LP/SAO)--This term refers to the loss of the primary or the secondary attachment object, for any cause, of more than fourteen days for children 0-5 years of age or for more than thirty days for children 6-15 years of age. This term also includes the working mother.

Primary Attachment Object (PAO)—This term refers to the adult to whom the child has formed a primary attachment during the first six months of its life. In this study, the term always refers to the mother.

<u>Parent--</u>This term refers to those adults, normally the father and the mother, to whom the child forms primary and secondary attachments during the first six months of its life.

<u>Perseverance</u>--This term refers to the act of prevailing or remaining in school regardless of ability, accomplishments, etc.

Primary or Secondary Attachment Object Loss (P/SAOL)--This term refers to the loss of the mother to whom the child has formed a primary attachment or to the father to whom the child has formed a secondary attachment.

Real Parent--This term refers to the biological or natural parent as differentiated from a temporary, substitute, or foster parent. In this study parents who adopt children prior to attachment formation are defined as real parents.

Separation--This term refers to any loss of a parent due to marital discord and includes divorce, desertion, temporary separation, etc.

Scholastic Ability--This term refers to the mother's perception of the subject's scholastic ability.

Substitute Parent--This term refers to those adults who take the place of the lost primary and secondary attachment objects.

<u>Success in School</u>—This term refers to the act of persevering in school.

<u>Withdrawal</u>--This term refers to the failure to persevere in school, the act of dropping out of school.

<u>Working Mother</u>--In this research, the term will be defined as working outside of the home full time, continuously for thirty school days or more.

<u>Assumptions</u>

It is assumed in this study that a relationship exists between the loss of parents by children and later ability to persevere in school. It is further assumed that the following variables may relate to perseverance: the age of the child at the time of the loss; the cause of the loss; the sex of the child as well as the sex of the parent; the duration of the loss; the number of losses; the socioeconomic background of the family; the child's ability in school; and the nature of the substitute parent and substitute surroundings.

Limitations of the Study

This study was limited by one particular type of community, one school district. The size of the sample, 142, limited the number of observations. The nature of categorical data limited the usefulness of quantitative predictions. The study was also limited by the ability of subject mothers to recall accurately. Due to the

limitations of time and resources, the study was further limited to one variable, childhood loss of parents and one hypothesized related complex behavior pattern, perseverance in school.

Research Questions

The research questions addressed in this study are as follows:

Primary Research Question

1. Are relative intactness of the family and subjects' perseverance in school statistically independent?

Secondary Research Questions

- 1. Is the age of subjects at the time of loss statistically independent of perseverance in school?
- 2. Is the duration of loss of parents statistically independent of perseverance in school?
- 3. Is the number of losses of parents experienced by subjects statistically independent of perseverance in school?
- 4. Is the proportion of subjects suffering no loss of parents and persevering in school equal to the proportion of subjects suffering loss of parents and persevering in school?
- 5. Is the sex of subjects statistically independent of perseverance in school?
- 6. Is the sex of lost parents statistically independent of perseverance in school?
- 7. Is the socioeconomic background of subjects' families statistically independent of perseverance in school?

- 8. Is the subject's ability in school statistically independent of perseverance in school?
- 9. Is the cause of subjects' loss statistically independent of perseverance in school?
- 10. Is the proportion of perseverance in school for subjects experiencing loss of parents caused by separation equal to the proportion of perseverance in school for subjects experiencing no loss of parents?
- 11. Is the proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers equal to the proportion of perseverance in school for subjects experiencing no loss of parents?
- 12. Are substitute parents and substitute surroundings statistically independent of perseverance?

Procedure for Data Analysis

The Michigan State University standard statistical program for the construction of descriptive statistics was used in this study. As the data were almost exclusively frequency counts, contingency tables of analysis were used to see if expected relationships existed among the variables. The t-test for proportions was used with research questions involving proportions.

Overview

A review of the literature is presented in Chapter II.

Emphasis is placed in two areas, the area of the variable and the area of the complex behavior problem.

Chapter III describes the population, the sample, the instrument, the research hypotheses, and an explanation of the design and methods of analysis.

In Chapter IV, the data are presented with a restatement of the hypotheses and a probability statement of acceptance or rejection, followed by a statement of acceptance or rejection based on the significance levels. The data are interpreted under the title, Discussion, in Chapter V.

Chapter V includes a summary of the facts, conclusions about the findings as they relate to both the theory this research was based on and on other findings. Finally, implications for the future are discussed.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

This review of the literature is divided into two main sectors. Part I deals with five aspects of the variable, primary/secondary attachment object loss. The review follows patterns set by research in the field and focuses on five questions as they relate to the variable and the complex behavior pattern. These questions are:

(1) Is P/SAOL associated with negative effects on children and if so, what are some of the effects noted by investigators? (2) Has research shown the death of one or both parents to affect children's adjustment?

(3) What are the effects of working mothers on child development?

(4) Has the loss of father been associated with childhood adjustment problems? (5) Parental discord often separates parents from each other and from their children. Has research shown the effect of such separation on children?

Part II will be limited to one aspect of the complex behavior pattern, perseverance in school—failure to persevere in school.

Although this research is limited to one variable, P/SAOL, as it may be related to failure to persevere in school, it becomes necessary to look at other variables before proceeding with the research. These five categories commonly associated with failure to persevere are:

(1) intelligence quotient, grade point average, ability, and

achievement; (2) irregular attendance and excessive tardiness; (3) discipline, violence, crime, and drug use; (4) socioeconomic status of the family; (5) broken homes and self esteem. By gaining some understanding of these variables and their possible relationship to failure to persevere in school, this research can be designed to more clearly focus on the variable, P/SAOL.

PART I

Loss of Primary/Secondary Object, General

The family is often viewed as society's womb. It provides our children with love, affection, and security, as well as introductory contacts with society and the world at large during their term of maturation. Margaret Mead (1971) explains,

During the long months of infancy the child's tie to the mother is a bodily one, the child learns through its own body what the world is like and what it is like to be a person. As the mother feeds the child when it is hungry the child learns that the world can be trusted to supply its needs. . . . There are no people anywhere, whatever their race and however simple or primitive their way of life, who do not, in the simplest sense, differentiate between a child with a recognized father and a child without one . . . without a recognized father, whether he is living or dead and whether he is the child's biological father or another man who stands in his place, the child has no social existence.

Wiene (1973) conducted a study of the family and peer relationships as they affect identity and interdependence of five year olds. He, similarly, concluded, "It appears that the child's parents and family are primary and fundamental in development of beneficial relationships with the outside world."

In times past, our children enjoyed the benefits of an extended family. Several pillars supported a roof of love, affection,

and security over the heads of our children. Today, in the nuclear family, the pillars are reduced to two, father and mother. If one or both of the remaining pillars are damaged or broken, how are those children affected? Bowlby (1972) reviewed more than five dozen studies conducted over a period of more than sixty years. He developed a thesis concerning the effects of object loss during childhood on later adult behavior. Bowlby explains that during an infant's early months, it learns to discriminate a particular figure, usually its mother, and develops a strong attachment to her company. It is particularly attached to her during the latter half of its first year and during the whole of its second and third years. The child is content when she is present and distressed when she is absent. It often protests even momentary separations and will always protest longer ones. The strength of the attachment commonly diminishes after the third birthday but remains strong nevertheless throughout the period of maturation.

A minority of children experience a loss of their primary attachment objects. Mothers die, desert, are institutionalized, etc. Bowlby believes a sequence of behaviors can be predicted when a child is separated from his mother if he has experienced a reasonably secure relationship to his mother during his first fifteen to thirty months. He describes three phases the child will pass through: protest, despair, and detachment.

At first, during the protest phase, he will demand his mother back with tears and anger and seems hopeful of succeeding in getting her back. As he enters the phase of despair, he becomes quieter but is still preoccupied, as much as ever, with the absence of his mother.

He still yearns for her return, but his hopes have faded in the phase of despair. He may alternate between these two stages as hope fades into despair and renewed hope grows from despair. Eventually, a greater change occurs. The child appears to forget his mother and if she returns he remains uninterested in her and may not even appear to recognize her. This phase is called detachment. During this stage the child is prone to temper tantrums and may exhibit violent destructive behaviors.

When a child is returned to his mother after reaching the early state of detachment, he may be unresponsive for an hour or even a day or more. When his intense ambivalent feeling for his mother finally breaks, it may do so in a storm of feeling for her. He may exhibit intense clinging, acute anxiety, and rage when his mother leaves him even for a moment. On the other hand, if he is separated from his mother for more than six months or separations have been repeated, there is danger he may reach the advanced stage of detachment and may remain detached, never recovering his affection for his parents.

Many studies associate the antisocial destructive behavior described by Bowlby in the detached phase with parental deprivation. Brown and Epps (1966) studied 546 women and 168 men prisoners. They found a significant relationship between adult crime and unstable parent figures in childhood for both males and females. Glueck and Glueck (1951) found that parents of delinquent children were nearly twice as likely to be divorced or separated (21.1%) as were parents of nondelinquents (11%). Parents of delinquents were found to be three times more likely to be unmarried to each other (6.3%) as were

parents of nondelinquents (2.2%), and delinquents were found to have a (4.1%) higher rate of parental death than nondelinquents. Costin (1972) lists problems related to parents not married to each other as one of five major problems facing American children.

Deutsch (1967) found overcrowding in the home related to poor school performance. Interestingly, the intact homes in his study were more crowded than broken ones, but children from intact homes did better in scholastic achievement. He concluded that crowding in the home is less likely to have a negative effect on scholastic achievement than is the fact of coming from a broken family background.

Holzner and Ding (1973) related an unstable family life with school withdrawal and drug addiction. Greer (1966) compared the frequency of parental loss among 466 patients with neurotic and psychopathic disorders with parental loss found in the control group.

Parental loss was recorded where there was a definite evidence of loss or continuous absence of parents for at least twelve months before the age of fifteen. He found four times the number of losses of both parents among the experimental group (16%) as he did from the control group (4%). He categorized the parental losses as: (1) death, (2) separation, (3) divorce, (4) illegitimacy, and (5) others. He found no difference between the experimental group and the control group in the incident of loss due to death, specifically.

Despert (1953) concluded that illness of children is frequent when the parents are emotionally rather than legally divorced. She found earlier (Despert, 1946) that unfavorable birth conditions are important contributing factors in genesis of anxiety in young children.

Over the past eighty years researchers have sought to relate abnormal behaviors with loss of a loved object, pathological mourning, and childhood experiences. Most investigators have taken as their starting point their abnormal patients. Freud (1897) was one of the first to do so. Mason (172), on the other hand, studied successful women. He studied 485 women with Ph.D. degrees who held the rank of Assistant Professor or above. The women were discovered to have five common characteristics, one of which was that they all came from stable homes in which both parents were present while they were growing up.

The biological parents affect their children in another way, genetically. Erlenmeyer and Kimling (1963) reviewed fifty-two studies and concluded that his survey of the literature over the past fifty years revealed a remarkable consistency in accumulated data relating mental functioning to genetic potentials. For unrelated people in a large random-mating population, the theoretical correlation for general intelligence is considered to be zero. He found a (+.23) correlation for foster siblings whereas for siblings reared apart, the correlation was (+.42) and siblings raised together scored (+.49). They found the foster parent-child correlation to be (+.20), and the true parentchild two and one-half times as great, (+.50). Clearly, parents affect their offsprings' intelligence. Honzik (1967) associated intelligence and environmental setting. She found sons with a close mother-son relation had higher I.Q.'s. She similarly found daughters' test performance positively related to fathers' friendliness and to parental compatibility. Deutsch and Brown (1964) found that the "father-inhome" is a variable positively associated with children's I.Q.'s. Clark-Stewart and Alison (1973) suggest that responsive maternal

behavior influenced the child's intellectual development. The child can and does reflect his parents' attitudes as early as 6-9 months. On the other hand, Antonovsky (1959) and Ausubel (1958), found that although infants react to parental attitudes, the reaction is not as intense or permanent as has been supposed. Boshier and Thom (1974) found conservatism and liberalism in parents associated with similar attitudes in their children and greater attitudinal similarities were found between father and son and mother and daughter.

LaRoch (1933) found a significant difference between the stepfather and the natural father in the involvement of child rearing. The areas she found significant were quidance, discipline, and decision making. Considerable concern has been expressed as Indian children's educational level is less than one-half that of the national norms whereas their dropout rate is more than double the national norm. Some studies have shown that the more English Indian children speak before they start school, the more successful they are in school. With these and other facts in mind, the Church of Jesus Christ, Latter Day Saints (Mormons) initiated a foster home placement program. hoped to improve these Indian children's scholastic achievement and intelligence. A study of the program was reported by Cundick et al. (1974), Brigham Young University. Eighty-four children, ages 8-14 were enrolled for five years at the time of the study. Iowa Test of Basic Skills and the California Test of Mental Maturity test scores were compared with children in other Indian educational programs and with national norms. The children's test scores declined with successive years of participation in the foster home program. I.Q.

scores showed no significant change. Canning (1974) found that foster children have serious problems of adjustment to the school environment.

Freud laid the foundation in the last century. Building on his legacy, researchers continue to this day to associate the childparent relationship to success or failure to relate with the outside world. This review has shown the following general variables to be correlated with P/SAOL: general social adjustment (Wiene, 1973; Mead, 1971); general success in life (Mason, 1972); emotional security (Bowlby, 1972); delinquency (Glueck and Glueck, 151); drug addiction (Holzen and Ding, 1973); and neurotic and psychotic disorders (Greer, 1966; Despert, 1953; and Freud, 1897). It is not difficult to see a possible relationship between these variables and failure to persevere in school. Indeed a direct association will be shown with most of these variables in a later portion of this review. Another group of studies more clearly relates P/SAOL with perseverance in school. Erlenmeyer and Kimling (1973), Honzik (1967, and Clark-Stewart and Alison (1973) associate intelligence with "parents in home." Canning (1974) found foster children have serious problems adjusting to the school environment. Cundick et al. (1974) found children separated from their parents do poorly on standardized tests. Mason (1972) found perseverance in school is directly associated with a stable family life with both parents present in the home while the children were growing up. Holzen and Ding (1973) found early school withdrawal related to an unstable family life.

Primary/Secondary Attachment Object Loss by Death

Death is the most clear cut and irreversible of all causes for parental loss. It is the most universal, too. Death is unaffected by the economic status, cultural status, geographical setting, and historical setting of the family. Unless we first experience death ourselves, we all experience the loss of our parents through death. Death is different from divorce and separation in another way. It is not the result of personal or interpersonal discord in the family.

The percent of children who experience the death of a parent by the time they reach sixteen years of age has been found to be as high as 19.5 percent (Munro, 1965) and as low as 12 percent (Brown, 1961).

Most bereavement studies explore the incident of P/SAOL by death among adult psychiatric populations and compare such statistics to the nonpsychiatric population. Inferences are then made regarding the significance of childhood P/SAOL by death for later psychiatric disturbances. Such studies cannot therefore tell us about the typical child who lost a parent due to death. The readers can, however, by reading these studies, gain some insight regarding the mental perils of childhood P/SAOL by death.

Brown (1961) found 41 percent of a group of depressed patients lost a parent before age fifteen compared with a 12 percent loss established by the death census. He concluded that bereavement in childhood, P/SAOL, is one of the most significant factors in the development of depressive illness. He theorizes that depression recurs in later life, triggered by minor rejection situations, in children apparently recovered from P/SAOL by death. Barry (1949) found

maternal deaths occurred in the histories of psychotic patients with increased frequency before the patients were eight years of age. Barry and Lindemann (1960) found that death of the mother before the child is five years of age is more frequent in psychoneurotics than in the total population. They found the most critical age for maternal death in little girls who developed neuroses is from birth to age two.

Birchnell (1970b) suggests that for psychiatric patients as a whole the experience of P/SAOL by death is a significant predisposing factor to mental illness.

Greer (1966) found that P/SAOL was four times as common among patients who attempted suicide as among the control group. On the other hand, when P/SAOL was divided into categories--death, separation, divorce, illegitimacy, etc.--there was no difference between their attempted suicide and controls in the incident of P/SAOL by death.

Hilgard et al. (1960) examined normal adults from the general population who suffered P/SAOL by death in childhood. They found 21 percent of the subjects experienced P/SAOL by age nineteen, whereas 27 percent of state mental hospital patients sustained a similar loss by age nineteen. Of the general population, twenty-nine (29) subjects were women who lost fathers. Fourteen of the twenty-nine women were classified as well adjusted. This definition was based on an intact home, a satisfactory marriage, and adequate relations with children. Similar information was not available for other subjects or for these twenty-nine subjects relating to maternal loss.

The mother-child relationship appears to outweigh the father-child relationship in most studies. Barry and Lindemann (1960) found the relationship between death of mother and subsequent development

of psychoneurosis to be consistent with what other investigators found for other psychiatric conditions including psychosis and delinquency. Barry (1949) and Barry and Lindemann (1960) all found a relationship between loss of mother and later psychoses. They found the death of the father, on the other hand, followed a pattern which is more nearly that which is found in the general population. Brown (1961) found the death of the father was more significant in age groups 5-9 and 10-14, whereas the loss of the mother was equally significant in each of the five year periods. Barry (1949) found maternal bereavement due to death before age eight may be a sensitizing factor in the development of subsequent psychoneurosis.

Death of a parent or parents is an experience common in the general population. Twelve to 19 percent of our children experience the death of a parent by age sixteen. Most studies explore the incident of P/SAOL by death among adult psychiatric populations and compare such statistics to the nonpsychiatric population. Almost all such studies find the incident of P/SAOL by death to be significantly higher among psychiatric patients than among nonpsychiatric patients. Investigators theorize that the depression occurs in later life, triggered by minor rejection situations. The death of the mother appears to be more significant to later depression than is the death of the father. One study examined the incident of P/SAOL by death experienced in the general population and compared such loss to the incident sustained by state mental hospital patients. State hospital patients experienced 9 percent more P/SAOL by death than did the general population. Delinquency, too, has been related to death of parents.

There is some general agreement in the literature. Childhood P/SAOL due to death is more common among neurotic, psychotic, and depressed patients than are similar deaths in the general population. The death of both parents is more significant than the death of only one parent. The death of the mother is more significant than the death of the father. Investigators are not in agreement concerning the significance of the age category at the time of the bereavement.

Primary Attachment Object Loss: Working Mother

The most common cause of primary attachment object loss is of a temporary repetitive nature caused by mother working out of the home. The U.S. Department of Labor (1976) reports that women made up 37 percent of the work force in 1952. This figure increased to 39 percent in 1959 and to 45 percent in 1975. Bowerman and Elder (1964) found women more frequently play a primary role in the family. The U.S. Department of Labor, Women's Bureau (1972) reports the increasing percentage of mothers entering the work force. In 1940 only one out of ten mothers with school aged children worked. In 1960, three out of every ten such mothers worked, and by 1971, four out of ten mothers were working. One out of every three working mothers had children under six years of age in 1962, and 16 percent of these children were fatherless. By 1974 more than half of our mothers with school aged children (54%) were working out of the home. Female heads of households increased from 10 percent in 1950 to 23.6 percent by 1975 (U.S. Department of Commerce, 1976).

The effect of the working mother on the child's education is not as clear as we might desire. Banducci (1964) studied more than

3,000 seniors of working mothers. He measured three socioeconomic groups which he labeled laborers, skilled workers, and professionals. Among the first two groups he found that mothers' working had little if any detrimental effect on the children in regard to educational aspirations and expectations. He found a slight trend for educational aspirations and expectations to be higher than those measured from nonworking mothers. Among the children of the professional mothers, however, he measured their educational aspirations and expectations lower than those found in the nonworking mothers' children. Glueck and Glueck (1951) and (1957) found the working mother had a special impact on delinquency. In a more recent study, Hoffman and Nye (1974) found a similar relationship between working mothers and delinquency in the middle class. Hoffman (1963) found, however, that maternal employment and delinquency are strongly associated with broken homes and when the latter variable was controlled the relationship disappeared. Hoffman found, too, that children of working mothers had lower I.Q. scores and lower performance records in school. In a study of dropouts, Van Dyke and Hoyt (1958) found mothers' working was not associated with dropping out of school.

Honzik (1967) found sons' I.Q.'s to be higher when they experience a close mother-son relationship. Clark and Alison (1973) found a relationship between maternal behavior and her child's intellectual development. Brown (1974) found lower scores on California Achievement Tests for middle class eighth and ninth grade sons of working mothers. Roy (1974) found, on the other hand, children of working mothers among rural high school students were more likely to go to college.

To summarize, a review of the literature indicates a relationship between working mothers and variables, delinquency, I.Q., and school performance. The findings are not consistent and investigators agree on the importance of further studies.

Loss of Secondary Attachment Object

The loss of secondary attachment objects (fathers) is even more common than the loss of primary attachment objects. Six out of ten mothers of school children worked in 1975 (U.S. Bureau of Labor Statistics, 1977). Sixteen percent of the children involved, 4.1 million, were fatherless. Although father's working out of the home is regarded as normal, Landy et al. (1969) found it feasible to treat long term nightshift work by fathers on a father-present-absence continuum. They found the effect of father's absence due to nightshift work similar to father's absence from the home. They found such absences negatively affect school performance as measured by American College Entrance Examinations. They found, too, father's absence due to nightshift work has a negative effect on the cognitive development of daughters under age nine, an effect similar to that caused by father's complete absence from the home.

Honzik (1967) related the father's presence in the home and his friendliness to his daughter's test performance. Mead (1971) relates the father's presence to the child's social existence and to his son's sense of triumph all of his life. Bunch et al. (1971) found more than the expected number of suicides kill themselves in a time period close to the anniversary of their father's death, but not to the mother's death. They found more females than males suicided near

their father's death anniversary. Munro (1965) views the loss of the father as a more emotional traumatic experience than the loss of the mother.

In a study on relationships between selected factors and school achievement among Mexican-American children, Cain (1970) found the father's presence and love positively related to arithmetic achievement. He found father's casualness negatively related with reading and general performance. Deutsch and Brown (1964) and Deutsch again (1967) investigated experiences which influence the development of intellectual functions in children. They found "father in home" a variable positively associated with children's I.Q. They explain the lowering of Negro children's I.Q., in part, by the prevalence of broken homes in the Negro population.

Kutcher (1972) studied absenteeism in low income schools. He found the father's presence in the home and his involvement with discipline moderately correlated with attendance and positive group adjustment. Bowerman and Elder (1964) found high school scholastic performance among high school boys most frequent when the father was seen as the most powerful family decision maker. Burns (1972) found the father's occupational status to be positively correlated with student success in school, as measured by the Michigan Assessment Program. Sutton-Smith et al. (1969) found the father's absence has a depressive effect throughout the child's cognitive development with the greatest effect during early and middle years. Boys without brothers were found to be more affected than those with brothers.

LaRoch (1933) found a difference at the .001 level between the natural

father and the foster father in the involvement of child rearing, particularly areas of guidance, discipline, and decision making.

The number of fatherless homes is increasing in the United States. A review of the literature indicates a positive relationship between father's presence and cognitive development. Nightshift work may affect cognitive development, at least for many children, in the same way a complete absence does. Both boys and girls are affected by their fathers' presence or absence, but the effect may be different for each sex. There is no clear indication of how the absence affects children differently at different age levels. The effect of fathers' absence is often measured in terms of I.Q., test performance, attendance, and social adjustment.

Separation Caused by Parental Discord

P/SAOL caused by parental discord is the largest of all categories and includes a number of subcategories. Subcategories, loss of mother and loss of father, for instance were examined under separate headings in this review. Unlike death, separation can be influenced by society. Society can affect the incident of separation caused by parental discord.

Costin (1972) lists "parents not married to each other" as one of five major problems facing American children. Despert (1953) found illness of children more frequent when parents are emotionally rather than legally separated. The visible discord itself may be more damaging to the child than the absence of a parent along with the absence of discord. Studies indicate a definite relationship between separations caused by parental discord and later illness. Greer

(1966) found loss caused by divorce, separation, and illegitimacy four times more common among patients who attempted suicide as among his control group.

Derdeyn (1976) concluded that we need: (1) more empirical studies to help predict the effect of divorce on children, and (2) more involvement of child psychiatrists in consultations, education, and research in this area. Bane (1976) similarly concluded that research has raised questions rather than answered questions on how best to meet special needs of children affected by divorce.

Cervantes (1965) associated divorce with dropping out of school. Glueck and Glueck (1951) found that parents of delinquent children were nearly twice as likely to be divorced or separated (2.1%) as were parents of nondelinquents (11%). They found, too, parents of delinquents were three times more likely to be unmarried to each other (6.3%) as were parents of nondelinquents (2.2%). Holzner and Ding (1973) related an unstable family life with school withdrawal and drug addiction. Deutsch (1967) found children from intact homes did better in scholastic achievement than did children with broken family backgrounds. He found that coming from an intact home to be a more important variable than coming from an uncrowded home. Mason (1972) studied variables associated with success. One variable common to all of his successful subjects was both parents in the home while the child was growing up.

Wallerstein (1976) found children's initial reaction to separation, caused by divorce, to be reactions of anger and denial as predicted by Bowlby (1969). Wallerstein goes beyond Bowlby to relate the child's reactions to school performance, as well as later

depressive behavior patterns. His study is of particular interest as he relates the lowering of the child's self-esteem to separation by divorce. Self-esteem has in turn been associated with school with-drawal in many studies. Such associations will be viewed in Part II of this chapter.

Separation of parents may be one of the major problems facing American children, according to Costin (1972). Illness (Despert, 1953) and suicide (Greer, 1965) have been associated with separation. Cervantes (1965) and Holzner and Ding (1973) found school withdrawal associated with separation. Glueck and Glueck (1965) found delinquency related to separation and drug abuse. Deutsch (1976), Mason (1972), and Holzner and Ding (1973) all found children from intact homes do better in school and are more successful in life than children from broken homes. Derdeyn (1976) and Bane (1976) both found research raises more questions than it answers and recommends further research to help meet special needs of children affected by divorce.

Research is often criticized on the grounds that other variables may be responsible for the observations recorded. Bowlby's (1972) work, already quoted, is criticized on such grounds. Critics explain the child's deviant behavior may not be due to the loss of the mother but to his new strange environment, the expectation of a rival, the quality of the substitute mother, previous unsatisfactory relations with his mother, etc.

Some studies of childhood behavior in the mother's absence claim to have accounted for these other variables. Spitz and Wolf (1946) observed infants who remained in the same institution during the absence of their mother. It was these infants' behavior which led

Spitz to delineate the syndrome, "anaclitic depression." They found only one change was necessary, provided it occurred within three months, to restore the children to their previous condition—the return of the mother. Two other studies reported the main variable is always the absence of the mother, Deutsch (1919) and Spiro (1969), both case studies.

One group experimented by removing eighty-four children, ages 8-14 from their parents. By placing the children in foster homes conducive to learning, they planned to raise the children's scholastic achievement and I.Q. Cundick et al. (1974) reported the results. Over a five year period, achievement declined each succeeding year and I.Q. scores remained constant. Although Hilgard et al. (1960) studied well adjusted adults who suffered death of a parent as a child, and Mason (1972) studied successful subjects, such studies are rare.

A few case studies have been popularized and generally support Bowlby's position that children separated from their mothers too long or too often may never fully recover. One such case study, Axline's (1964) Dibs, describes a boy who sat mute for hours and exhibited violent temper tantrums while his peers were in school learning to read. Dibs, who was rejected by his parents at early infancy, was suspected of suffering mental retardation or deep-seated illness but was later proven brilliant. Wexler's (155) Sandy is a similar case study. Sandy was rejected by his mother during the first months of his life and was later given to his grandparents by his father. He was diagnosed by doctors as hopelessly retarded, an imbecile. Yet, he seemingly fully recovered by age eighteen. In both cases the boys exhibited autistic symptoms.

Bettelheim (1967) described a boy who developed normally until the age of two when his mother entered a nursing home. The boy regressed, losing those words already learned, and became autistic. Bettelheim reports too that recovering autistic children regress temporarily with the slightest form of rejection. Ekstein (1966), Eisenberg (1957), Mahler (1963), and Bettelheim all associate autism with parents, usually the mother. Bowlby (1973) lists inappropriate mothering as one of three possible causal factors. Other investigators feel another set of variables is as important or more important than is the parents' variable.

Part I Summary

In a review of the literature, not a single study failed to associate at least one undesirable variable with childhood loss of primary or secondary attachment objects. Few studies, however, pretended that all separations of children from their parents have resulted in observed negative effects on children. Most studies indicate only a minority are affected. The most common research is one which starts with abnormal subjects and attempts to associate the symptoms to an earlier experience, P/SAOL.

The literature seems to indicate that most serious mental illnesses are associated with loss of parents, particularly with the loss of mother. While working mothers seem to have some negative effects on children, the effect has not been noted on all children.

In the case of father's absence, not all children are noted to be affected, but the effects reported were mostly negative. The death of one or both parents has been found to have a negative effect on a majority of the children. There seems little agreement on how the length of the loss affects children, except that longer periods may have a more damaging effect than shorter periods. Similarly, research does not demonstrate a definite age or age group at which children are most susceptible or the sex of the child most likely to be affected. Most research indicates the child is more sensitive to the loss of mother, and more recent research demonstrates the importance of father's presence in the home while the child is growing up.

A review of the literature highlights two points. (1) Parents risk the normal potential development of their child absenting themselves from their child. This observation is particularly true if the absence is often, for long periods of time, or at critical developmental periods of the child's life. The danger is even greater for children whose potential for maturation is rooted in psychologically weak ground. (2) Childhood loss of primary and secondary attachment objects is a fertile, potentially productive, and important area in which research may greatly benefit society.

PART II

A Complex Behavior Pattern: School Withdrawal

Dropping out of school is a phenomenon generally regarded as a social illness. School withdrawal is often perceived as a waste of human resources. During periods of full employment, dropping out of school is deplored as a manpower loss. School withdrawal is suspected as a liability to society, and the national incident of dropout is closely monitored by the U.S. Government. The U.S. Bureau of Census

(1976) reported 23 million teenage dropouts in 1975. Of the amount, 8.4 million were female and 14.6 million were male.

The phenomenon, dropping out of school, is one of the most common subjects of educational research. Investigators most frequently seek to identify symptomatic variables related to school withdrawal. Such variables are sought as indicators of potential dropouts. Investigators grope for tests with predictive value (Keene, 1976). Finally, special programs are devised for potential dropouts to strengthen the holding power of the schools.

This review will now examine those variables most often related to school withdrawal. They are: intelligence quotient, grade point average, ability, and achievement; irregular attendance and excessive tardiness; discipline, violence, crime, and drug use; socioeconomic status of the family; broken homes; and self-esteem.

I.Q. and Grade Point Average

Investigators most commonly associated grade point average, academic ability, and intelligence quotient with school withdrawal. O'Neill (1963) believes it is pretty well established that low I.Q. is one of several factors which lead to withdrawing from school. Yudin (1973) compared fifty dropouts with fifty graduates admitted for college. He found I.Q. to be a significant factor as early as the first grade. Matthews and Bowman (1960) found low I.Q. associated with dropping out of school and that children from broken homes have lower I.Q.'s. In a recent study in Michigan, Fuller and Friedrich (1972) found the average I.Q. for thirty-nine dropouts to be 94.92, and they measured the average nondropout's I.Q. at 108.63. Cervantes

(1965), on the other hand, states that although a low I.Q. is the intellectual milieu of the dropout, it is by no means a determinant in withdrawal. Closely associated with I.Q. is grade point average. Harding (1967) found G.P.A. a variable related to dropouts at the .001 level. Kilpatric (1973) found dropouts do not differ significantly from nondropouts in G.P.A.

Ability and Achievement

Brookover (1965) participated in a longitudinal study. He found a significant relationship between G.P.A. and academic ability. Harding (1967) found academic ability an important variable significantly related to dropping out. Tseng (1972), Kowalski (1974), and Yudin (1973) all found substantially the same thing: school withdrawal and academic ability are significantly related. Cundick (1974) found children who are removed from their parents suffered decreasing school achievement, and Cain (1970) found fathers' love and presence associated with school success. Berry (1974) administered an Adjective Checklist to eighty sixteen-seventeen-year-old reentry dropouts, matched for race, sex, and age. Dropouts received scores significantly lower than the control group on achievement. The U.S. Department of Health, Education, and Welfare (1964) found underachieving significantly related to school withdrawal. Kilpatric (1973) found no significant relationship between academic ability and G.P.A., and Lee and Crump (1963) found ability is not always a deciding factor. They point out that low achievers often graduate whereas students with greater ability often drop out.

Greaney (1973) found school withdrawal related to verbal reasoning ability. Fuller and Friedrich (1972) found verbal reasoning ability, numerical reasoning, abstract reasoning, and mechanical reasoning all associated with school withdrawal.

Irregular Attendance and Excessive Transfers

Irregular attendance is so strongly associated with school withdrawal in the minds of investigators that it is often left unmeasured in their research. It is noted as a significant variable, however, by O'Neill (1963), U.S. Department of Health, Education, and Welfare (1964), Kutcher (1972), Yudin (1973), and again by Greaney (1973). O'Neill (1963) and Yudin (1973) noted excessive transfers from school to school as significant variables.

<u>Discipline</u>, <u>Violence</u>, <u>Crime</u>, and Drugs

Kutcher (1972) found fathers' involvement in discipline positively related to attendance. Discipline problems was one of the variables related to school withdrawal by U.S. Department of Health, Education, and Welfare (1964). Yudin (1973) associated negative behaviors with dropping out of school. Blake (1974) similarly associated delinquent behavior with dropping out and O'Neill found a relationship between delinquency and school withdrawal. Carter (1972) found school behavior problems and crime associated with dropping out. Berry (1974) found aggression related to school withdrawal. Brown and Epps (1966) found a relationship between crime and unstable parent figures in childhood for both males and females.

Ahmad (1966) found delinquents to have lower I.Q.'s as compared to normal adolescents.

Holzner and Ding (1973) related an unstable family life with school withdrawal and drug addiction. Wiener and Egan (1973) studied one-hundred heroin addicts and related addiction to dropping out of school. They found, too, as compared to the normal population, these students are more likely to have only one parent in the family. Loken (1973) found dropouts twice as likely to use drugs as are nondropouts. Winburn and Hays (1974) found marijuana, tobacco, and stimulants significantly more prevalent among dropouts than among nondropouts. Annis (1975) conducted a longitudinal study of 915 ninth grade students. For almost every drug used by students, the use was found significantly greater among dropouts than among nondropouts. They found evidence of equally strong use by dropouts before withdrawing from school.

Discipline, violence, aggression, crime, and drugs are identified as variables closely associated with dropping out of school.

These variables have been related to other variables: broken homes, irregular attendance, achievement, ability, and the socioeconomic status of family which are in turn related to school withdrawal.

Social Economic Status of Family

Sexton (1961) studied 285,000 students and 10,000 teachers in three-hundred big city schools. She found family income is one index to social class, no matter how the term is defined. She found many other indices: occupation of the father, type of housing, educational levels, and others. She found family income highly correlated with

all other indices. She found a "lower-class" family will tend to have a lower income, lower status, lower paying occupations, poor housing, and lower educational levels. She found a family possessing one of these characteristics will tend to possess all of them. Carter (1972) found broken homes, family size, and unemployed parents all associated with juveniles referred to the court three or more times.

Brookover (1965) found ability in school associated with socioeconomic status of parents. The U.S. Department of Health, Education,
and Welfare (1964) found a relationship between school withdrawal and
family income. Greaney (1973) compared school entrance with terminal
leaves and found socioeconomic status of family an important indication. Van Dyke (1958) participated in a cooperative research project.
They found children of unskilled workers are nine times more likely to
drop out than are children whose fathers are classified as professionals. The absent father was found to affect school performance,
too (Landy, 1964). In a study of Caucasian males, Harding (1967)
found a significant relationship between dropping out and socioeconomic
status of family. Kowalski found a relationship between adverse
economic conditions of the family and school withdrawal. O'Neill
(1963) considers it a well established fact that low socioeconomic
status of the family is a factor which leads to dropping out.

The literature is not in agreement, however. Kilpatric (1973) reported in his study which associated school withdrawal with socioeconomic status that his study did not support other studies. In a longitudinal study starting in December 1964 and continuing through November 1971, Blake (1974) found the occupation of the father to have little influence on school dropouts when student status in school was

controlled. He found low aspirations and delinquent behavior associated with school withdrawal. Blake used the father's occupation as a measure of socioeconomic status. In a study of dropouts, its causes and cures, Cervantes (1965) found dropping out is rarely precipitated by financial conditions. Matthews and Bowman (1960) found only 5 percent of the dropouts in their study claimed to leave for financial reasons. Matthews found dropouts more often come from broken homes.

Education of parents is, according to Sexton and others already quoted, one aspect of the socioeconomic status. Van Dyke (1958), Bledsoe (1959), Williams (1963), and Duncan (1965) all found parents of dropouts have less education than do parents of nondropouts. Harding (1967) found the child's concept of the parents' expectations related to school withdrawal. Kilpatric (1973) found the child's perceived parental expectations similarly correlated with dropping out. O'Neill (1963) and U.S. Department of Health, Education, and Welfare (1964) found parental attitude toward school affected dropping out. Kowalski (1974) found lack of reinforcement from the home associated with school withdrawal.

School withdrawal is associated with socioeconomic status of the family in most studies. Investigators do not agree, however, that the family's socioeconomic status is a causal factor in dropping out of school.

Deutsch (1967) explains a poor cultural environment increases children's need for stimulation in school. This same poor cultural background, however, does little to prepare the child to accept school experiences. Deutsch, therefore, recommends that society accept

responsibility--through the schools--to prepare the child for school, as well as providing school for the child.

Broken Homes and Low Self-Esteem

Deutsch (1967) studied children coming from overcrowded, broken, and intact homes. In his sample he found intact homes more crowded than broken ones but found children from intact homes do better in scholastic achievement. He found coming from an intact home significantly correlated with achievement, and achievement scores for his total experimental group were influenced by the large proportion of children from broken homes. O'Neill (1963), Matthews and Bowman (1960), and Carter (1972) found broken homes correlated with school withdrawal. Holzner and Ding (1973) found school withdrawals associated with unstable family backgrounds. Cundick (1974) found children removed from parents caused scholastic achievement to decrease, and Canning (1974) found children of foster families have more adjustment problems in school. U.S. Department of Health, Education, and Welfare (1964) reports associated school withdrawal with weak or absent fathers. Wiener (1973) found dropouts and drug addicts are more likely than the control group to have only one parent in the family. In a study of successful women, Mason (1972) found one constant factor among all subjects, and that was the presence of both parents while the girls were growing up. Wallerstein (1976) found a significant relationship between problems in school, broken homes, and low self-esteem. It is interesting to note several investigators found relationships between school withdrawal and low self-concept.

Fifield (1963) and Beaird (1964) both found school withdrawal related to poor self-concepts. Kilpatric (1973) found school withdrawal related to poor self-concept, low parental expectations, and the absence of educational goals. Blake, too, found dropouts related to low aspirations, and Berry (1974) related dropping out to poor self-esteem. U.S. Department of Health, Education, and Welfare (1964) found poor attitude toward school and education, lack of an educational perspective, and disinterest in the curriculum related to school with-Davis (1962) found poor "self-esteem" and "not wanted" drawal. variables associated with dropping out while O'Neill (1963) found a correlation between failure to persevere in school and a lack of goals, unmotivated by the curriculum, inability to adjust, emotional instability, and personality defects. Cervantes (1965) and Harding (1967) both found school withdrawal related to self-esteem. Harding found parental expectations and goals related to school withdrawals.

Tseng (1972), however, found no significant difference between dropouts and nondropouts in self-esteem. His findings were supported in a study the next year by Kowalski (1974) who found a relationship between perceiving fathers' unacceptance and withdrawal, but no significant difference between dropouts and nondropouts in self-esteem. Mason (1972) studied the effects of special counseling programs designed to raise reentry students' self-esteem and achievement. Analysis of the test data suggested counseling did improve self-esteem but did not improve achievement.

Part II Summary

Ability, achievement, I.Q., and grade point average are clearly associated with school withdrawal as are irregular attendance and excessive transfers. So, too, have discipline, violence, crime, and drugs been closely related to dropping out of school. A review of the literature indicates that the socioeconomic status of the family, self-esteem, and broken homes are variables directly correlated with school withdrawal. These variables are not only related to school withdrawal but are clearly associated with each other.

Although these variables are clear indices of school withdrawal, research has yet to prove which, if any, of these indices are a cause of the phenomenon. It is not clear either that special programs for potential dropouts affect the incidence of school withdrawal. Is it possible that terminability precedes symptom identification or that the cause and cure for the malady are more closely associated with the home than the school? Wilson (1976) suggests factors affecting dropouts are established prior to high school. Matthews and Bowman (1960) found indicators of school withdrawal as early as the first grade, and Barrea (1976) found practices contributing to school dropout begin at an unusually early age. All of the variables identified in this review are interrelated and associated with the home as well as with school withdrawal.

CHAPTER III

DESIGN OF THE STUDY

This chapter will present the research procedures used to determine the dependence of the complex behavior problem, withdrawing from school and the variable, primary or secondary attachment object loss. This chapter will include the following:

- 1. A description of the population.
- 2. A description of the sample selection.
- 3. A description of the instrument.
- 4. A description of the data analysis procedure.
- 5. A list of the testable hypotheses.
- 6. A summary of the chapter.

Population

Subjects were drawn from a single school district, Bayside
Public Schools. Bayside, with a population of 18,000, is the largest
of a dozen small cities and villages in a rural agricultural county of
63,000 people (1970 U.S. Census). More than 86 percent of Bayside's
5,807 students, K-12, come from the city itself and its close in
suburbs. The remainder of the students live in the country, mostly on
farms. (See Table 3.1 below.) Bayside was chosen on the basis of
accessability.

Location	Number	Percent
City	1,342	67
Suburb	400	20
Country	272	13
Total	2,014	100

Table 3.1.--Population Distribution for Secondary Students.

Bayside, a two hour drive from Detroit, is surrounded with fields of grain and dairy farms. Within the school district are a number of small private schools, all church connected: three elementary schools; a junior high school; a high school; and a college. Residents of Bayside are within a 45-minute drive of a major university.

Approximately 50 small manufacturing firms are located in the school district. The Michigan Security Agency reported a total county labor force of 27,000, as of April 1978. Of this amount 7.6 percent or 2,100 were described as unemployed.

Public records indicate that 51 percent of the current secondary enrollment are male students while the remaining 49 percent are females. The students are almost all caucasian. The racial composition of the secondary school population is pictured in Table 3.2.

The population studied consisted of those youths from the school district who possessed all of the following characteristics:

1. Youths who had birthdays prior to February 23, 1962, and were not more than 21 years of age by March 8, 1978.

Table 3.2.--Racial Composition of Secondary Student Population.

Racial Division	Percent of Population
Caucasian	98.8
Latino	1.2
Other	0
Total	100.0

- 2. Youths who attended the public schools for one or more days between September 5, 1975, and March 8, 1978.
- 3. Youths who were not found in categories other than "in school" or "live dropouts" during the period of the study.
- 4. Youths who had at least one parent living in the area of the study during the period of the survey.

The population is further defined in Tables 3.3-3.5.

Sample Selection

To aid in determining whether a dependent relationship exists between the loss of parents and later perseverance in school, a random sample was chosen in the following manner. The names of all streets and roads in Bayside school district, 371 in all, were cut from city and county maps provided by the Chamber of Commerce. Each name was cut into equal sizes of paper to assure equal chance of selection. The names were placed in a hat and thoroughly mixed. One name at a time was drawn by the blindfolded investigator and placed on the list in order of its drawing. This process continued until a predetermined number (9%) of the streets were drawn.

Table 3.3.--Secondary Students--Population (February 23, 1978).

Year		Number
1977-78	In-school population, 16 years of age and older	1,100
1977-78	Drops, excluding deaths, transfers, etc.	74
1977	Graduates	397
1976-77	Drops, excluding deaths, transfers, etc.	201
1976	Graduates	388
1975-76	Drops, excluding deaths, transfers, etc.	205
	Total	2,365

Table 3.4.--Secondary Students--Persevering Population (February 1978).

Year		Number
1977-78	In-school population, 16 years of age and older	1,100
1977	Graduates	397
1976	Graduates	388
	Total	1,885

Table 3.5.--Secondary Students--Dropout Population (February 1978).

Year		Number
1977-78	Drops, excluding deaths, transfers, etc.	74
1976-77	Drops, excluding deaths, transfers, etc.	201
1975-76	Drops, excluding deaths, transfers, etc.	205
	Total	480

As names were selected, they were marked on a map and every home on that road or street was visited. On first contact, an occupant was found in 48 percent of the homes. A number of occupants were home for unusual reasons, with illness being the most common reason. Other occupants were home because their automobiles would not start or were stuck in the snow or ice.

If no one answered the door, people in the first or second house to the right or left of the homes were asked if the home contained subjects. If these people were not home either, or they did not know, the people in the three homes most directly across the street were asked. If this method failed, names were taken from the house, the mailbox, or from neighbors, and the people were contacted by phone in the evening and residents were identified as subjects or nonsubjects. If few people were home in a neighborhood, the area was revisited later in the day or in the evening.

During the first one-third of the survey, the interviewer obtained a second opinion from another neighbor if he was informed no subjects lived in a home. Ten percent of the double-checked homes were cross-checked again by phone. No information pertinent to the study obtained from adult neighbors was found to have been in error. During the second third of the survey, second opinions were not obtained from a second neighbor, but one out of twelve homes was double-checked by phone. No errors were found. In the final third of the survey, empty homes were double-checked with any two neighbors who claimed to know the occupants. Spot checking by phone was discontinued. Subjects identified by neighbors were revisited in their

home or interviewed by phone. Parents of three drop subjects and two persevering subjects were interviewed by phone.

Over one hundred and fifty homes were surveyed in a nine-hour period between 9:00 A.M. and 6:00 P.M. Return visits were made later in the same day, evening, and weekends. Homes were recontacted until the resident family was identified as having subjects or nonsubjects. Seven contacts were required in one instance before the subject was identified and an interview was completed.

Between February 23, 1978, and March 8, 1978, more than 2,600 homes were contacted. Parents of 142 subjects, 40 drops, and 102 perseverers were interviewed. Occupants of streets were similar and streets were similar in the amount of subjects produced. Nearly 9 percent of the streets in the district were sampled. Only one occupant refused to cooperate. Subject identification was not determined for this occupant. Five fathers were interviewed alone. Fathers and mothers were interviewed together on eleven occasions. On one occasion, paternal grandparents who lived across the street from the subject family were interviewed in place of the parents who were away. Two adoptive mothers were interviewed, one the mother of twin boys adopted at the age of six weeks, and the other the mother of a boy adopted at the age of three days. All other interviewees identified themselves as the biological mothers of the subjects.

The subjects identified in this survey included 76 males and 66 females. Three of the males were of Latino origin. The remaining males and all females were Caucasians.

Listed below are Tables 3.6-3.8 which compare sample findings with: population distribution; racial distibution of the population;

Table 3.6.--A Comparison of Population and Sample Distribution Based on Location.

Location	Percent of Population	Percent of Sample
City	67	69
Suburbs	20	22
Country	13	9
Total	100	100

Table 3.7.--A Comparison of Population and Sample Distribution Based on Race.

Racial Division	Percent of Population	Percent of Sample
Caucasian	98.8	97.9
Latino	1.2	2.1
Other	0	0
Total	100.0	100.0

Table 3.8.--A Comparison of Population and Sample Distribution Based on Sex.

Sex	Percent of Population	Percent of Sample
Male	51	53
Female	49	47
Total	100	100

and sex distribution of the population. The findings pictured in the tables suggest that the sample finally achieved in this survey was quite representative.

Procedure

Bayside has a city ordinance requiring door-to-door solicitors to register with the local police. This investigator registered with both the local police and the Chamber of Commerce.

As street names were randomly selected, every house on the street was visited. At each door the investigator knocked or rang and waited twenty seconds, knocked or rang and waited fifteen seconds, knocked or rang a third time and waited another fifteen seconds. If no movement was detected by the end of the third wait, the initial contact was terminated.

Once a resident answered the door the investigator presented his Michigan State University identification card and stated, "I am from Michigan State University and I am conducting a survey."

Question Sequence

The questions listed below were devised to collect data which were used to answer the research questions identified in Chapter I.

- 1. Do you have members of your family or are there people living in this home, age 16 through 21?
- 2. Has any member of your family, age 16-21, moved away from your family or home?
- 3. How many people in your family or home fall into this category?
- 4. Subject's sex is male or female?

- 5. Subject's age is?
- 6. You are the subject's mother?
- 7. Is subject in school? Graduated? Dropped? From subject school?
- 8. At what age did subject discontinue school?
- 9. As subject's mother, how would you describe subject's ability in school, not necessarily subject's mark or what subject accomplished in school, but subject's real ability: above average, average, or below average?
- 10. Would it be accurate to say your family income is above or below \$15,000? Below \$50,000 or over?
- 11. You said you are subject's mother. Are you subject's real mother? The mother to whom subject was born?
- 12. Has subject always lived with you? And with subject's real father? The father to whom subject was born?
- 13. Subject's real father is deceased then? Divorced?
- 14. What was subject's age at the time of the death, divorce, etc.?
- 15. Did subject ever have another father? At what age? Does subject still live with second father?

Subsequent fathers, mothers, ages, and durations were recorded.

- 16. From the time subject was born until subject started school, was there ever a time when you were away from subject for more than two weeks, due to illness, vacation, or any reason? Was the father away for more than two weeks due to business, illness, vacation, etc.?
- 17. At what age? For how long?
- 18. Did you ever work out of the home?

19. What age was subject when you started working? How long did you work?

As the interview ended, the investigator thanked the parent for the information.

The chart below shows the relationship between the variables, the hypotheses, and the instrument. The questions listed below were devised to elicit data about the variables to test the hypotheses.

Question Analysis

A rationale for the questions in this survey follow in the numerical order of the hypotheses to which they relate.

<u>V1 Persevere</u>--All questions relate to persevere and persevere is measured against all other variables. A relationship between school perseverance and parental loss was suggested by Deutsch (1967), O'Neill (1963), Matthews and Brown (1960), Carter (1972), Holzner (1973), Cundick (1974), and Canning (1974).

<u>V23 Number of Losses</u>--Bowlby (1972) concluded that repeated loss of mother is dangerous to a child's emotional development.

<u>V9 Age</u>--In a review of the literature Bowlby (1972) found children react differently to parental loss at different ages. Barry (1949), Brown (1961), and others found children exhibit somewhat similar reactions if they fall into similar age groupings, 0-5, 6-11, and 12-18 years of age. Due to insufficient data collected in the last two categories and due to the fact that mothers often remembered events as happening before or after their child started school, categories preschool and school age were used in this research.

V17 Duration--Bowlby (1972) concluded that if preschool children are separated from their mothers for more than six months, there is danger that they may never recover their emotional attachment to their mothers. Glueck (1951), Deutsch (1967), and Costin (1972) found prolonged separation related to later emotional problems.

V2 Sex of Child--Research (see Chapter II) shows young boys sometimes react differently to a parent's absence than do young girls.

V3 Sex of Parent--Most recent research, Smith (1969), Burns (1972), and others show that the sex of the lost parent determines to some extent the type of behavior the affected child will exhibit.

V14 Socioeconomic Background of the Family--In this study family income was used as an index of social class. Sexton (1961) studied 285,000 subjects. She found family income an accurate index of both social class and perseverance in education. In this study, \$15,000 was used to separate below average from average income. This sum was used at the suggestion of welfare personnel in the county where the study was conducted.

<u>V13 Ability</u>--Ability is a common variable found related to perseverance. In this study the variable, mother's perception of her child's ability, was used. The perception variable has been used by Fifield (1963), Beaird (1972), and by others (see Chapter II).

V15 Cause--A review of the literature indicates the following types of childhood parental losses most affect children: death; parental discord; working mothers; and others. Due to insufficient data, death and others were combined in this study.

Table 3.9 listed below further shows the relationship between the research hypotheses and the individual questions designed to gather data to test the hypotheses.

Interview Procedure

The first portion of the interview, questions 1-8, was structured to elicit specific responses: yes, no, age, sex, etc. After providing the information, mothers volunteered explanations for their answers. Although the additional information was not useful, mothers were not discouraged from talking about their children whom they were often proud of or disappointed in. Frustration was often vented upon the school. Question 9, the mother's description of her child's ability in school appears as a structured question calling for one of three specific answers. In fact, all mothers gave more than a specific answer and in every case justified the answer they gave. If rapport was not established prior to this question, it was established at this point and probably assured a response for the income question which followed.

With question 11, the survey was unstructured and by this point mothers were almost always persuaded that the interviewer was interested in the parent-child relationship and not the husband-wife relationship. Most mothers answered with pride that there were no separations or divorce in their family. Those mothers who experienced a divorce usually volunteered a cause.

Although specific questions were elicited from subjects, the interview procedure was informal and unstructured. All questions were Open-ended in that subjects felt free to add to, quality, or explain

Table 3.9.--The Relationship Between the Hypotheses and the Individual Questions Designed to Collect Data to Test the Hypotheses.

Hypotheses		Variables	Questions
Primary	V1 & V2	3 Numberall loss	11-13, 15, 16
1	V1 & V9	Agepreschool, school age	14
2	V1 & V1	7 Duration1 yr. or less, 1 yr. plus	5, 14, 7
3	V1 & V2	Numberone, one plus, no loss	11-13, 15, 16
4	V1 & V2	3 Numberall loss, no loss	7, 11-13, 15, 16
5	V1 & V2	Sexchildmale, female	4
6	V1 & V3	Sexparentfather, mother, both	6, 11-13, 15, 16
7	V1 & V1	4 Socioeconomicbelow average, above average	10
8	V1 & V1	3 Abilitybelow average, average, above average	9
9	V1 & V1	5 Causeseparation, working mother, other	11-13, 15
10	V1 & V1	5 Causeseparation	11-13, 15
11	V1 & V1	5 Causeworking mother	18, 19
All hypotheses	٧٦	Perseveredrop, persevere	1-19
Subject identif	ication .		. 1, 2, 3, 5, 8

their answers. The financial question was the only question in which the investigator discouraged more specific information. Listening was used by this investigator as a means of establishing rapport. Subject parents were surprisingly willing to answer all questions with apparent openness and honesty. Nearly 80 percent of the parents responded with both a smile and a "you are welcome" at the end of the interview.

More than 10 percent of the parents thanked the interviewer for coming.

Testable Hypotheses

Listed below are the hypotheses which were tested with the data collected with the questionnaire.

Primary Hypothesis

The relative intactness of the family and subjects' perseverance in school are statistically independent.

Secondary Hypotheses

- The age of subjects at the time of loss is statistically independent of perseverance in school.
- 2. The duration of loss of parents is statistically independent of perseverance in school.
- The number of losses of parents experienced by subjects is statistically independent of perseverance in school.
- 4. The proportion of subjects suffering no loss of parents and persevering in school is equal to the proportion of subjects suffering loss of parents and persevering in school.
- 5. The sex of subjects is statistically independent of perseverance in school.

- 6. The sex of lost parents is statistically independent of perseverance in school.
- 7. The socioeconomic background of the subjects' families is statistically independent of perseverance in school.
- 8. The subject's ability in school is statistically independent of perseverance in school.
- 9. The cause of the subjects' loss is statistically independent of perseverance in school.
- 10. The proportion of perseverance in school for subjects experiencing loss of parents caused by separation is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.
- 11. The proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.
- 12. Substitute parents and substitute surroundings are statistically independent of perseverance.

<u>Analysis</u>

The Michigan State University Standard Statistical Program was used to analyze the data. Contingency tables of analysis were used as the data were frequency counts. A chi square test was used for the primary hypothesis and for hypotheses 1-3 and 5-9. Hypotheses 4, 10, and 11 require examination of proportions and the t-test for proportions was therefore used. Alpha was set at .05 level of confidence

for both tests and the data collected from the selected streets were generalized to the population.

Summary

One hundred and forty two (142) subjects between the ages of 16 and 21 were randomly selected from a single school district. Forty (40) of the subjects were defined as dropouts and 102 were defined as perseverers. Mothers of the subjects were interviewed individually in their homes and no subjects were lost.

The data were organized into categories to test the hypotheses, to measure the independence of variables, loss of parents, and perseverance in school. The primary hypothesis, hypotheses 1-3 and 5-9 were tested with the chi square test of independence while hypotheses 4, 10, and 11 were tested with the t-test for proportion. Dependence was determined if either the t-test or the chi square was significant at .05 level of confidence.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The data collected for this research are presented in this chapter. Each hypothesis of this study is stated and followed by the statistics related to the hypothesis.

The original data presented in this chapter were collected from personal interviews with the mothers of 142 subjects between the ages of 16 and 21 years of age. The interviews were conducted according to the methods described in Chapter II.

Procedure

A chi square test of significance or a t-test for proportion is submitted for each comparison of variables. The major variable, perseverance in school or dropouts, is tested in each hypothesis investigation against one of three other major variables: student ability as perceived by mother; socioeconomic status; and relative intactness of family. This last variable is further broken down into five categories: age of child at loss, duration of loss, sex of the lost parent, and the cause of loss.

Originally proposed was a further categorization of the intactness variable according to the quality of the substitute homes and Parents. Secondary hypothesis 12 was to have been tested against these quality variables. In the data gathering, it became evident that the subjectivity of the responses and the difficulty of distinction among the various quality factors made this both imprudent and unproductive to pursue. This hypothesis then remains untested.

In both statistical tests that were used here, the chi square and the t-test for proportion, it was predetermined that alpha must exceed the .05 level of confidence before the hypothesis would be accepted.

The data presented in this chapter were collected from a single Michigan school district. The 142 subjects were randomly chosen, and all participated in the study.

The analysis of the data gathered in the interviews with respect to the childhood loss of parents and later perseverance in school is presented as follows:

- The primary hypothesis and subsequent secondary hypotheses are presented in the same order in which they were presented in Chapter I.
- 2. The source table for the chi square or for the t-test is presented with each subproblem.
- 3. The .05 level of confidence for the degrees of freedom stated will be used as the criterion of accepted or rejected for each hypothesis.
- 4. A report of the findings on the research hypotheses will follow the presentation of each research table.

This research was based on 1,363 separate observations, collected from 142 subjects, which were used to test 12 hypotheses. No subjects were lost, but 4 observations were missing on a

persevering subject and 1 observation was missing from a dropout subject. Each of the 5 missing observations is noted at the base of the appropriate research table. Observations missing in 4 out of the 12 tests were taken into account in the statistical procedures.

Test of Primary Hypothesis

The primary hypothesis is that the relative intactness of the family and subjects' perseverance in school are statistically independent.

Data gathered from personal interviews with mothers of the subjects are set out with their statistical significance in Table 4.1. The comparison is between youths who have or have not experienced a loss of a parent with respect to whether they persevered in school or dropped out. It presents, too, the figure for the corrected chi square with 1 degree of freedom.

Table 4.1.--A Comparison of Intactness of Family (Loss/No Loss) with Perseverance in School (Drop/Persevere).

Perseverance	No. of Cases		Cases with ory of:	Chi Square with 1 Degree
	cases	Intact Family	Loss of Parent	of Freedom
Dropout	40	8	32	
Persevere	102	<u>52</u>	50 —	
Total	142	60	82	10.07*

^{*}Significant at the .05 level.

The research demonstrates that relative intactness of the family and the subjects' perseverance in school are not independent. As the chi square figure of 10.07 is significant at the .05 level of confidence, the null hypothesis is rejected.

Test of Secondary Hypotheses

Twelve secondary hypotheses were tested. For nine of them the statistical test, the chi square test of significance, was applied. For three of them the t-test for proportion was applied. In each, the critical level of confidence was established at .05.

Data for all were gathered in personal interviews with mothers of the subjects and were tabulated according to the several variables and subvariables.

Secondary Hypothesis 1

The age of subjects at the time of loss is statistically independent of perseverance in school.

Table 4.2 sets out the data on perseverance in school (Dropout/Persevere) for all subjects who have experienced a loss of parent. It compares those whose loss occurred before their sixteenth birthday with those whose loss was on or after that birthday. Finally, it presents the figure for the corrected chi square with 1 degree of freedom.

Table 4.2.--A Comparison of Age at the Time of Loss (Under Six Years of Age/Six Years of Age and Older) with Perseverance in School (Drop/Persevere).

Perseverance	No. of		Cases with al Loss at:	Chi Square with
rerseverance	Cases	0-5 Yrs. of Age	6 Plus Yrs. of Age	1 Degree of Freedom
Dropout	32	8	24	
Persevere	49 *	13	<u>36</u>	
Total	81	21	60	.01**

^{*1} missing observation, persevere.

The results demonstrate that the age of subjects at the time of loss of parents and perseverance in school are independent. As the chi square figure of .01 is not significant at the .05 level of confidence, the null hypothesis is not rejected.

Secondary Hypothesis 2

The duration of loss of parents is statistically independent of perseverance in school.

Table 4.3 sets out the data on perseverance in school (Drop/Persevere) for all subjects who have experienced a loss. It compares those whose losses were one year or less in duration with those whose losses exceeded one year in duration. Finally, it presents the figure for the corrected chi square with 1 degree of freedom.

^{**}Not significant at the .05 level.

Table 4.3.--A Comparison of Duration of Loss (One Year or Less/Longer than One Year) with Perseverance in School (Drop/Persevere).

Damaguana	No.		Cases with 1 Loss for:	Chi Square with
Perseverance	of Cases	l Yr. or Less	Longer than 1 Yr.	l Degree of Freedom
Drop	31*	12	19	
Persevere	49* —	8	41	
Total	80	20	60	3.10**

^{*1} missing observation in each category, drop and persevere.

The results demonstrated that the duration of the loss of parents is not independent of perseverance in school. As the chi square figure of 3.10 is significant at the .05 level of confidence, the null hypothesis is rejected.

Secondary Hypothesis 3

The number of losses of parents experienced by subjects is statistically independent of perseverance in school.

Table 4.4 sets out data on perseverance in school (Drop/Persevere) for all subjects. It compares those experiencing no loss, those who experienced a single loss of parent, and those who experienced two or more losses of parents. Finally, it presents the figure for the raw chi square score with 2 degrees of freedom.

^{**}Significant at the .05 level.

	No of	No.	of Case	es with:	Chi Square with
Perseverance	No. of Cases	No Loss	One Loss	Two Plus Losses	2 Degrees of Freedom
Drop	40	8	23	9	
Persevere	102	52	42	8	
Total	142	60	65	17	13.35*

Table 4.4.--A Comparison of Loss of Parent (No Loss/One Loss/Two or More Losses) with Perseverance in School (Drop/Persevere).

The results demonstrate that the number of losses of parents is not independent of perseverance in school. As the chi square figure of 13.35 is significant at the .05 level of confidence, the null hypothesis is rejected.

Secondary Hypothesis 4

The proportion of subjects suffering no loss of parents and persevering in school is equal to the proportion of subjects suffering loss of parents and persevering in school.

Table 4.5 sets out the data on perseverance in school (Drop/Persevere) for subjects who have experienced loss of parents as compared to subjects who have not. The table shows the t-value and the degrees of freedom. Significance is established at the .05 level of confidence if the observed level of t is equal to or less than the critical value of t.

^{*}Significant at the .05 level.

Table 4.5.--The Proportion of Perseverance in School (Oron/Persevere) by Subjects Who Have Lost Parents

	as Compare	d to the Propor	tion of Perse	verance in Schoo	by Subjects f	as Compared to the Proportion of Perseverance in School by Subjects from Intact Families.
Loss of	No. of	No. of Cases Who:	ses Who:	Drocos	Standard	Observed t-Value with
Parent	Cases	Persevere	Dropout		Deviation	140 Degrees of Freedom
Loss	82	50	32	8609.	. 491	
No Loss	09	52	∞	.8667	.343	
Total	142	102	40			-3.67

The observed level of t, -3.67, was less than the critical value of t, -1.96, therefore, the null hypothesis is rejected. The results demonstrate that the proportion of youths suffering no loss of parents and persevering in school is significantly greater than the proportion of youths suffering losses of parents and persevering in school.

Secondary Hypothesis 5

The sex of subjects is statistically independent of perseverance in school.

Table 4.6 sets out data on perseverance in school (Drop/Persevere) for all subjects and compares them on the basis of sex. The table shows, too, the corrected chi square with 1 degree of freedom.

Table 4.6.--A Comparison of Sex of Subjects with Perseverance in School (Drop/Persevere).

Perseverance	No. of		f Cases to Be:	Chi Square with 1 Degree
	Cases	Male	Female	of Freedom
Drop	40	19	21	
Persevere	102	57	45	
Total	142	76	66	.51

The results demonstrate that the sex of the youths and perseverance in school are independent. As the chi square figure of .51 is not significant at the .05 level of confidence, the null hypothesis is not rejected.

Secondary Hypothesis 6

The sex of lost parents is statistically independent of perseverance in school.

Table 4.7 sets out data on perseverance in school (drop/persevere). It compares subjects who lost fathers with those who lost mothers. The table shows, too, the corrected chi square with 1 degree of freedom.

Table 4.7.--A Comparison of Sex of Lost Parent with Perseverance in School (Drop/Persevere).

Perseverance	No. of		ses Experi- Loss of:	Chi Square with 1 Degree
	Cases	Father	Mother	of Freedom
Drop	32	14	18	
Persevere	49*	15	34	
Total	81	29	52	.33

^{*1} missing observation, persevere.

The results demonstrate that the sex of the lost parent is independent of perseverance in school. As the chi square figure of .33 is not significant at the .05 level of confidence, the null hypothesis is not rejected.

Secondary Hypothesis 7

The socioeconomic background of the subjects' families is statistically independent of perseverance in school.

Table 4.8 sets out data on perseverance in school (Drop/ Persevere) for all subjects and compares them on the basis of socioeconomic background (Below Average/Average, and Above Average).

The table shows, too, the corrected chi square of 1 degree of freedom.

Table 4.8.--A Comparison of Socioeconomic Background (Below Average/ Average, and Above Average) of Subjects with Perseverance in School (Drop/Persevere).

Doncovonance	No. of		ses with Socio- c Background	Chi Square with
Perseverance	Cases	Below Average	Average and Above Average	l Degree of Freedom
Drop	40	23	17	
Persevere	102	15	87	
Total	142	38	104	24.71*

^{*}Significant at the .05 level.

The results demonstrate that the socioeconomic background of the subjects' families and perseverance in school are not independent. As the chi square figure of 24.71 is significant at the .05 level of confidence, the null hypothesis is rejected.

Secondary Hypothesis 8

The subject's ability in school is statistically independent of perseverance in school.

Table 4.9 sets out data on perseverance in school (Drop/Persevere) for all subjects and compares them on the basis of ability (Below Average/Average/Above Average). The table shows, too, the raw chi square with 2 degrees of freedom.

Table 4.9.--A Comparison of Ability (Below Average/Average/Above Average) with Perseverance (Persevere/Drop).

	No. of	No. of C	ases with A	bility:	Chi Square with
Perseverance	Cases	Below Average	Average	Above Average	l Degree of Freedom
Drop	40	5	27	8	
Persevere	102	5	50	47	
Total	142	10	77	55	9.21*

^{*}Significant at the .05 level.

The results demonstrate that the subject's ability and perseverance in school are not independent. As the chi square figure of 9.21 is significant at the .05 level of confidence, the null hypothesis is rejected.

Secondary Hypothesis 9

The cause of subjects' loss is statistically independent of perseverance in school.

Table 4.10 sets out data on perseverance in school (Drop/Persevere) for all subjects experiencing a loss of parent. Losses are compared on the basis of cause of lost parents (Separation/Working Mothers/Others). Finally, the table shows the raw chi square with 2 degrees of freedom.

	No. of	No. of Cas	es with Cau	ses:	Chi Square with
Perseverance	Cases	Separation	Working Mother	0ther	2 Degrees of Freedom
Drop	32	13	16	3	
Persevere	49*	6	33	10	
Total	81	19	49	13	9.08**

Table 4.10.--A Comparison of Cause of Loss (Separation/Working Mother/ Other) with Perseverance in School (Drop/Persevere).

The results demonstrate that the cause of the lost parent and perseverance in school are not independent. As the chi square figure of 9.08 is significant at the .05 level of confidence, the null hypothesis is rejected.

Secondary Hypothesis 10

The proportion of perseverance in school for subjects experiencing loss of parents caused by separation is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

Table 4.11 sets out data on perseverance in school (Drop/
Persevere) for subjects who have experienced a loss of parent caused
by separation as compared to subjects who have not lost a parent.
The table shows the t-value and the degrees of freedom. Significance
is established at the .05 level of confidence if the observed level
of t is equal to or greater than the critical value of t.

^{*1} missing observation, persevere.

^{**}Significant at the .05 level.

Table 4.11.--The Proportion of Perseverance in School (Drop/Persevere) by Subjects Who Have Lost Parents Caused by Separation as Compared to the Proportion of Perseverance in School by Subjects of Intact Families.

Family	No. of	No. of Cases Who:	es Who:	Dronovtion	Standard	Observed t-Value with
Characteristic	Cases	Persevere	Dropout		Deviation	140 Degrees of Freedom
Separation	19	9	13	.3185	.478	
No Loss	09	52	ω	.8667	.343	
Total	62	58	21			-4.45

The observed level of t, -4.45, was greater than the critical value of t, 1.96, therefore the null hypothesis is rejected. The results demonstrates that the proportion of perseverance in school for youths experiencing no loss of parents is significantly greater than the proportion of perseverance in school for youths experiencing loss of parents by separation.

Secondary Hypothesis 11

The proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

Table 4.12 sets out data on perseverance in school (Drop/Persevere) for subjects who have experienced loss of parents caused by working mothers as compared to subjects who have not lost parents. The table shows the t-value and the degrees of freedom. Significance is established at the .05 level of confidence if the t is equal to or greater than the critical value of t.

The observed level of t, -4.45, was greater than the critical value of t, 1.96, therefore the null hypothesis is rejected. The results demonstrates that the proportion of perseverance in school for youths experiencing no loss of parents is significantly greater than the proportion of perseverance in school for youths experiencing loss of parents by separation.

Secondary Hypothesis 11

The proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

Table 4.12 sets out data on perseverance in school (Drop/Persevere) for subjects who have experienced loss of parents caused by working mothers as compared to subjects who have not lost parents. The table shows the t-value and the degrees of freedom. Significance is established at the .05 level of confidence if the t is equal to or greater than the critical value of t.

Table 4.12.--The Proportion of Perseverance in School (Drop/Persevere) By Subjects Who Have Lost Parents Caused by Working Mothers as Compared to the Proportion of Perseverance in School by Subjects of Intact Families.

Family	No. of	No. of Cases Who:	ses Who:	O cocon	Standard	Observed t-Value with
Characteristic	Cases	Persevere	Dropout		Deviation	140 Degrees of Freedom
Working Mothers	49	33	16	.6735	.474	
No Loss	09	52	∞	.8667	.343	
Total	109	85	24			2.47

The observed level of the t, 2.47, was greater than the critical level of the t, 1.96, therefore, the null hypothesis is rejected. The results demonstrate that the proportion of perseverance in school for youths experiencing no loss of parents is significantly greater than the proportion of perseverance in school for youths experiencing loss of parents due to working mothers.

In the application of the tests of the data for these twelve hypotheses, nine were not accepted and three were accepted, in their null form. There is a statistical relationship between the variable persevere (drop/persevere) and each of the following variables: loss of parents, duration of the loss of parents; the number of losses of parents; proportion of subjects who experienced loss with the proportion of subjects who had experienced no loss; socioeconomic background of the subject's family; school ability of the subjects as perceived by the subjects' mothers; causes of the loss of parents; separation as the cause of the loss of parents.

No statistical relationship was found, however, between the variable persevere (drop/persevere) and variables: age of the subject at the time of the loss; sex of the subjects; sex of the parents that the subjects lost.

The findings of the research are summarized in Table 4.13.

Table 4.13.--A Table of the Research Findings.

Hypotheses	Variable	Statistical Test	Chi Square or t-Value	Degrees of Freedom	Reject or Not Reject
Primary	Loss/No Loss of Parents	Chi Square	10.07	-	Rejected
-	Age at Loss of Parents	Chi Square	.00	-	Not Rejected
2	Duration of Loss	Chi Square	3.10	-	Rejected
က	Number of Losses	Chi Square	13.35	2	Rejected
4	Loss/Proportion	I-test	-3.67	140	Rejected
2	Sex of Subject	Chi Square	.51	_	Not Rejected
9	Sex of Lost Parent	Chi Square	. 33	_	Not Rejected
7	Socioeconomic Family Background	Chi Square	24.71	-	Rejected
ω	Ability of Subjects	Chi Square	9.21	2	Rejected
6	Cause of Lost Parent	Chi Square	9.08	-	Rejected
10	Cause of Loss Separation	T-test	-4.45	140	Rejected
=	Cause of Loss	T-test	2.47	140	Rejected

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CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

Man has yet to plumb the depth or measure the breadth of the parent-child relationship. In the general field of parent-child relationships, this research aimed to explore the relationship, if any, between the loss of parents and the child's later perseverance in school. Causes of childhood loss of parents are grouped here as death, divorce, working mothers, and other.

This study is designed to test the assumption that a relationship exists between the loss of parents by children and their
perseverance in school. Other common assumptions tested included the
relationships between school perseverance and the following familybased variables: the age of the child at the time of the loss; the
cause of the loss; the sex of the child as well as the sex of the lost
parent; the duration of the loss; the number of losses; the socioeconomic background of the family; the school ability of the child;
and the nature of the substitute parents and substitute surroundings.
These assumptions emerged from a review of the literature.

The sex of child, sex of parent, age of child at loss, duration of loss, number of losses, cause of loss, mother's perception of the learning ability of the child, socioeconomic background of

family, and substitute parents and surroundings were all selected as variables to be tested against school perseverance. The following research hypotheses were developed.

Primary Hypothesis

The relative intactness of the family and subjects' perseverance in school are statistically independent.

Secondary Hypotheses

- The age of subjects at the time of loss is statistically independent of perseverance in school.
- 2. The duration of loss of parents in statistically independent of perseverance in school.
- The number of losses of parents experienced by subjects is statistically independent of perseverance in school.
- 4. The proportion of subjects suffering no loss of parents and persevering in school is equal to the proportion of subjects suffering loss of parents and persevering in school.
- 5. The sex of subjects is statistically independent of perseverance in school.
- 6. The sex of lost parents is statistically independent of perseverance in school.
- 7. The socioeconomic background of subjects' families is statistically independent of perseverance in school.
- 8. The subject's ability in school is statistically independent of perseverance in school.
- The cause of subjects' loss is statistically independent of perseverance in school.

- 10. The proportion of perseverance in school for subjects experiencing loss of parents caused by separation is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.
- 11. The proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

An instrument was devised to collect the data to be tested.

An informal open-ended questionnaire was administered in the home of each subject. Data were collected from mothers of subjects in the personal interviews.

A single school district was chosen and the population was defined as youths between the ages of 16 and 21 who were attending or had once attended the schools in the district and who had one or both parents still living in the district. The sample consisted of 142 boys and girls. Streets and roads within the district were randomly selected from a hat and every home on the selected street was visited. Homes were revisited until all subjects were identified on each street. No subjects were lost.

As the data collected were categorical in nature and because some hypotheses required proportional data, the chi square test of independence and the t-test for proportion were selected as testing instruments. Significance was set at the .05 level of confidence.

Each of the research hypotheses was tested and the results are summarized below.

Discussion

Following are a list of the research hypotheses with a discussion of the findings.

Primary Hypothesis

The relative intactness of the family and the subjects' perseverance in school are statistically independent.

The literature seems to indicate that most serious mental illnesses are associated with loss of parents, particularly with the loss of mother. While working mothers seem to have some negative effects on children, the effect has not been noted on all children.

In the case of father's absence, not all children are noted to be affected, but the effects were reported negative. The death of one or both parents has been found to have a negative effect on a majority of children. Children suffer the loss of parents for varying lengths of time. There seems little agreement on how the length of the loss affects children, except that longer periods may have a more damaging effect than shorter periods. Similarly, research does not demonstrate a definite age or age group at which children are most susceptible or the sex of the child most likely to be affected. Most research indicates the child is more sensitive to the loss of mother, and more recent research demonstrates the importance of father's presence.

This research sought to discover whether there is a relationship between childhood loss of parents and later perseverance in school. The results of this study indicate that for this population there is such a relationship. Loss of parents and perseverance in school are found to be statistically significant at the .05 level of

Table 5.1.--A Summary of the Research Findings.

Hypotheses	Variable	Statistical Test	Chi Square or t-Value	Degrees of Freedom	Reject or Not Reject
Primary	Loss/No Loss of Parents	Chi Square	10.07	L	Rejected
_	Age at Loss of Parents	Chi Square	.00	-	Not Rejected
2	Duration of Loss	Chi Square	3.10	-	Rejected
က	Number of Losses	Chi Square	13.35	2	Rejected
4	Loss/Proportion	T-test	-3.67	140	Rejected
2	Sex of Subject	Chi Square	.51	_	Not Rejected
9	Sex of Lost Parent	Chi Square	. 33	-	Not Rejected
7	Socioeconomic Family Background	Chi Square	24.71	-	Rejected
ω	Ability of Subjects	Chi Square	9.21	2	Rejected
6	Cause of Lost Parent	Chi Square	9.08	-	Rejected
10	Cause of Loss Separation	T-test	-4.45	140	Rejected
11	Cause of Loss	T-test	2.47	140	Rejected

confidence. Only 20 percent of the sampled dropouts came from intact families while more than 50 percent of the sampled perseverers came from intact families.

Secondary Hypotheses

Hypothesis 1: The age of subjects at the time of loss is statistically independent of perseverance in school.

Research does not demonstrate a definite age or age group at which children are most susceptible to loss of parents. This study found the variable, age at the time of loss, statistically independent of variable perseverance at the .05 level of confidence. Twenty-five percent of the sampled dropouts and 26.5 percent of the perseverers who suffered losses of parents, suffered the losses before starting school. Similarly, the remaining 75 percent of the dropouts and the 73.5 percent of the perseverers who suffered losses, did so after starting school. Age at the time of loss and perseverance are statistically independent.

Hypothesis 2: The duration of loss of parents is statistically independent of perseverance in school.

There is little agreement in the literature on the effects of different durations of parental loss on children, except that longer periods of time may have a more damaging effect than shorter periods of time. Duration of loss of parents and perseverance in school have a statistically significant relationship. Both categories of suffering losses suffered more losses for longer periods of time than they did for shorter periods of time.

Hypothesis 3: The number of losses of parents experienced by subjects is statistically independent of perseverance in school.

Most research indicates that numerous losses of parents are more likely to have a negative effect on children than a single loss, providing the duration of the single loss is not longer or the loss is not at an earlier age. This research found the number of losses and later perseverance to be dependent variables. Although only 20 percent of the dropouts suffered no loss, 51 percent of the perseverers sustained no loss. Where 41 percent of the perseverers suffered a single loss, the dropouts sustained 57 percent in that category. Similarly, less than 8 percent of the perseverers suffered more than one loss, while 22 percent of the dropouts did so.

Hypothesis 4: The proportion of subjects suffering no loss of parents and persevering in school is equal to the proportion of subjects suffering loss of parents and persevering in school.

This study found the proportion of youths suffering no loss of parents and persevering in school exceeds the proportion of youths experiencing loss of parents and persevering in school at the .05 level of confidence. While nearly 87 percent of the youths who suffered no loss of parents were found to persevere in school, only 61 percent of the youths who suffered a loss did so.

<u>Hypothesis 5:</u> The sex of subjects is statistically independent of perseverance in school.

Many studies find the sex of the child to be significantly related to developmental problems, while others do not. This study did not find the variables, sex of the child and perseverance,

dependent. Among the dropouts, 48 percent were males while 52 percent were females. The perseverers were similarly divided with 56 percent males and 44 percent females.

Hypothesis 6: The sex of lost parents is statistically independent of perseverance in school.

Most studies find the child is more sensitive to the loss of mother. Recent research demonstrates the importance of father's presence. This research found the sex of the parent to be independent of perseverance in school. Although 44 percent of the dropouts' loss was due to absence of fathers, 56 percent was caused by loss of mothers. Perseverers, who suffer a loss, were even more likely to have lost a mother (69%) than to have lost a father (31%).

Hypothesis 7: The socioeconomic background of the subjects' families is statistically independent of perseverance in school.

Most research finds a significant relationship between the socioeconomic background of the family and perseverance in school. Other studies have found the relationship disappeared when student status in the school was controlled.

This research found family income and perseverance in school to be dependent. While 57 percent of the dropouts were found to come from families with lower than average incomes, only 15 percent of the perseverers fell into this category. Where 42.5 percent of the dropouts came from families with average or above average incomes, more than twice that percent, 85 percent, of the perseverers did.

Hypothesis 8: The subject's ability in school is statistically independent of perseverance in school.

This research found ability in school, as perceived by the subject's mother, and perseverance in school to be dependent at the .05 level of significance. Perseverers formed 50 percent of the below average group, 65 percent of the average group, and nearly 86 percent of the above average group.

Hypothesis 9: The cause of subjects' loss is statistically independent of perseverance in school.

Other research seems to indicate that most serious mental illnesses are associated with loss of parents. The causes considered by most investigators are: death, divorce, working mothers, and other.

Students who suffer losses caused by separation are nearly three and one-half times as likely to be a dropout (40%) as they are to be a perseverer (12.8%). In considering all subjects, perseverers make up 87 percent of the no loss category, 31 percent of the separation group, and 67 percent of the working mothers category.

Hypothesis 10: The proportion of perseverance in school for subjects experiencing loss of parents caused by separation is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

Most research indicates that the child is sensitive to parental discord. Some investigators have found parental discord to be more damaging to the child than an actual separation. This research found the proportion of perseverance in school for subjects experiencing no loss of parents exceeded the proportion of perseverance in school for subjects experiencing losses of parents caused by separation at the .05 level of confidence. While nearly 87 percent of the subjects

who suffered no loss of parents were found to persevere in school, only 31 percent of the youths suffering a divorce or desertion similarly persevered.

Hypothesis 11: The proportion of perseverance in school for subjects experiencing loss of parents caused by working mothers is equal to the proportion of perseverance in school for subjects experiencing no loss of parents.

Investigators are divided on the effect of mothers working outside the home. Some research indicates there is no effect while other investigators have found positive or negative effects. This research found the proportion of perseverance in school for subjects suffering no loss of parents exceeded the proportion of perseverance in school for subjects experiencing loss of parents caused by mothers working at the .05 level of confidence. While 87 percent of the children who suffered no loss of parents persevered in school, a lesser number, 67 percent, of those with working mothers did so.

Summary of Discussion

Of the twelve research hypotheses, nine were rejected and three were not rejected in their null form. The following variables were found to be significantly related to the variable perseverance (drop/persevere): relative intactness of the subjects' families (loss/no loss); duration of the loss of parents; number of losses of parents; proportion of loss of parents; socioeconomic background of the subjects' families; ability of the subjects in school as perceived by the subjects' mothers; cause of the loss of parents; separation as the cause of the loss of parents; and working mothers as the cause of loss of parents.

Statistically significant relationships were found between the variables described above regardless of the age of the subject at the time of the loss, the sex of the subject, and the sex of the parent which the subject lost.

Among the subjects studied, dropouts were four times as likely to have suffered the loss of parents as they were to have come from intact families. The proportion of intact families for persevering youths was significantly greater than the proportion of youths suffering losses of parents and persevering in school.

The number of losses of parents experienced by subjects was found to be related to perseverance in school. The more losses of parents subjects suffered, the more likely they were to be found in the dropout category. The fewer losses of parents subjects experienced, the more likely they were to be identified as perseverers.

A statistically significant relationship was found between cause of the subjects' loss of parents and perseverance in school.

Of the three causes measured, separation, working mother and other, separation was found to be the most significant. Although a statistically significant relationship was found between the duration of the subjects' losses of parents and perseverance in school, the relationship is the reverse of what might be expected. Perseverers experienced longer periods of loss of parents than did dropouts.

Like other studies, this research found the socioeconomic background of the subjects' families and ability of the subjects in school both related to perseverance in school. Unlike other studies, this study measured the mothers' perception of their children's ability in school. Dropouts were less likely than perseverers to come

from families with average and above average incomes, and their ability in school was more likely to be perceived by their mothers as below average.

Implications

This research is the result of the study of a single school district. In this single community, a web of statistical relationships developed. Although the purpose of this study was to determine the relationship between losses of parents by school age children and perseverance in school, it was not the intention of the study to assign a causal relationship to the findings. The observed relationship, however, leads to some speculation.

If we observe a relationship between instability of the family and dropping out of school, efforts may be justified to find ways of reducing the number of losses of parents sustained by children. Efforts may be justified to develop methods of strengthening the family.

As childhood loss of parents is an increasing phenomenon, it becomes increasingly desirable to conduct research measuring its effect on children. Parents can be made more aware of this effect on their children. From this study in one district, it would appear that those families which need the most help in understanding how loss of parents can affect their children may be families with average and below average income, families in which mothers perceive the ability of their children in school as below average, and families in which losses are repeated or extended over longer periods of time. These families may need help in understanding the effect of such losses

regardless of the sex of the child, the age of the child at the time of the loss, and the sex of the parent which the child loses.

Recommendations

The experience of interviewing mothers of 142 subjects spread throughout the district impressed upon this investigator that parents seldom knowingly set out to damage the emotional growth of their children. Most of the parents interviewed seemed willing to make sacrifices for the good of their children. Many mothers appear to be at a loss to understand their child's failure to continue through school.

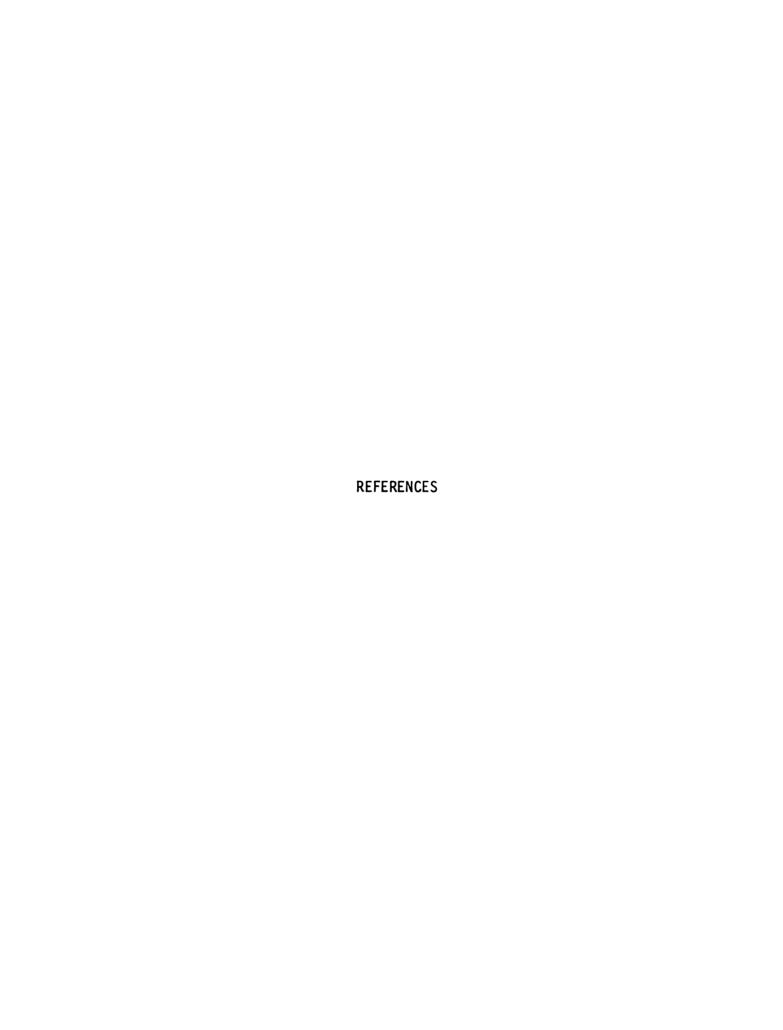
Based on these assumptions, this investigator makes the following recommendations. Further research is needed in the effects of separation caused by marital discord on children involved.

Research must be designed to hold constant such variables as socioeconomic background of the family and ability or perceived ability.

Research is recommended in which the proportion of separations suffered by children in the following categories are measured against the proportions of separations sustained in the general population: children who are screened into special education programs; who exhibit antisocial behavior; who become addicted to drugs; who obtain criminal records; who are diagnosed as autistic; who are committed to mental institutions; who commit suicide; and who conceive their own children out of wedlock.

It is recommended, too, that research be conducted to isolate the most important and most common causes of marital discord and the most effective techniques in minimizing and managing causes of marital discord. It is not enough to conduct the research and publish the findings. Methods must be devised to make this knowledge available and useful to parents and prospective parents.

Efforts may be justified in developing parenthood training, training aimed at teaching children how to recognize those elements in their own personalities and in the personalities of others, which will increase their ability to recognize and select compatible mates. Parenthood training may aim at recognizing and minimizing causes of marital discord and its effects on children. Finally, counseling services with similar goals and based on similar research may be developed as a continuing extension of parenthood training.



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