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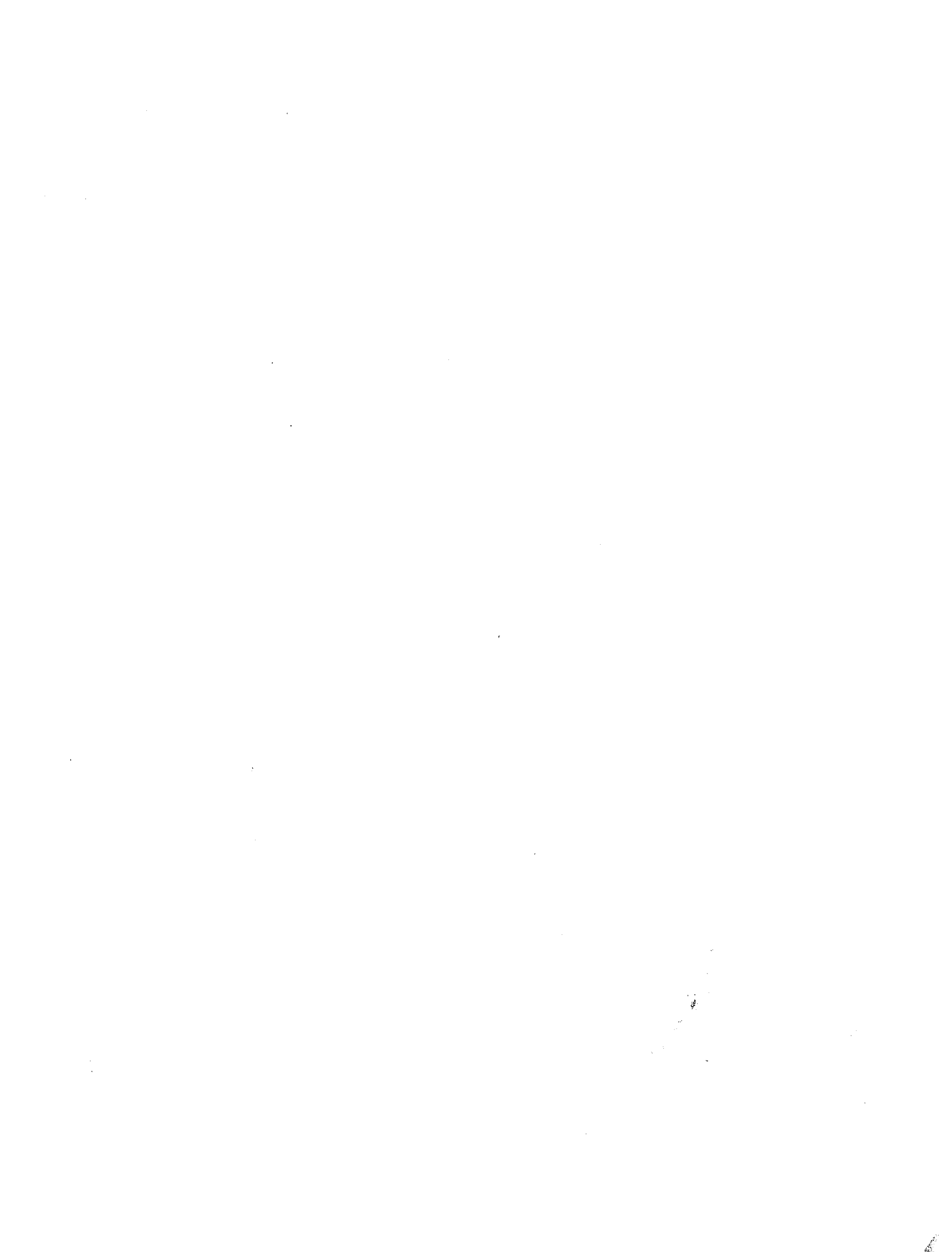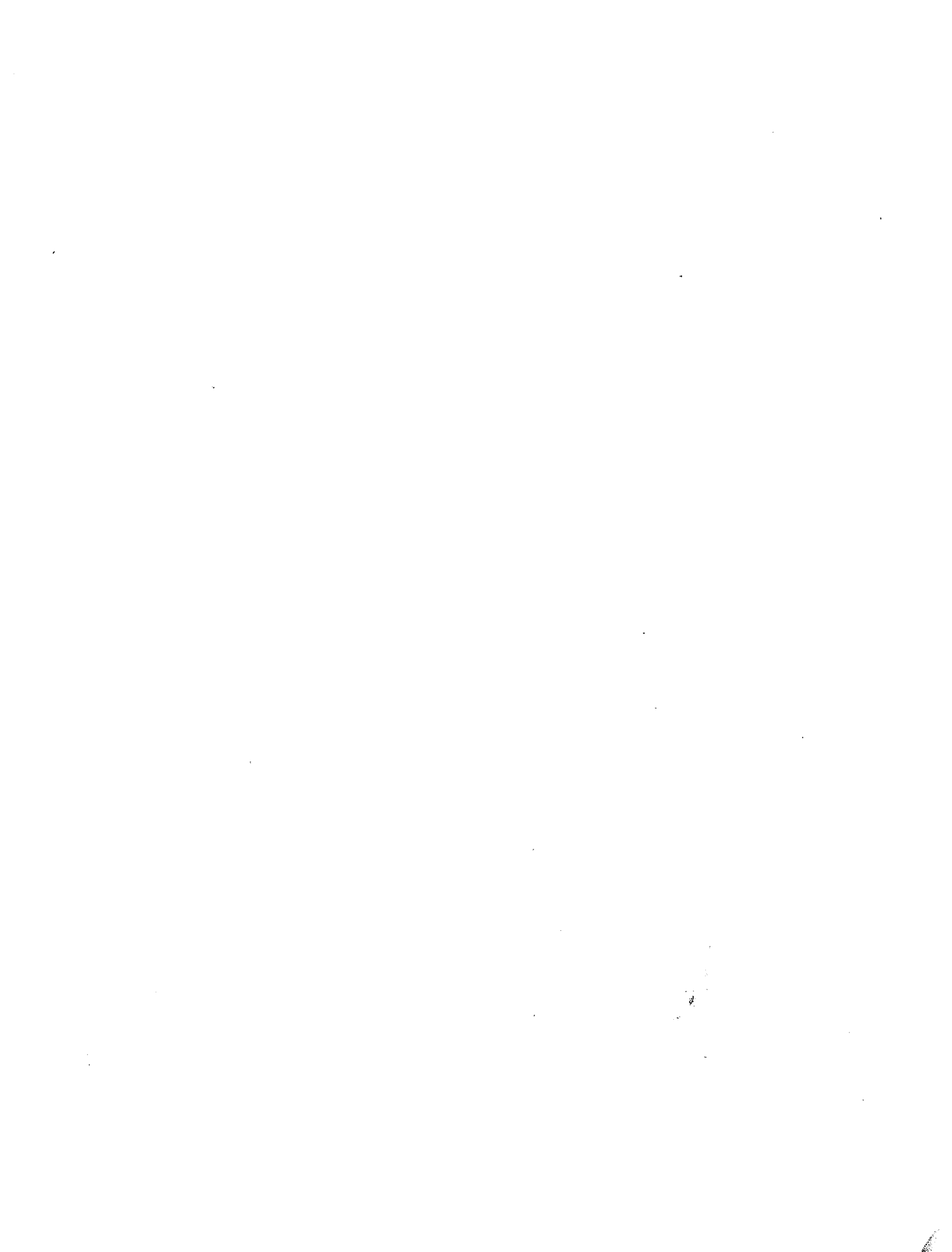
Type and frequency of children's fears: A comparison of
self-care and adult-care children

Lopp, Eileen Tate, Ph.D.

The University of North Carolina at Greensboro, 1989

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TYPE AND FREQUENCY OF CHILDREN'S FEARS:

A COMPARISON OF SELF-CARE

AND ADULT-CARE CHILDREN

by

Eileen T. Lopp

A Dissertation Submitted to
the Faculty of the Graduate School at
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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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Self-care and adult-care children were compared on the frequency with which they reported experiencing fear, on the types of fears that they reported having, and on how they coped with fear. Responses were obtained from 72 matched pairs of self-care and adult-care children. The children were matched on age, sex, race, family composition, and SES. A matched pairs t test indicated that more self-care children report having after-school fears than do adult-care children. But no differences were found for any of the other four measures of fear.

Based on a review of the literature on types of children's fears and on children's methods of coping with fears, typologies were constructed and children's responses were coded according to these typologies. Chi-square analyses of the fear and coping responses indicated that there were significant differences between self-care children and adult-care children. Children in adult-care reported more fears of animals and of being alone or separated from family than did self-care children, who reported more fears than adult-care children of interactions with people, of violence, and of imaginary creatures, the dark, and scary TV shows. The most common method of coping with fears for children in both groups was avoidance/escape; but more self-care children reported using it than did adult-care children. Instead, children in adult-care reported using more internal self-control methods of coping with fear.

The study also explored related research questions involving the influence of several independent variables on the amount of fear experienced. Among the independent variables investigated were: age, presence of a sibling, child can play

outside, child can invite a friend in to play, child has a dog or cat as a pet, child is restricted in TV viewing, and whether the child likes the current care arrangement. No clear patterns emerged from this exploratory investigation.

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Very special thanks are due to my family and friends for their assistance with childcare, home-cooked meals, and chauffering, which gave me time to devote to the research.

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CHAPTER I

INTRODUCTION

The fears and coping strategies of self-care (latchkey) children have become issues of national concern. Currently many after-school programs and phone-friend programs are being established in response to the alarm that was sounded as a result of preliminary research findings that children in self-care arrangements may be at substantial risk of a multitude of harms. Yet other researchers report that children may thrive in self-care arrangements (Galambos & Garbarino, 1983), and for them, an after-school program would be less suited to their particular needs.

The increased use of self-care arrangements is correlated with the steadily increasing proportion of working women (Powers & Anderson, 1986). Most single parents are employed, as are most parents living together, and many children are allowed to care for themselves at home or to care for younger siblings (Powers & Anderson, 1986; Stroman & Duff, 1982). Many parents claim that they have no practical alternative to the self-care arrangement. Thus, for many families, self-care arrangements have become an unavoidable necessity, and the trend toward increasingly greater usage is predicted to continue (Powers & Anderson, 1986).

Numerous researchers have portrayed the latchkey problem as a social ill of our society. Among the negative consequences that are said to plague latchkey children are delinquency, lowered self-esteem, poor school performance, and excessive fears (Woods, 1972; Long & Long, 1981; Stewart, 1986). Particularly in

the popular press and in the self-help psychological literature, the belief has prevailed that excessive fears may produce permanent damage to those susceptible children thrust prematurely into a self-care arrangement (Long & Long, 1983; Turkington, 1983).

<u>Purpose for Research</u>

In spite of the alarm concerning possible harmful effects of the self-care arrangement, the following questions have not been conclusively answered:

Are self-care children more fearful than adult-care children? Do the fears of self-care children differ from those of children in adult-care? Do the coping patterns of self-care children differ from their adult-care counterparts? These are the major questions that are addressed in this study.

While fears are ubiquitous among children irrespective of care arrangement, the types of fears they experience may differ. By classifying fears into general types or categories, comparisons of the prevalence of fear types can be made between groups. This will indicate whether children in self-care experience more of some categories of fears than do children in adult-care. Any fear categories identified as being significantly more frequent for self-care children than for adult-care children will be noted and discussed. Similarly, any coping methods found to be more frequently used by self-care children than by adult-care children will be identified and discussed.

There are three major streams of literature that are relevant to the research questions of this study: 1) latchkey children, 2) the nature and distribution of children's fears, and 3) the coping methods children employ to deal with their fears.

These three major streams of literature were reviewed to the extent that each pertained to the specific research questions being investigated.

The amount of literature available on fears and coping is vast, but there is virtually no research literature on the fears or coping methods of children who are at home without adult supervision. Within the popular literature, there is speculation about self-care children's fears and some limited or questionable evidence of their greater amount of fear (cf. Rodman & Pratto, 1986). The popular literature has publicized research that was based upon small samples of self-care children living in particular types of neighborhoods which are not characteristic of the population at large (cf. Robinson, Rowland, & Coleman, 1986).

Lynette and Thomas Long (1982, 1983, 1988) and others (Grollman & Sweder, 1986; Turkington, 1983; Wellborn, 1981; Wong, 1981) have disseminated numerous warnings regarding excessive amounts of fear plaguing latchkey children. Wellborn (1981, p. 42) stated there are millions of latchkey children "who lead fearful, victimized existences." Long and Long (1983) have reported that latchkey children experience a greater amount of fear than children cared for by parents, and they expressed concern about the permanency of such fears and of their deleterious consequences for children. Although the research of the Longs has been the most widely disseminated, it is also marked by methodological problems (Cole & Rodman, 1987). Their work has not been published in peer-reviewed journals; they do not describe their procedures or methods; they acknowledge having asked different questions of self-care and adult-care children; and they admit to the

possibility of bias in their questioning procedures (Cole & Rodman, 1987; Rodman, Pratto, & Nelson, 1985).

Research Questions

The research questions that were addressed are:

a) Is there a significant difference in frequency of fears between children in self-care arrangements and those in adult-care arrangements?

b) Do the fears of children in self-care arrangements differ qualitatively from those of children in adult-care?

c) Do the fear coping strategies employed by children in self-care arrangements differ qualitatively from those of children in adult-care?

d) Are there identifiable aspects of the self-care arrangement, such as telephone access, companionship of friends, presence of siblings, and presence of pets that are associated with reduction in fear frequencies?

Overview of Research Design

This study focused in detail on the issues of children's fears and coping methods, and compared self-care and adult-care children on the frequency with which they report experiencing fears, on the types of fears that they report having, and on the coping strategies they utilize to combat the fears.

This study was designed to analyze responses to the same set of questions about fear that were asked of 72 matched pairs of self-care and adult-care children. The data were collected in a study carried out by Rodman and Stewart and partially supported by funds from the William T. Grant Foundation. The children were matched on age, sex, race, family composition, and SES.

Fears were assigned to one of several fear categories that have been developed through a review of the literature on children's fears. The resultant distribution of fears of self-care children was compared with a similarly derived distribution of fears for adult-care children. The chi-square test was used to identify any statistically significant discrepancies in the two fear distributions. Any types of fears which are over-represented for self-care children as compared to adult-care children can be readily identified using this procedure.

Categories of coping strategies have been developed through a review of the relevant literature. Each coping strategy reported by one of the sample children was assigned to an appropriate category. The resultant distribution of coping strategies used by self-care children was compared with a similarly derived distribution of coping strategies used by adult-care children. The chi-square test was used to identify any statistically significant discrepancies in the two distributions of coping methods. Any category of coping strategies which was over-represented by self-care children as compared with their adult-care counterparts was reported and discussed.

In order to test whether or not self-care children report a higher frequency of fear experiences than adult-care children, a matched pairs difference of means t test was utilized.

Significance of the Study

The population of self-care children has experienced rapid growth in correspondence with the increased employment of women in the workforce. Now most single parents are employed, as are most dual parents, and many children are allowed to care for themselves at home or to care for younger siblings. Some

parents use self-care out of necessity and some use it because they and their children view self-care as a desirable option.

In some quarters, including presentations before legislative committees, such as the House Committee on Education and Labor, and the Senate Committee on Labor and Human Resources, it is being assumed that the self-care arrangement is a social problem and represents a serious danger for children and their families (Flynn & Rodman, in press). There is little research evidence to support this assumption. The limited research evidence on fears of latchkey children is mixed.

In contrast to the findings reported by the Longs (1981), Galambos and Garbarino (1983) found no difference in fear level between self-care and adult-care children in their study of children from more affluent and rural neighborhoods. The present research evidence is inadequate to assess the actual risks of the self-care arrangement, including the possible presence of "excessive" fears, because researchers have just begun to study the effects on latchkey children (Robinson, Rowland, & Coleman, 1986).

In summary, the fears of self-care (latchkey) children have become an issue of national concern. A few researchers have raised the alarm about dire consequences that are said to plague one third or more of latchkey children (Long & Long, 1983). One of these dire consequences is said to be excessive fears. This study will focus in detail on the issues of children's fears and coping methods. It will compare self-care and adult-care children on the frequency with which they report experiencing fear, on the types of fear that they experience, and on how they cope with fear.

Although this study may not clear up the controversy about self-care children's fears, it is the first attempt to investigate empirically the topic by using a standardized questionnaire on a matched sample of self-care and adult-care children. It is also the first attempt to test several hypotheses comparing self-care children's fears with adult-care children's fears.

CHAPTER II

REVIEW OF THE LITERATURE

In the absence of existing research on the fears of self-care children, selected aspects of the literatures on latchkey children, children's fears, and children's fear coping methods will be reviewed. The fear typologies and coping method typologies of researchers were reviewed to identify appropriate categories for inclusion in the present study's classification schemes.

Critique of Research on Latchkey Children

Many researchers reviewing the literature have found the few existing studies on latchkey children to lack generalizability (Robinson, Rowland, & Coleman, 1986; Rodman & Pratto, 1986). One reason for the lack of generalizability is that definitions used for latchkey status have not been uniform. For example, Powers and Anderson (1986) use the term "latchkey" for sibling care arrangements and the term "self-care" for children who are strictly alone, but others do not make that distinction. In addition, characteristics such as neighborhood type, socio-economic level, race, and religion differ among subjects utilized in various studies. Many samples included a predominance of one race (Long & Long, 1981; Woods, 1972), or of one type of neighborhood within one geographic region (Woods, 1972; Galambos & Garbarino, 1983; Long & Long, 1981).

The major empirical research studies that have addressed the issue of fears of latchkey children are those of Long and Long (1981) and Galambos and Garbarino

(1983). These studies suffer from methodological problems that pose threats to both internal validity and to generalizability (Rodman, Pratto, & Nelson, 1985). Neither Long and Long (1981) nor Galambos and Garbarino (1983) studied representative samples of children. The children in the Long and Long (1981) study were from urban neighborhoods; those in the Galambos and Garbarino (1983) study lived in strictly rural regions. These studies produced different results. The Longs reported high levels of fear among self-care children. Galambos and Garbarino, however, found no difference in fear level between self-care and adult-care children in their study of white, middle-class children in rural or affluent suburban settings. In reviewing these two studies, Robinson, Rowland, and Coleman (1986) suggest that the environmental context can make a difference in fear levels.

The Long and Long (1981) study involved a thirty minute semi-structured interview of black, parochial, elementary school children. The sample sizes were small, including only 53 latchkey children and 32 children continually supervised by an adult. Study results were reported as a compilation of anecdotal data with occasional proportions cited. For example, in the seventh conclusion, Long and Long (1981, p. 24) stated that "Children who routinely stay home alone run at least one chance in three of developing substantial fear responses including recurring nightmares, fear of noises, the dark, and elevated concern for personal safety including fear of fires and especially of intruders." They did not suggest that such concerns might only be applicable to children from predominantly black, urban areas. No methodology was presented to indicate how the risk factor of one in three was derived.

The conclusions of the Long and Long (1981) study had widespread implications for parents contemplating use of self-care, as the study received extensive media coverage, in spite of numerous methodological problems (Rodman, Pratto, & Nelson, 1985; Rowland, Coleman, & Robinson, 1986). Among other things, no matching was done, and the "authors acknowledge a lack of precision and possible interviewer bias" (Rodman, Pratto, & Nelson, 1985, p. 414). The study sample was comprised of children enrolled in an all-black parochial school in Washington, D.C. The fact that parents paid a tuition of nearly $1000 per year for each child enrolled, and that most families were Catholic, is indicative of the specialized nature of this urban sample population. No demographic information was reported; no information is presented on the safety of the neighborhood in which the children lived; nor is there any information on the support systems within the child's family, school, or neighborhood.

The lack of any reported statistical significance in the findings limits its utility. For example, the authors reported finding "no difference in the average amount of time a child in third grade was left unsupervised as compared with a sixth grader." Because a total of only 53 latchkey children were included, and because this total is broken down by grade level, the comparison may be based on such small sample sizes of third and sixth graders that it would not likely yield any statistically significant differences.

One of the most striking omissions is information about the methodology used to evaluate levels of fear. Namely, what criterion was used to establish a "high-fear" rating versus a "low-fear" rating, or a "moderate-fear" rating? The

authors do not provide any operational definitions and much of the data presented is anecdotal.

The publication of the Longs' findings fueled the growing public and professional concern about negative effects of self-care arrangements (Rodman, 1985; Turkington, 1983). Rodman, Pratto, and Nelson (1985) consider these concerns premature and possibly unwarranted, as they run ahead of the available evidence. The dangers associated with overgeneralizing the risks of the self-care arrangement are that alternative care arrangements may be employed inappropriately. For some children, self-care promotes responsibility and is beneficial (Gallogly, 1985; Rodman, 1985; Stroman & Duff, 1982), whereas under other circumstances it is inadvisable, and may in fact promote fear and anxiety (Long & Long, 1981; Rodman, 1985). But the need for appropriate after-school care is too important to base decisions on anecdotal evidence about the presumed negative consequences of the self-care arrangement.

The Longs' study presents us with many more questions than it answers. Their findings must be viewed as preliminary, and the research questions require further investigation. Practitioners and advocates of after-school care need to be aware that the conclusions from their study may only be applicable to an urban black population, and that further research is needed for verification.

In spite of its many shortcomings, the Longs' study was an important one, as it was among the first empirical studies to be conducted on latchkey children. After publication of The Handbook for Latchkey Children and their Parents (1983), the authors were frequently cited by journalists about the dangers of latchkey care

("Helping Latchkey," 1985; Long, Long, & Huff, 1982; Merrill, 1984; Robinson, 1983; Wellborn, 1981). Their dedicated pioneering efforts and their emphasis on dissemination have made the public more aware of the potential dangers of latchkey care and, as a result, more alternative after-school care programs have been developed. They have also inspired more researchers to conduct studies on self-care to refute or substantiate their claims.

The only other major published study which has compared levels of fear in self-care and adult-care children (Galambos & Garbarino, 1983) studied older children, fifth- and seventh- graders from a rural neighborhood. They found no significant differences between groups on any measure studied, including the amount of fear reported.

The mail survey of parents of third-, fifth-, and seventh- graders utilized by Galambos and Garbarino (1983) had a 33% return rate. The children to be studied were then selected on the basis of reported child care arrangements. Because of a "virtual absence" of reported use of a latchkey arrangement among parents of third-graders, only fifth- and seventh-graders were included in the study (Galambos & Garbarino, 1983, p. 4). The lack of response to the survey by parents of third-graders may be indicative of the presence of a non-response bias in reporting use of self-care for younger children, or it may be due to the fact that it was rarely used by these parents.

Because few details of the analysis methods were included, the conclusion that "latchkey children performed no differently in school than did non-latchkey children, nor were they more fearful of being outside alone" is difficult to evaluate.

Lack of statistical significance may stem from the small number of latchkey children (21) in the sample or from some other aspect of the methods used in the study.

The final conclusions of Galambos and Garbarino (1983, p. 40) are nevertheless relevant for the study of fears of latchkey children. They state that "the results of the study suggest that in a rural area that is relatively crime-free, latchkey children are not any more or less socially and academically adjusted and fearful than children who are regularly supervised by an adult." The authors suggest that there appear to be community differences with respect to a latchkey child's response to a situation. They cite such variables as presence of social support systems, cohesion, and stability as characteristic of an ideal environment for a latchkey child, regardless of whether the neighborhood is urban or rural.

The discrepancy in the results reported on fear in these two studies may be due to a number of factors related to methodology or samples utilized. There were substantial age and environmental differences in the two samples: The Longs' (1981, 1983) research was conducted with elementary school children who lived in a relatively threatening urban environment. Galambos and Garbarino (1983), however, conducted their research in a safe, rural setting on fifth- and seventh-graders. Thus it is understandable that Galambos and Garbarino (1983) found no significant differences between self-care and adult-care groups in fear level or in academic achievement and social adjustment. They concluded that the context or neighborhood in which the unsupervised child lives may have an important influence on how well the child is able to adjust to the latchkey situation. Depending upon the type of emotional climate to which the child is exposed in the home and

neighborhood, they suggested that some children will thrive on the opportunity of being a latchkey child, others will just manage to cope, and still others will be harmed.

Several findings reported in the literature will be further investigated in the current study. For example, Long and Long (1981, pp. 24-25) stated that the "fear responses for those latchkey children being cared for by a sibling was markedly less than for children at home alone." They also concluded that "Fear responses can be reduced by providing a pet for the child" (p. 25). Although not a major focus of this study, the part played by siblings and pets in alleviating fear will be explored.

Research indicates that children may experience fear when left alone, irrespective of their regular after-school care arrangement. In particular, the research results reported by Zill, Gravaeus, and Woyshner (1977) indicates the frequent presence of incidents of fear among children aged 7 to 11, when left at home without an adult:

> As part of the National Survey of Children conducted by researchers at Temple University in 1976, 2,258 boys and girls aged 7 to 11 were asked if they were worried when they had to stay at home without a grown-up to watch them. Thirty-two percent of the boys and 41% of the girls replied "Yes." Fifteen percent of these children reported that they worried "a lot" and 13% said that they were frequently scared. When these same children were asked which of several possibilities made them feel afraid, the issue most frequently identified was that somebody bad might get into their house (62% of the boys and 75% of the girls.) (Zill, Gravaeus, & Woyshner, 1977, pp. 12-13).

Jersild and Holmes (1935), in their classic observational study of children's fears, reported an average fear incidence of one fear every four and a half days. The children studied, however, did live in a protected environment. Also, this study

was conducted primarily on preschool-age children, although the sample included some children as old as eight years of age.

Jersild and Holmes (1935) conducted additional research on childhood fears, as reported from recall by 303 adults. The subjects were asked not only to describe their earliest recalled fear, but also to recollect the age at which each of their reported fears first appeared. These subjects reported fear of the dark as the most intense fear recalled, followed closely by fear of animals. Fears under the heading of "failure, personal inadequacy, ridicule, and appearing or performing before others" constituted the third largest group of most intense fears. Fear of danger of an accident or injury was the fourth largest, and the remaining fears were widely scattered among the remaining categories. Thirty-four percent of the reported fears still persisted at the time when the subjects wrote their reports. These fears were (in order of prominence): fear of animals, fear of harm or injury through accidents or fighting, fear of failure, inadequacy, and appearing or performing in public, fear of the dark, and fear of high places and of falling. Fears may have changed in the interim, aside from the introduction of TV. However, this report is indicative of the kinds of fears one might expect to occur without the publicity given to crimes or the frequent exposure that children now get to violence in the media.

A major focus of the current study is the relative amount of different types of fear among self-care children and the ways in which they cope with fear. Included in the study is a literature review of normal childhood fears for children in first through sixth grades. Also included is a brief account of some of the ways that fears are acquired or reinforced.

The Nature and Distribution of Children's Fears

Normal children have a surprisingly large number of fears (Barrios, Hartmann, & Shigetomi, 1981). Investigating a large sample of 6- through 12-year-old children, LaPouse & Monk (1959) indicated that 43% of the mothers of the sample children reported having children with seven or more fears. The results of a smaller validation sample further indicated that maternal reports may underestimate the prevalence of their children's fears. When compared to the children's own reports, mothers underreported the number of their children's fears and anxieties by 41%.

Wolman (1978) reported 53 different fears of children in middle childhood. He distinguished between rational and irrational fears. He considered as irrational any fear stemming from unnecessary fanning of the imagination, which has not withstood reality testing. He listed as irrational the fear of supernatural beings, omnipotent burglars and kidnappers, bogeymen, and other imaginary creatures. In particular, he cited scary TV programs that elicit morbid, irrational fears as potentially having an adverse affect on the child's mental health. In contrast he listed common rational fears that are related to truly dangerous things: big dogs, snakes, serious injury, surgery, loss of parents, or loss of parents' love.

Sarafino (1986) suggested that, in general, fears are less problematic if they result from specific unpleasant prior experiences and if they are isolated, rather than part of an overall pattern of fearfulness or personality disorder. This corresponds with the distinction that Wolman (1978) made between rational and irrational fears

using reality testing. Sarafino (1986, p. 16) suggests the following criterion for

viewing a fear as a problem:

> Whether or not a child's reaction should be considered a "problem" is
> determined by the intensity of the fear response, the degree of real danger,
> how persistent the fear has been, and the extent to which the reaction
> interferes with normal physical, social, and intellectual growth.
> Underreacting by not perceiving a dangerous situation as threatening can be
> as much of a problem as overreacting.

Kellerman (1981) distinguished "normal" fear from fear that poses a true

psychological problem by using the criterion of "life disruption." To what extent is

the fear disruptive to the child's normal functioning at home, at school, or when

interacting with peers? Furthermore, he considered fear as problematic only if it

was also persistent, as children normally go through temporary periods of

fearfulness. Kellerman made no distinction between "normal" fears and those

considered as "phobias", which are unrealistic and out of proportion to actual

danger.

Sarafino (1986) defines "phobias" as intense and irrational fears that are

directly associated with specific events and situations. Because children often do

not understand the difference between fantasy and reality, there is really no such

thing as an irrational fear for them. It is the tendency for fearful associations to

proliferate and become generalized to other circumstances that is problematic.

Sometimes these fears result from coincidental associations, which then form the

basis for superstitions to develop. Then the fears are reinforced by the children's

fertile imaginations and vivid fantasy life. These generalized associations become

particularly disturbing when they spread over time to new objects--leading the child

to become fearful of entire classes of stimuli. Each avoidance of a feared stimulus

then serves to reinforce the fear and makes the fear harder to extinguish. While the initial development of such fears may be inevitable, the timely treatment of them helps to ensure their riddance.

Jersild and Holmes (1935) cited the problem of preventing and overcoming fear as inseparable from the utility of fear. They cited benefits that may be derived even from fears that seem to be founded on superstition or on some experience that is unlikely to recur. The fear may serve as an irritant that promotes constructive achievements. Lewis and Rosenblum (1974) also recommended more research to determine the functional role of fear, suggesting in particular that fear has an appeasement function, facilitates aggression, and elicits avoidance. It is difficult to discern which fears are permanently hurtful and which may ultimately serve to promote personality development.

Kellerman (1981) also addressed the protective value of fear. He stated that the vast majority of childhood fears are learned, and therefore are subject to unlearning. He spoke of fear as being children's first line of defense. By increasing awareness of the environment, children learn what is safe and what must be avoided. Some of this occurs as children experience the consequences of their behavior, while other learning is acquired through observing the words and actions of others. Such messages as, "Don't talk to strangers," or "Look both ways before crossing the street," are integrated into the child's view of the world. Growing children are increasingly expected to look out for themselves. Learning to be afraid of certain circumstances is a first step in defending oneself. Children can use the energy derived from the fear reaction to either confront the fearful stimulus (fight)

or run from it (flight). Thus fear exists for a good reason and the types of fears that children experience at different stages of growth are often intimately connected with their particular psychological and physical needs.

The literature on childhood fears consistently indicates that girls are more fearful than boys (Kellerman, 1981; Manosevitz & Lanyon, 1965; Scherer & Nakamura, 1968). Kellerman (1981) questions whether the tendency for girls to be more fearful stems from an inborn difference between the sexes, or whether boys may be equally fearful but have learned not to admit fear. Jersild and Holmes (1935) found no substantial differences between the sexes in number of fears or amount of fearfulness.

Schwartz and Johnson (1985, p. 198) summarized fear prevalence as follows:

> Mild fears are common in childhood. They are often age or stage specific and are frequently transient in nature, disappearing with the passage of time without benefit of treatment. The expression of such fears is a normal aspect of development.

Coping Methods Children Use to Dispel Fear

A major fear coping method that children use routinely is escape and avoidance. Children in fear try to do something to prevent or reduce its unpleasant sensation. Often this involves avoidance. Sometimes the avoidance method is masked by the children's claiming not to "like" the fearful situation. Coping with social situations involving a fear of failure or ridicule often involves avoidance behavior or withdrawal. Children can then excuse themselves by rationalizing that "it's not really a failure if you don't try." Such avoidance behavior is counterproductive to overcoming the fear and developing the social skill. Children

need to learn how to face the fears successfully to gain a sense of control over them.

A second problem with avoiding fearful situations is that sometimes the avoidance behavior can get worse and become more disruptive to the normal routine of living. Although initially unpleasant, the fear may be further reinforced by some secondary gains, which are side effects associated with treating the fear. A common side effect is increased parental attention given to help children cope with their fears. Coping responses associated with a positive payoff and including some additional considerations as secondary gains would tend to prolong fears, rather than extinguish them. Instead, coping mechanisms which enable children to gain more control over their fears promote the successful interaction of children with their environment and more self-confidence.

The coping mechanism that is most dysfunctional is one which serves to prolong the fear or, even worse, to generalize its association to other stimuli. In particular, when a secondary gain is produced which has caused the fearful behavior to last longer than necessary, a chronic fear pattern is established. A chronic fear usually results from the prolonging of a learned fear that was perpetuated by a positive payoff. The coping mechanisms utilized to handle the fears are as important to study as are the fears themselves.

Kellerman (1981, p. 57) stated that children are "their own best therapists", as they are often adept at helping themselves deal with fear. In particular, the practice of repeated viewing of a scary movie or video is a natural form of desensitization commonly utilized by children. Children gain control at their own

pace by viewing the same scary movie repeatedly. The second or third time through, children may be more prepared and in control than they were in viewing the scary scenes initially. The elements of surprise are thereby brought under control.

Another method by which children may gain control over their fears is through reducing their dependency upon others. The dependency of children on adults, in varying degrees, for emotional support, food, housing, clothing, and approval makes them more vulnerable to the world and to fear (Wood, 1976). Wood suggested that the more control children take over their own lives, and the more authority of their own they exert, the less fearful of others they become.

Sarafino (1986) reported that development of a strong self-concept can help to "immunize" children against many childhood fears. Thus children who have confidence in their ability to master and control events and challenges are thought to be less vulnerable to fear. To the extent that self-care fosters such development of mastery and control, it may serve to lessen fearfulness.

Sources of Children's Fears

The much quoted study by Jersild and Holmes (1935) investigated causes of fears as recalled from childhood. Of particular interest is the large number of fears attributed to threats, warnings, and tales told to the child by others. One extreme example cited was that of the inducement of fear of the dark when a child was locked into a dark cellar by his parents for "crying too loud and too long about nothing." Instances were also given of parents or teachers producing fear by threatening to inflict unusually severe punishment. As an illustration, one boy at

age eight was threatened by a teacher that she would put the children in a dark cellar filled with vicious rats and keep them locked inside overnight. Another boy reported that his most intense fear, a fear of policemen, was encouraged by his mother who, knowing of his fear, would pretend to call a policeman. The prevailing characteristic in these accounts is the use of an appeal to fear as a means of disciplining the child through intimidation. Thus it was found that adults as well as other children frequently play upon a child's fears, sometimes inadvertently or for amusement, and sometimes to serve an ulterior purpose.

Conflicting evidence abounds in the children's fear literature on the ages at which fears emerge and disappear. Apparently, this emergence is dependent upon the child's environment, temperament, and experiences. Many researchers state that the types of fears that children have are related to their age (Graziano, DeGiovanni, & Garcia, 1979; Sarafino, 1984; Scherer & Nakamura, 1968). One reason for this is that the experiences children have change as they grow older. As children grow older, their range of fears grows wider and they acquire the ability to dwell on the past and to anticipate the future. Thus, many of their fears will become anticipatory. This observation is substantiated by studies reviewed by Scherer and Nakamura (1968) and by Graziano, DeGiovanni, and Garcia (1979). The most consistent trends noted are an age-related decline in fear of animals (Angelino, Dollins, & Mech, 1956; Bauer, 1976; Maurer, 1965) and in fears of the dark or of imaginary creatures (Bauer, 1976; Maurer, 1965), and an age-related increase in school and social fears (Angelino, Dollins, & Mech, 1956; LaPouse & Monk, 1959).

Many fears of middle childhood had their origins in early childhood. As children enter the primary grades, Wolman (1978) reported that there is a decline in fears related to certain forms of bodily safety and in fears of dogs, noises, darkness, and storms. However, he reported no significant decline in fears of supernatural forces, such as ghosts and witches. He found most of the new fears to be related to school and family, including fears of ridicule, failure, disapproval, and rejection by parents, teachers, and peers. Another common worry that emerges in middle childhood is concern for parents' health and family well-being. Wolman (1978) reported that parents themselves greatly contribute to the emerging of these fears by inappropriately relating their own fears and concerns to children or by threatening that something bad may happen to the children if they do not comply with their parents' orders. Another fear reported as common for this age is that of fears of violence or severe illness, such as being hurt, poisoned, kidnapped, or having to undergo surgery (Sarafino, 1986; Wolman, 1978). These fears are often related to the fear of being abandoned by parents through the death of one of them or through divorce. Between six and ten years of age, children show a gradual increase in their understanding that death is final and that it involves an absence of bodily functions. This realization reinforces the fear of being permanently abandoned, especially by a parent. All of these types of fears are considered as typical of normal childhood.

Another major way in which children acquire fears is through direct experience with negative events (Sarafino, 1986). Sometimes parents are instrumental in the development of fear in children by using excessive or

inappropriate forms of punishment. Children are quite reasonably frightened by intense physical pain and by some other punitive methods, such as locking them in a dark closet or telling them that they will be given away. Virtually all parents use punishment at some time or other that frightens their children.

Derevensky (1974) proposed that many of the fears that children have are environmentally induced and are probably taught to them by parents, teachers, and through experience. He stated that the high inner city crime rate appears to have a direct effect upon what children fear. He concluded that the common assumption made by parents that most fears are unwarranted seems to be mistaken. In a classic, earlier study, Jersild and Holmes (1935) came to a similar conclusion and supported it with numerous illustrations. Wood (1976) also reported that the fears of our children, as well as our own fears, are becoming more "civilized", more urban, and more interpersonal.

A frequent source of children's fears is their own imagination, and often this is fed by the stories they see on TV and movies. Sarafino (1986) reported that children generally watch between 15 and 25 hours of TV per week. Fears are learned through observation as children see models of fearful behavior in many different situations.

Television is a particularly insidious source of fears, as it may instigate some of the more aberrant or unrealistic fears (Heath & Petraitis, 1987). Television is noted for its presentation of many novel, unrealistic, and exaggerated situations that can frighten impressionable children. Often it exaggerates the threat of danger by portraying real, but highly unlikely, possibilities. The many crime programs, with

gangsters, murderers, and violence, make children fearful of criminal attack. The frequent violence inflicted upon innocent victims may suggest to children that such danger is likely and perhaps unavoidable. Also the publicity of murders, robberies, and arson in the newspapers, magazines, and TV news programs confirms this exaggerated belief.

Another exaggeration on TV or the movies occurs when animals and insects are portrayed as vicious creatures that sometimes conspire to attack humans. Movies such as Jaws, Raiders of the Lost Ark, The Swarm, or The Birds are examples that had widespread impact on adults as well as children. It was reported that people stayed out of the water in unprecedented numbers during the summer that Jaws was playing in theaters (Sarafino, 1986). Both adults and children were afraid of being attacked, dismembered, and killed by marauding sharks.

Another way that children learn fears is from the warnings that people give them. Sometimes these warnings are deliberately designed to frighten the child into compliance with a demand. A parent might warn a child, "If you don't eat your dinner, you'll get sick and the doctor will have to give you a shot."

From these accounts it is evident that fears may have many sources, and attributing a particular fear to one situation, such as the self-care arrangement, may be inaccurate. Also, the source of fears is but one of several factors that determine what fear is present in children's lives.

Fear Classification Strategies

According to Schwartz and Johnson (1985), one obstacle to the study of childhood fears has been the absence of any meaningful classification system.

Scherer and Nakamura (1968) reported that prior to 1968, individual fear items had been classified on the basis of conceptual groupings of related fears (e.g., classical phobias, social interactions, noises, etc.). For example, Manosevitz and Lanyon (1965), who gave a fear checklist to college students, used the same fear classification system as Wolpe and Lang (1964). The six classifications and the number of items Manosevitz and Lanyon (1965) placed in each class are: Animal, 10; Tissue damage, illness, death, or associated stimuli, 24; Classical phobias, 21; Social or interpersonal, 30; Noises, 4; and Miscellaneous, 9.

Scherer and Nakamura (1968) were the first to report use of factor analysis to group fears into clusters, which they suggested may prove useful in developing and refining pencil-and-paper measures of fear and anxiety beyond conceptual or logical groupings. Using a sample of 263 boys, ages 6 to 12, they derived the following factors for their fear subscale: 1) fear of failure or criticism, 2) major fears, 3) minor fears of travel, 4) medical fears, 5) fear of death (including guns, getting sick, break-ins), 6) fear of the dark, 7) home/school fears, 8) miscellaneous. The fear subscales of failure, medical, and miscellaneous were interrelated, as were the subscales of major, death, and home/school fears.

Problems arose in assigning specific fears to the categories derived through factor analysis. Scherer and Nakamura (1968) point out that although an effort was made to place an item on only one factor, if an item loading was relatively equal on two factors, the item was placed on both factors. As they acknowledge, this led to the clustering of items which did not have an easily discernible logical relationship. For example, one cluster analysis of fears identified a factor which

was labeled "failure or criticism", and which included such diverse items as elevators, dogs, nightmares, getting a cut or injury, being criticized, and taking a test. Excessive diversity among the items comprising clusters is often a problem of factor analytic studies. The illustration is one example of illogically formed clusters that was noted by the authors.

Miller, Barrett, Hampe, and Noble (1972) published the second factor analysis in the fear literature. Instead of using children's self-report ratings as did Scherer and Nakamura (1968), they used parent ratings on a fear inventory. The ratings were made on 179 children, ranging in age from 6 to 16. The three factors extracted were fear of 1) physical injury based on societal or man-made dangers, including loss of family member, 2) natural and supernatural dangers, including the dark, and 3) psychic stress, such as fear of making mistakes, being criticized, or being separated from parents.

Miller, Barrett, Hampe, and Noble (1972, p. 267) noted "remarkable similarity" between their parent-rating factors and the child-rating factors obtained by Scherer and Nakamura (1968). They indicated that the three factors of Scherer and Nakamura, major fears, minor fears, and death, all fell within the domain of their physical injury factor. The two Scherer and Nakamura factors, criticism and home/school, corresponded to their psychic stress factor. They stated that the Scherer and Nakamura fear of the dark factor was one component of their natural events factor. They attributed any differences in findings to discrepancies in type of rotation and number of extracted factors, rather than to differences between parent and child raters. The authors proposed that the results of their analysis, with the

addition of a miscellaneous category, serve as a basis for the classification of childhood fears.

Based upon information from previous research, Derevensky (1974) predicted the following percentages of responses: Animals, 30%; People, 16%; Dark, 5%; Spooks, 6%; Natural hazards/heights/speeds, 22%; Miscellaneous (including "alone" and death and injury), 20%. Except for the inclusion of alone and death/injury in the miscellaneous category, this typology is very similar to the one proposed for this study. Derevensky (1974, p. 20) reported that 68% of the animal responses could be considered as "real" fears for children tested within the study. The other 32% of the animal responses were considered as "less real", since they involved fears of caged animals that posed no real threat to the child's personal safety. Derevensky (1974) found that responses in the category "people" appeared to reflect current crime rates. Fear of death and personal injury was the predominant response within the miscellaneous category, with "war" getting more responses than any of the others. Derevensky (1974) reported that fear of the dark did not seem to occur until the ages of nine and ten, and then it increased considerably for children eleven and twelve. Derevensky (1974) also felt that the responses in the category "Dark" were related to the fear of being attacked by people in the dark, and not fear of the dark per se. Fear of spooks or the supernatural was highest at age six and gradually disappeared by ages eleven and twelve. In direct opposition to this finding, Jersild and Holmes (1935) reported that fear of the dark and of imaginary creatures associated with the dark showed an increase with age. Most studies show an overall decline in the number of fears and a change in fear type from immediate,

tangible fears to anticipatory, less tangible fears with increasing age (Scherer & Nakamura, 1968).

<center>Development of a Typology for Children's Fears</center>

In reviewing the literature on fear typologies, six general categories were identified as common to most studies. Briefly, these are animals, people, dark, spooks, natural hazards, and miscellaneous. When the miscellaneous categories were subdivided into component fear areas, two other fear types of particular relevance to the current study emerged: fear of being alone and fear of death and injury. Except for clarifications of definition and nomenclature, these are essentially the basic eight fear categories utilized for the current study.

Sipes, Rardin, and Fitzgerald (1985), in a study done on 2,728 ninth-graders, reported the percentage distribution of fears obtained in one fear typology. After combining some similar categories to better correspond with those proposed in the current study, the distribution of fears reported by Sipes, Rardin, and Fitzgerald is: People/social, 15%; Death/violence/physical injury, 5%; Spooks/imaginary creatures/dreams, 18%; Alone/separation or loss of others, 15%; Animals/insects, 15%; Natural hazards/war/disasters/heights/speed, 11%; Dark, 19%; Miscellaneous, 5%; (Total, 103%, due to rounding). This was the typology that was initially adopted for the fear analyses in the present study.

There is both consistency and diversity in the fear categories reported in the literature. The fear categories most consistently used in the literature and which are commonly attributed to latchkey children were utilized for the current study. The eight dimensions of fear formulated for the present study are compatible with those

derived through factor analysis by Scherer and Nakamura (1968) and by Miller, Barrett, Hampe, and Noble (1972). Derevensky (1974) used the same categories as Maurer (1965) to determine if the fears of children previously reported were still being experienced. Most of these categories were similar to those used by Sipes, Rardin, and Fitzgerald (1985), in which 2728 ninth graders wrote essays on the cause of their greatest fright and how they reacted to fear. Since, conceptually, the current study questions most closely resemble the open-ended ones used by Sipes, Rardin, and Fitzgerald (1985), their typology was also considered to be the most appropriate one to use for the present study. The major difference between this typology and that of the frequently cited research of Derevensky (1974) and Maurer (1965) is that Sipes, Rardin, and Fitzgerald include those fears related to death or injury by violence in one category and those of man-made gadgets in the category of natural hazards and accidental harm. Derevensky (1974) and Maurer (1965), instead, use a classification called "machinery" for both types of fears of injury.

Sarafino (1986) cited the most common fears among primary school age children. These are animals/insects, dark, death/separation/injury, doctors/dentists, heights, monsters, imaginary creatures, nightmares, school/teachers/classmates, storms/natural events, and deep water. By combining monsters, imaginary creatures, dark, and nightmares into one category, and heights, storms/natural events, and deep water into another category, a typology of fears similar to that utilized in this study can be derived. Because the fear of being alone or separated from a family member is of particular interest in this study of self-care and adult-care children, it

was not grouped with the category of death and injury fears, but was retained as a distinct category.

Review of Coping Methods Typologies

The work by Jersild and Holmes (1935) is still a major source for current studies of methods of coping with fear. They used the following categories in tabulating and tallying reports of methods by means of which subjects overcame or coped with their childhood fears:

a) Overcame fear via internal changes involving added experience, growth, information, rationalization, self-reasoning, or successful encounter with the feared event.

b) Overcame fear through non-personal counteracting forces (e.g., with extra work, subject fell asleep before having time to experience fear).

c) Overcame fear through influences exerted by others (including parents, other adults, and playmates).

d) Avoidance or removal of fear stimulus.

e) Natural dissipation of temporary fear, elicited only in response to a temporary episode.

f) Fear tolerated but not overcome.

Jersild and Holmes (1935) reported that few fears were overcome through the direct assistance of other people. Instead, they found that coping with fears tended to be primarily a private battle. They also observed that the chief factor in overcoming fear is the increase in ability and experience that comes with growth and development and the increase in information and skill that comes in the course

of normal daily life, as distinct from especially planned ways adopted by children or their elders in an effort to combat fear. Irrespective of coping strategies, some fears subsided or changed in the natural process of growth, while others persisted into the adult years.

Mooney (1985) reported results of frequencies found for coping strategies used among 21 children who were fearful during the night. In spite of the small sample size and his use of a checklist methodology for data collection, the frequencies obtained are consistent with those reported by Sipes, Rardin, and Fitzgerald (1985), who asked open-ended questions. The only difference is the absence of the category "in vivo desensitization/flooding" in Mooney's study. Sipes, Rardin, and Fitzgerald (1985) reported that 22% of their ninth-grade subjects, who described coping strategies used to permanently overcome their fears, fell into this category. Because ninth-graders are older than the children of the current study and might therefore have more sophisticated coping skills, only the five categories used by Mooney (1985) and Mooney, Graziano, and Katz (1985) will be included in the current study. All of the original nine proposed by Sipes, Rardin, and Fitzgerald (1985) are included in the current study if the categories "Animals" and "Miscellaneous" are equated to "Inanimate objects" and if the three categories-- "Destroy", "Took control", and "Escape"--are all equated to "Avoidance or escape".

After combining these categories, the frequencies reported by Sipes, Rardin, and Fitzgerald (1985) are as follows: Reason/Age, 55%; People, 8%; Animals/Miscellaneous, 2%; Prayer to God, 2%; Destroy/Took control/Escape, 11%; In vivo desensitization/flooding, 22%. The largest category, "Reason/Age", is

indicative of the fact that the most likely way a child overcomes fear is through reasoning or growing up. The only other coping strategy which was employed by a substantial number of respondents was "In vivo desensitization/flooding." This category includes strategies used by children in which they deal with their fear through directly confronting or exposing themselves to the feared object or situation until they no longer experience the fear associated with it. These data were collected using open-ended questions regarding coping strategy employed to overcome the greatest fright the child had when young.

The typology of coping methods proposed for this study is consistent with the typology used by Wilson, Hoffner, and Cantor (1987), who investigated coping strategies used to reduce children's fear induced by mass media programming. The main difference noted is that the category of "prayer", which is included in the current study, was not included among the strategies depicted on the visual checklist presented to the subjects of the Wilson, Hoffner, and Cantor (1987) study. The strategies, which were illustrated with simple line drawings, were: 1) hold onto a blanket or cuddly toy, 2) get something to eat or drink, 3) cover your face, 4) turn off the TV, 5) leave the room, 6) sit by your mom or dad, 7) talk to your mom or dad, and 8) keep telling yourself it's not real. These strategies are more appropriate to the specific task of reducing fear induced by TV or a movie than are the five proposed for the current study. The categories selected for the current study, including that of prayer, are considered to be more appropriate in a comprehensive investigation of fear coping strategies. These categories are internal

self-control, social support, inanimate objects or pets, avoidance or escape, and prayer.

Need for Review of Children's Fear Literature

The primary reason for reviewing the fear literature was to investigate the normal development and evolution of children's fears. The self-care literature includes warnings of fears that linger into adulthood (Long & Long, 1983). The Longs reported that 50% of the adults in their study who had been latchkey children said they were still afraid to be alone and suffered from "latchkey syndrome." This syndrome was characterized by loneliness, boredom, resentment toward parents, increased fears, social isolation, and a trend toward occupations that tend to be oriented around things instead of people. Thomas Long (1983) surmised that a lifetime of fear may be the legacy for latchkey children. They may have sublimated unexplained fears that they suffered as children--fears that, never confronted, have never gone away. In reviewing the fear and coping literature, an attempt was made to identify any conditions known to contribute to retention of some fears beyond their normal longevity.

A second reason for reviewing the fear literature was to discover what amount of fear might be considered excessive. The term "excessive" was used to refer to any fear(s) which inappropriately disrupted children's normal functioning. Any such fear would be considered as problematic only if it is also persistent. Problematic fears should be treated as soon as they are recognized, before they have time to spread and become generalized to other areas. Type of after-school care

arrangement may impact the timing and modality of treatment for children's problematic fears.

Persistent and problematic fears may result more from inadvertent reinforcements on secondary gains associated with treating fears than with the initial stimulus. For example, children who are afraid of the dark may be allowed to come into bed with their parents. In receiving special privileges as a consequence of fearful behavior, children are rewarded for their fears. The recurrence of such fears may become habitual as a means for deriving the secondary gain. These gains may include special treatment, relaxed standards of discipline, avoidance of chores and responsibilities, or increased attention. Thus, fear reinforcers that tend to prolong fears, rather than extinguish or control them, need to be researched, along with the actual fears, their contexts, and fear coping methods.

A third reason for reviewing the literature on children's fears was to obtain a classification scheme for children's fears that would be appropriate for use with children of ages 7 to 12. Ideally, this scheme would incorporate those fears cited by the self-care literature as being more prevalent for children in self-care than for those in adult-care. These include recurrent nightmares and the fears of being alone, noises, rain and thunder, the dark, and intruders (Long & Long, 1981).

A fourth reason for reviewing the fear literature was to investigate how the reported frequency of children's fears differs according to the type of instrument used. The methods of analyses used also differed by the types of data collected. Factor analyses were usually conducted on fear checklist data to generate categories of fears, while self-report data were typically categorized into conceptual groupings

of logically related fears. The fear checklists generally yielded substantially different results from that generated by open-ended self-report questions. The different methodologies used in collecting and analyzing fear data were reviewed along with the classification schemes for categorizing fears.

A final reason for reviewing the fear literature was to come up with some general conclusions about children's fears that are pertinent to children's after-school care arrangements. One possible generalization is that in some areas, children's fears have been found to be related to the current local crime rate. However, such a generalization as this could only explain the higher incidence of one category of fears--that of fear of death or injury by violence--for self-care children. It does not account for why self-care children may have a higher incidence of fears in some other category. Other researchers emphasized other sources of fears. As a whole, the fear literature provided diverse perspectives and insights into the sources and the manifestations of different kinds of specific fears. Many different fear typologies were used in research, so none was ever considered as a standard. Thus, there is little evidence of consensus among researchers on even the basic form children's fears. Because the findings by different researchers focus on different issues and sometimes present conflicting evidence, the research on children's fears would be difficult to summarize. Instead, some of the salient topics on fears of self-care and adult-care children are summarized while needs for future research are recommended.

Hypotheses of the Study

None of the studies reviewed has investigated fear among self-care children as compared with a matched sample of children in adult-care. In this study, both differences in frequencies of fears and in fear content will be analyzed statistically. Moreover, none of the published studies has investigated strategies for coping with fears among self-care children by comparing them with the strategies used by a matched sample of children in adult-care. Such a comparison in the distribution of coping behaviors will be examined statistically in this study.

The study involves three phases. Phase one involves testing of the hypotheses. The second phase involves exploration of the significant results obtained in the first phase. Phase three examines which variables are associated with the amount of fear reported.

Phase I. Hypotheses to be Tested

While there might be some reason to suspect that self-care children would report more fear than adult-care children, there is very little information available in the literature on the nature of the fears or fear coping strategies of self-care or adult-care children. Therefore no predictions were made about differences between the two groups of children, and the following null hypotheses were tested:

1) There is no difference between self-care children and adult-care children in the frequencies with which they report feelings of fear.

2) There is no difference between self-care and adult-care children in the types of fears that they experience.

3) There is no difference between self-care and adult-care children in the types of fear coping strategies that they employ.

Phase II. Exploratory Analyses of Significant Results

All significant results obtained in Phase I will be further explored in subsequent analyses to investigate what other variables might be contributing to the differences in fear between adult-care and self-care children. Variables included in the investigation were: age, sex, race, neighborhood, marital status of parent(s), employment status of parent(s), presence of a sibling in the care arrangement, mention of sibling conflict, mention of liking to play with a sibling, a measure of how much the current care arrangement is liked, both the initiating and receiving of telephone calls after school, outside play, going to a friend's house, inviting a friend inside to play, watching TV, the number of chores a child must do, and compliance in chore completion.

Phase III. Analyses of Variables Associated with Fear

Although this was not the major focus of the dissertation, a secondary issue is to determine which variables may influence the amount of fear reported. In this third phase, the influence of a set of independent variables upon three different fear variables was measured. The basic questions for the analyses are as follows:

1) Will this set of independent variables account for a significant amount of the variation in after-school fear?

2) Will this set of independent variables account for a significant amount of the variation in bedtime fear?

3) Will this set of independent variables account for a significant amount of the variation in fear frequency?

The set of independent variables included in the analyses are: age, care group, presence of a sibling, sibling conflict, mention of liking to play with a sibling, a measure of how much the current care arrangement is liked, both the initiating and receiving of telephone calls after school, outside play, going to a friend's house, inviting a friend inside to play, watching TV, the number of chores a child must do, and compliance in chore completion.

CHAPTER III

METHODS AND PROCEDURES

Research Design

This study used a matched sample design to answer the research questions and to test the specific hypotheses. Responses made by 72 matched pairs of self-care and adult-care children to the same set of questions about fear were analyzed. The data were collected in a study carried out by Rodman and Stewart and partially supported by funds from the William T. Grant Foundation. By matching adult-care children and self-care children on critical control variables, such as family composition, neighborhood type, and parents' educational/occupational status, valid measures of differences in fear frequencies and in fear-coping methods can be derived. Some of the variables that have been controlled through matching, such as neighborhood type and race, are thought to influence the amount and type of fears experienced (Robinson, Rowland, & Coleman, 1986).

The use of this design has the following advantages:

a) it controls for some of the variables thought to affect fears, as well as some implicit variables that were automatically included in the matching process. (An example of this might be the heightened sense of independence and lowered sense of self-esteem that often accompanies the experience of being a child in a single parent household, both of which may affect fear frequency),

b) it simplifies statistical analysis and increases statistical power in not having to statistically control for the variables included in the matching, and

c) it makes possible more precise statistical analyses, since the paired t test can be utilized to measure differences in fear frequencies between the two groups.

d) it provides an appropriate comparison group for the qualitative measures of fear and fear coping methods so that discrepancies in frequencies can be identified.

Selection of a Typology for Children's Fears

Currently there exists no standard typology for children's fears, since in the past, normative information about children's fears has largely been limited to overt descriptions of feared objects and situations (Mooney, Graziano, & Katz, 1985). The recent factor analytic research of Mooney, Graziano, and Katz (1985) has derived typologies using fear checklist data, which differs substantially from data collected through open-ended questions. Thus, an appropriate typology that utilizes self-report data from open-ended questions needed to be found or devised.

The following fear typology of eight categories was proposed for this study: animals, people, dark, spooks, natural hazards, being alone, death/injury, and miscellaneous. This fear typology was based on (1) the typologies that are reported in the children's fear literature, (2) the distribution of fear responses given by the children in the present study, and (3) the fears reported in the popular literature to be prevalent among latchkey children. For example, because fear of violence, kidnapping, and break-ins has often been attributed to latchkey children, a separate category dedicated to the fear of death and injury by violence was included, which

was distinguished from fear of injury by natural or man-made hazards. Because it is difficult to distinguish between fear of persons and fear of ridicule by persons, those fears associated with social and interpersonal adjustment were included in the fear of people category.

The fear of being alone, including the loss of others, was established as a separate category for this study. The fear of being alone is a frequently cited fear among children (Wolman, 1978). In the literature, this is associated with fear of separation or loss of others through death or divorce. Sipes, Rardin, and Fitzgerald (1985) have also used the fear of being alone, including loss of others, as a category in their research.

Except for fears that have been cited as being of specific concern to children in self-care, other fears were assigned to categories in accordance with criteria established in the literature on fear. Because of small frequencies obtained for the categories "dark" and "miscellaneous", the few miscellaneous fears were reclassified in the remaining categories, and fear of the dark was combined with fear of spooks, so that statistical analyses could be performed. This is common practice among the fear studies reviewed. The fears included in the miscellaneous category of the research reviewed varied drastically from study to study. Thus the miscellaneous category is one of the least amenable to comparative analysis.

The likelihood ratio chi-square statistic was used to compare the distributions of fears of self-care and adult-care children. The discrepancies detected were reported and discussed.

<u>Selection of a Typology for Children's Fear Coping Methods</u>

The question of whether children in self-care have qualitatively different coping mechanisms for handling their fears than do children in adult-care was investigated by first developing a typology of coping strategies. The five coping methods categories derived from factor analysis by Mooney, Graziano, and Katz (1985) comprise the typology of coping methods selected for this study. The following five categories were thus adopted for use in analyzing the frequency data obtained on coping methods:

1) Internal self-control: without changing environment or circumstances—may include self-talk or realizing there is nothing to fear.

2) Social support: interaction with other people, including vocalizations, such as crying, yelling, or arguing.

3) Inanimate objects or pets: clinging to or hiding under blankets or pillow, or stroking stuffed or live animal.

4) Prayer: includes mention of receiving help from a "Heavenly Being."

5) Avoidance or escape: control over inanimate environment, such as checking under bed, turning on the light, turning TV on or off, getting something to eat or drink, etc.

The frequencies reported for "Inanimate objects" and for "Prayer to God" were low. Prior to analyses it was decided that if the category "Inanimate objects" was too small for use of the chi-square statistic, it would be combined with "Avoidance/escape"; and the "Prayer" category, if too small, would be combined with "Internal self-control". As cell sizes were small, these categories were

combined so that three categories remained in the typology that was statistically analyzed. Differences found between self-care and adult-care fear coping strategies were measured using likelihood ratio chi-square statistics.

This typology provides a means of objectively contrasting coping methods. Because the situational circumstances were not revealed in the children's responses, no judgment could be made as to which coping methods might be considered maladaptive. Thus, those maladaptive coping methods often attributed to the self-care arrangement, such as hiding in a closet or under the bed when a break-in is feared, were classified as avoidance/escape methods.

Qualitative and Quantitative Analyses of Fear Types
and Coping Methods

The open-ended verbatim responses to the fear and coping questions were examined individually. These responses provide the kinds of anecdotal accounts of fears and coping methods that most closely resemble the data reported by the Longs (1983). A discussion of the most dramatic accounts of fears and coping methods reported provides a point of reference for making comparisons with the previously published research from the more popular literature sources. In addition, the percent of fear types and coping methods that were used by children in the two child care groups will be reported. Thus, a better estimate of how serious and widespread is the problem of "excessive" fears among latchkey children can be ascertained, using the matched subjects from the two types of care arrangements.

Reliability

A verbatim transcription of the children's responses to the fear and fear coping questions was recorded during the interview. A fear response list was prepared by enumerating all of the different fear responses given, eliminating any duplications. In this manner 97 different fear responses were listed. The responses to the questions on fear coping methods were similarly recorded and listed, yielding 73 different coping responses. The 97 distinct fear responses and 73 distinct fear coping responses obtained from the fear and coping questions (including the probe questions) are listed in Appendix D. Some of the responses in these lists are similar to others, but because of some extra qualification or variation, a separate response category was designated. In verifying the accuracy of the response lists, each was checked against the verbatim response recorded on the Children's Interview. The final result was a listing of all fears and all fear coping methods mentioned, without any repetitions. These listings were used to assign fears to the six final categories of fears and to the three final categories of fear coping methods.

After the fear and fear coping methods typologies were specified, the researcher assigned each response on the lists to one of the categories. The fears and fear coping methods were assigned to categories in a manner that was blind to the type of care arrangement. The criteria used for determining the categories to which specific fears and fear coping methods belong are presented in Appendix D. The computer was then programmed to make the actual assignments of children's fear and coping responses to the categories.

As a means of checking the reliability of assigning the fears and fear coping methods to categories, a second rater independently assigned the distinct fears and fear coping methods (from the two lists) to the categories of the two typologies, using the written criteria prepared by the researcher. The second rater's assignments were also made blind to any knowledge of the care arrangement group. In fact, the second rater, who holds a master's degree in communication, had not been involved in the study prior to assigning the list of fears and fear coping methods to categories. These assignments were then compared to those made originally, and 90 concordant fear classifications were obtained. In a similar manner, 70 concordant fear coping classifications were obtained.

The observed percentage agreement is operationally defined as the proportion of judgments on which two independent raters agree out of the total number of ratings made (Scott & Wertheimer, 1962). The observed percentage agreement for the fear distribution was computed as 90 divided by 97, which is 93% concordance in fear classifications. Similarly, the observed percentage agreement for fear coping methods was obtained by dividing the 70 concordances by the 73 total coping methods, which yields 96% concordance for fear coping methods classifications. Scott and Wertheimer (1962) suggest that these proportions can be taken as crude measures of interrater agreement for nominal scale judgments, such as are used for the fear and coping categories. But they warn that these measures may be deceptively high if the number of categories in the scale were small or if only a few of the categories were used with any appreciable frequency. In such a case, much of the agreement might be due to chance alone, rather than be indicative of a

reliable measure. Thus the 96% agreement for coping methods may be high because only three final categories were used. Also, the majority of the coping methods responses were classified as belonging to the "Escape/Avoidance" category. Similarly, some fears, such as of dogs, snakes, or scary TV/movies had much larger than average frequencies.

The kappa coefficient (Cohen, 1960), which is generally regarded as the statistic of choice for measuring agreement on nominal scale ratings (Uebersax, 1987), was also computed for both the fear and the fear coping methods assignments to categories. The kappa statistic purports to provide a measure of interrater agreement that corrects for random decisions made by raters. The coefficient kappa is computed as the proportion of chance-expected disagreements which do not occur (Cohen, 1960). The computed kappa coefficient for interrater agreement in assigning fears to categories was .80, and kappa for fear coping methods was .93. Cohen (1960) noted the similarity of his measure to that proposed by Scott (1955), which was used to compute the percentages of agreement to estimate reliability.

Researchers have criticized the kappa coefficient because it may not be entirely satisfactory as an index of interrater agreement (Uebersax, 1987; Wilcox, 1987). One concern is that kappa values obtained from different studies may not be comparable. Its "chance-corrected" measure of agreement is predicated upon a null hypothesis of random decision making by all raters (Uebersax, 1987, p. 140). The practical ramification of this problem is that it is not clear how the magnitude of

kappa is to be interpreted once the null hypothesis is known not to be true (Wilcox, 1987).

To further check the reliabilities of the fear and coping classifications, new frequency and likelihood ratio chi-square analyses were run for fears and coping methods using the second rater assignments to the typologies previously adopted. The results of the second rater analyses were almost identical to those obtained originally. Most of the coding differences in fear were associated with the atypical responses of a few individual children. The 7 rater differences in classifying fears involved the fear responses of only 9 children, out of a total of 144, as few of these fears were mentioned by more than one respondent. Only 2 of the 7 fears had been reported as first fears. Thus the substantive differences between the codings of the two raters were minimal, and the classifications for both fears and fear coping methods are judged to have good interrater reliabilities.

Selection of the Sample

The sample of matched pairs of adult-care and self-care children was selected using the following procedure: In the Charleston County School District, one elementary school was selected from each type of location--urban, suburban, and rural. A screening questionnaire (Appendix A) was sent home to the parents of children in grades 2 through 5. In a cover letter, parents were asked to complete the questionnaire and to give permission for their child to participate in the study. Parents were assured that all participation would be voluntary for all parts of the study. All classes were promised an ice cream party if at least 75% of the

screening questionnaires were returned. A high response rate (above 80%) was obtained at each school. The exact response rates are given in Table 1.

The parents' screening questionnaires were utilized to determine the types of care arrangements used by the children and to collect demographic data needed to select matched pairs of children in self-care and adult-care arrangements. As fewer children used self-care, the self-care sample was selected first. To meet the qualifications for classification as self-care, a child had to have spent at least 5 hours per week before and/or after school, alone or with a sibling under age 18, for a duration of at least 6 months. The parents' questionnaire served to provide information on the type of care arrangement(s) used and on parents' employment status. It also provided demographic data on the status level of the parents' occupations, their educational attainment, and marital status--all of which information was needed to select and match the sample pairs. All self-care children were then paired with a child who met the criteria for adult-care (of being regularly under adult supervision in a home before and after school).

The sample pairs were matched on five variables: age, sex, race, family composition (one- or two-parent homes), and social status. A stratified sample of 24 matched pairs of adult-care and self-care children was selected from each of the three schools, yielding a total sample of 72 matched pairs (144 children). Within each school, half of the children were of ages 7, 8, or 9, and the other half were of ages 10, 11, 12. Thus the sample includes equal numbers of younger and older children. The major demographic characteristics of the sample children are presented in Table 2. The demographic characteristics varied by neighborhood type

and by their prevalence among self-care and adult-care children. As more males reported using self-care than did females, there were more boys than girls in the total sample. The sex composition varied by neighborhood type, with the greatest discrepancy between the percentage of boys and girls in the sample occurring at the urban school, which had 62.5% males and 37.5% females.

The racial composition of the sample was largely determined by neighborhood type, and approximates the proportion of black to white children in each school. The urban school had a predominantly black student body, whereas the suburban school was comprised of about four times as many white children (79%) as black (21%) in the sample. The overall sample was 61% white and 39% black, which is very similar to the racial composition of the Charleston County School District, which was 62% white and 38% black.

The matching process resulted in very similar demographics for all but one of the children. At the predominantly black urban school, one self-care white boy was inadvertently included in a pair with a black boy. Except for race, all other demographics matched well. The researcher did not realize the racial difference until she interviewed the child. After considering the limited options available to find another matched pair at the urban school, the decision was made to retain this pair despite the racial difference.

Sample children were also matched by family composition, which varied notably by neighborhood type. Only 8% of the children in the suburban school were from single-parent homes, whereas 75% of the urban children lived with only one parent. Because the suburban school was predominantly (79%) white and the

urban school almost exclusively (96%) black, the effects of race and family composition for these two schools were confounded in all analyses which purported to measure the effect of these demographic variables on fear. The family composition of children in the rural school was similar to that of the total sample. Forty percent of the children in the total sample and 36% of the children in the rural school were from single-parent homes.

Family social status varied by neighborhood type. Parents of children in the suburban school were much more likely to have more education and higher level occupations than parents of children at either the urban or rural schools. Over half of the parents (56%) of children in the total sample had achieved more than a high school education. Mothers of the self-care children in all three schools had more years of education than mothers of adult-care children.

Data Collection Procedure

The second phase of data collection began after the sample of matched pairs was selected. Students were given behavioral inventories, which included the three self-report checklists concerning how they felt. The checklists contained a few questions on fear, from which were obtained four of the fear measures for this study. These questions and the instruments are discussed in the methodology section.

All interviews were done by Dr. Martha Stewart, who was employed with the Charleston County Schools. Over the course of a week at each school, she interviewed each child individually and administered orally the Children's Interview (Appendix C). The other measure of fear frequency and the characteristics of the

before- and after-school care arrangements were obtained from the structured part of the interview. Also, descriptions of the children's fears and coping methods were obtained from the open-ended fear and coping questions included in the interview. The verbatim responses of these fears and coping methods were recorded by the researcher.

The Children's Interview included questions designed to corroborate information on the screening questionnaire concerning before- and after-school care arrangements. Other questions solicited information on the children's after-school activities, restrictions or prohibitions imposed on seeing their friends or viewing TV, the children's attitude toward their current care arrangement, the type and frequency of their fears, and how the children coped with fears or crisis situations. The interview instrument incorporated key questions that were asked by Long and Long (1983). Some questions were adapted to make the interview applicable to adult-care as well as self-care children. The instrument also contains some new questions that were not found on the Longs' instrument. Due to the focus on fear and fear coping methods of this dissertation, not all of the data obtained from these questions will be analyzed.

<u>Definitions of Variables</u>

The primary independent variable is that of the non-school care arrangement, which could be either of two types: self-care or adult-care. A self-care arrangement was defined as one in which a child had spent at least 5 hours per week, before and/or after school, alone or with a sibling under age 18, and had done so for at least 6 months. An adult-care arrangement is one in which a child

has remained for at least 6 months under regular adult supervision, either by a parent or by another adult during non-school hours.

Five separate fear measures are used as the dependent variables. The operational definitions are given later in a separate section.

The qualitative dependent variables are the fears and fear coping methods of adult-care and self-care children. These variables are operationally defined by the categories that comprise their typologies. The typologies selected for use in this study were presented in a previous section.

The instrument in which each variable is contained and the operational definitions of each quantitative or dummy variable are described below.

Instruments Used and Description of Variables

The items or scales used in the present study are discussed here, along with the instruments used to measure them.

The parents' screening questionnaire used in this research is a revised version of a questionnaire used in an earlier study of the effects of self-care arrangements on elementary school children (Stewart, 1981). This contains information pertinent to the assignment of a subject to one of the two child care arrangements. It also contains the information required to select and match pairs on the identified independent variables. A copy of the questionnaire is in Appendix A.

Two short self-report questionnaires, entitled "How-I-Feel Questionnaire I" and "How-I-Feel Questionnaire II", which express nine feelings, each to be either acknowledged or denied, were administered to the students in small groups. Copies of these questionnaires may be found in Appendix B. The feelings being described

are depression, fear, happiness, and neutrality. The variables, labelled as Bedtime Fear and After-School Fear for the analyses, were derived from this instrument.

Another instrument used in this study is the 40-item Children's Interview (Appendix C), which is a mixture of closed and open-ended questions posed to each subject in a private interview. All interview questions were asked by the same researcher in the same manner, and each sampled child's responses were recorded. Each personal interview took approximately 30 minutes. The interview instrument incorporated, with some adaptations, key questions from the Long and Long (1983) study. Adaptations of the Longs' interview instrument made it applicable for use with adult-care as well as self-care children. As Long and Long (1983) had not used a matched adult-care comparison group in their research, or had not used standardized questions for the self-care and adult-care groups, these modifications were critical to the matched pair design of this research.

Operational Definitions of Dependent Variables

The five quantitative fear variables were obtained from four separate instruments. They are operationally defined in the following manner:

1) Fear frequency is a measure of frequency of fear based on question #33 from the Children's Interview: "All of us get pretty scared sometimes. How often do you feel pretty scared?" The response range was: 0 = "Never"; 1 = "Once a month"; 2 = "Twice a month"; 3 = "Once a week"; 4 = "Once a day or every night"; and 5 = "Several times a day".

2) Bedtime fear was measured on a 3-point scale, having values 0, 1, or 2. The value was obtained by recording the number of "yes" answers given to the

following statements on the self-report "How-I-Feel Questionnaire I": Children were asked how they recalled feeling after having just gone to bed at night. The child could affirm or deny any of the feelings expressed. These included the two fear feelings:

#2. I feel scared.   YES   NO

#5. I feel afraid.   YES   NO

3) After-school fear was measured using almost identical methodology to that used to measure bedtime fear, but it was obtained by asking children to recall their feelings just after coming home from school in the afternoons. Scoring of responses resulted in one of the following values: 0 = "No fear expressed"; 1 = "Yes answer to either feeling scared or feeling afraid, but not both"; and 2 = "Yes answer to both feeling scared and to feeling afraid".

4) Values for the two variables, "Fear of many things" and "Wakes up scared sometimes" were obtained from a 37-item checklist, entitled "What I Think and Feel". Questions #7, "I am afraid of a lot of things," and #29, "I wake up scared some of the time," were used as separate measures of fear. The values for each of these variables was either 0 or 1, corresponding to the answer of "no" or "yes" that had been circled by the child. Thus "0" indicated absence of the described fear, and "1" indicated presence of the fear.

5) Measures for qualitative types of fears experienced were obtained in response to question #31A on the Children's Interview: "All of us are afraid of something. What's the one thing you are most afraid of?" (record verbatim)...(probe #31B:) "What are some other things you are most afraid of?"

(record verbatim)...(probe #31C:)..."Anything else?" (record verbatim). The methodology utilized by Derevensky (1974) was nearly identical to that used in collecting the data for this study. The fear questions asked by Derevensky were, "What are the things to be afraid of?" Verbatim responses were recorded. The researcher probed for more fears to be cited by asking, "And what else?" and "Anything else?" (Derevensky, 1974, pp. 78-79). The children in this study were asked what they feared the most, rather than cite fears that came to mind. The categorization of fears used by Derevensky was one of the schemes used to develop the typology of this study.

The initial coding for the open-ended responses resulted in over 90 different types of fear responses. These fears were assigned to categories for analysis in accordance with current practice in the fear literature for pre-adolescent school-age children.

Based on the questions asked, it is possible to analyze the data only on the initial response to the question asking for the "one thing you are most afraid of" or to analyze the data on all fears mentioned in response to the initial question and to the follow-up probes. Using similar questions, some research studies report only first fear mentioned. Some report all the fears mentioned, with a probing question or two utilized to solicit other fear responses (Maurer, 1965). Still other research studies report both. Derevensky (1974) provided normative data on both initial fear responses and total fear responses. Following this precedent, frequency analyses were conducted on both the initial fear response given as well as on the total fear

responses. Because multiple responses given by the same child are not independent, chi-square analyses were only done on the initial fear response.

6) The fear coping strategies employed by the children were measured by classifying responses made to the following question: "What sorts of things do you do when you feel afraid?" (record verbatim)...(probe #32B:) "Anything else?" (record verbatim). Using the selected typology, the children's fear coping methods were classified. Following the precedent established in analyzing fears, frequency analyses were done on both the total responses given, as well as on the initial fear coping responses. Because of the independence of variables requirement, chi-square analyses were done only on the initial coping response for the two child care groups.

Operational Definitions of Independent Variables

The following independent variables were investigated: care group, age, presence of a sibling, hours of TV child views, amount child likes the current care arrangement, presence of sibling conflict, and child's mention of liking to play with sibling. In addition, other independent variables investigated were: whether child phones someone, whether someone phones the child, whether child can play outside, whether child can invite a friend in to play, whether child has a dog or cat as a pet, whether child is restricted in TV viewing, whether child has chores to do, and whether child does chores. All of these variables are contained in the Children's Interview. The response code values for these variables are given in Appendix F.

<u>Accounting for Variation in Fear Frequency</u>

The third phase of the research investigated the relationship between three measures of fear frequency and the independent variables. Due to a very limited amount of prior research, the directions of influence that the independent variables were expected to have upon the fear frequency measures could be specified for only a few of the variables. The following summarizes the influences these variables were expected to have upon children's fears:

<u>Age</u>

The effect of age on fearfulness could not be predicted for the age range of seven to twelve. Only types of fears--but not the amount of fear--are known to change with age, with older children tending to respond with more realistic fears (Derevensky, 1979).

<u>Siblings</u>

The effect of the presence of siblings on fear could not be predicted. While presence of a sibling may alleviate the fear of being alone, the sibling may also be a source or promoter of fear. Survey research by Straus, Gelles, and Steinmetz (1980) indicated that physical assault by siblings was three times as great as assault by parents, and thus children may have a legitimate reason to be afraid of being hit by a sibling. Also abusive treatment by older siblings (mainly brothers) and their friends is a significant threat to young children in the absence of adult supervision (Coolsen, Seligson, & Garbarino, 1985; Long, L. & Long, T., 1983). Long and Long (1981) reported that children at home with an older sibling seemed to generate a closer attachment to the sibling than to the parents. They also found that when

children reported having a close relationship with a parent, they reported having fewer fears or bad dreams. Thus, the presence of siblings, with or without conflict, should be expected to increase fearfulness. Yet, Long and Long (1981, p. 25) reported that the fear responses of latchkey children cared for by a sibling were "markedly less" than for children at home alone. Because of apparent inconsistencies and mixed results, the null hypothesis of no effect of sibling presence on fear frequencies was tested.

The two variables, sibling conflict and liking to play with sibling, may also affect fear frequency, but like the variable, sibling presence, there was insufficient information to predict the direction of the effect.

Liking of Care Arrangement

The variable denoting how much the child likes the care arrangement was expected to be inversely related to amount of fear experienced. A child would be more likely to prefer a care arrangement in which less fear was experienced, and conversely, a child who likes the care arrangement would presumably spend less time feeling afraid after school.

Dog or Cat Pets

The variable denoting presence of a dog or cat was expected to be associated with less fear. Long and Long (1981) reported that children at home alone often turned to pets for comfort. Pets were thus seen as helping to reduce fear, although the barking of a pet dog, for example, could at times increase the child's alarm.

Telephone Contact

Telephone contact that is either initiated or received by the child was expected to be associated with lesser fear. Numerous hotline services have been established to help lower fearfulness or cope with emergencies faced by children in self-care (Guerney & Moore, 1983). Telephone calls either initiated or received when a child is in self-care are expected to convey a message of concern for the child's well-being. Long and Long (1981) reported that telephone calls between children at home alone and parents usually had a safety theme, whereas, telephone conversations between parents and children with siblings at home were frequently to enlist the parents' aid in resolving sibling conflicts. They also found that children perceived a closer attachment with their parents if the parents were perceived as expressing concern about the child, and a closer attachment to a parent was associated with fewer fears or bad dreams. Also, a child's fears may be alleviated by making or receiving a phone call. Thus, particularly for children alone in self-care, if most of the phone calls made or received involve a parent or caring adult, then fear frequency should be lowered.

Contact with Friends

The variables concerning social contact with friends, including play outside, visiting a friend, or inviting a friend in to play, were all expected to impact the child's frequency of fears. Social contacts and engagement in some activity should serve to lessen fearfulness, and this contact with friends or playmates, unlike that with siblings, is voluntary, and so is less likely to promote fears. Thus fewer restrictions in making social contacts was expected to reduce children's fearfulness.

Influence of TV

No prediction was made regarding the impact of TV viewing on fear. Fears may be acquired from watching TV (Wilson, Hoffner, & Cantor, 1987), yet one of the coping methods reported to be frequently employed by children in self-care to dispel fears is that of turning on the TV, with the volume loud (Long, L. & Long, T., 1983). It would thus appear that TV is a mixed blessing in alleviating fears.

Doing Chores

No prediction was made concerning the influence of doing chores on the amount of fearfulness experienced. Like viewing TV, doing chores would seem to serve as a mixed blessing in offering a distraction, while simultaneously offering opportunities to produce fears.

Influence of Childcare Group

In trying to account for variation in fear frequency, childcare group was included as an independent variable. As the research reviewed presented contradictory conclusions, no effect was specified. Of the two research studies which measured fear, the one involving black youth from inner-city, urban neighborhoods reported higher levels of fear for self-care children than for adult-care children (Long & Long, 1981). The other study by Galambos and Garbarino (1983) reported no difference in fearfulness between adult-care and self-care children in a rural area that is relatively free of crime. The difference in race or neighborhood type may account for much of the difference in reported fear. Until more studies control for neighborhood type and race through some process, such as matching, the relationship of care type with fear cannot be predicted.

Methodology for Testing Directional Hypotheses

Hypothesis #1, which states, "There is no difference between self-care children and adult-care children in the frequencies with which they report feelings of fear" was tested by using a matched pairs difference of means t test on the five fear measures, After-school fear, Bedtime fear, Fear frequency, Many fears, and Wake up afraid.

Hypothesis #2, which states, "There is no difference between self-care and adult-care children in the types of fears first mentioned," was tested using the likelihood chi-square statistic on the reported greatest fears of the children in the self-care and adult-care groups.

Hypothesis #3, which states, "There is no difference between self-care and adult-care children in the types of fear coping strategies that they employ" was tested by classifying the reported coping strategies into the categories of the typology of strategies that was adopted for this study. Chi-square analyses were then conducted to determine whether significant differences exist between frequency distributions in coping methods categories for the self-care and adult-care children.

Methodology for Phase III Analyses

Phase III analyses investigated whether there are identifiable aspects of the self-care arrangement, such as:

a) telephone access to an adult,

b) companionship of friends,

c) presence of siblings and/or pets,

d) amount of time in self-care,

e) amount of time spent viewing TV, and

f) chore responsibilities

that are associated with a reduction in fear frequencies?

To investigate the relationship of these and similar variables with fear, an initial stepwise multiple regression analysis was run on each of the three quantitative fear variables, including all of the independent variables, and using data from all the children (N=144) in the sample, irrespective of care arrangement. This identified the independent variables that have a significant impact on each of the three fear variables. The regression coefficients and significance level are reported for each independent variable that is significant.

Because the variables that have an impact on the fears of self-care children may be different from those having an impact on the fears of adult-care children, stepwise regression analyses were also conducted separately for the two child care groups. Because each care group has a sample size of 72, the number of independent variables included in the analyses was limited to 7. This is in keeping with the general consensus among statisticians to have at least 10 sample cases for each independent variable included in multiple regression analyses.

The independent variables can be divided conceptually into two sets or clusters. One cluster represents "familial contact" with members of the household and significant others, including pets. This cluster includes presence of a sibling, sibling conflict, mention of liking to play with a sibling, a measure of how much the current care arrangement is liked, and both the initiating and receiving of telephone calls after school. The other cluster represents the amount of

"restrictiveness" imposed upon after-school activities. The activities included in this cluster are outside play, going to a friend's house, inviting a friend inside to play, watching TV, and number of chores the child must do. The related variable, age, was also included with the restrictiveness cluster, since restrictions imposed on these activities are likely to be dependent upon age. Likewise, the variable of compliance in chore completion is closely related to the activity of doing chores, and was included in this cluster.

Focusing initially on the self-care group, a stepwise regression analysis of the first fear measure was done on the first cluster of independent variables; this was followed by a stepwise regression of the first fear variable on the second cluster of independent variables. The significant independent variables from both analyses were then combined into a composite model, and the first fear variable was regressed on all of the significant independent variables. The regression coefficients and their level of significance are reported.

The same sequence of analyses was then performed for each of the other two fear variables. This provided information on which of the independent variables are accounting for a significant amount of variance in each of the dependent (fear) variables.

The same analytic procedure was then followed for the adult-care group of children. It was then possible to identify and discuss the similarities and differences between the two groups of children, in regard to which of the independent variables appear to be contributing to the several measures of fear.

Table 1

Number of Children, Response Rates, and Percentage of Children Using Self-Care

and Adult-Care Arrangements by Neighborhood Type and Grade Level

Neighborhood Type		Response Rate		Percentage Using Care Arrangements (N)			
	N	(# of Returned Questionnaires)		Self-Care		Adult-Care	
Suburban							
Grade 2	101	96%	(97)	8%	(8)	92%	(89)
3	103	92%	(95)	17%	(15)	83%	(80)
4	102	84%	(86)	27%	(23)	73%	(64)
5	96	81%	(78)	27%	(22)	73%	(55)
Total	402	89%	(356)	19%	(68)	81%	(288)
Urban							
Grade 2	81	84%	(68)	9%	(6)	91%	(62)
3	68	85%	(58)	17%	(10)	83%	(48)
4	74	82%	(61)	13%	(8)	87%	(53)
5	74	77%	(57)	14%	(8)	86%	(49)
Total	297	82%	(244)	13%	(32)	87%	(212)
Rural							
Grade 2	119	92%	(109)	16%	(17)	84%	(92)
3	121	75%	(91)	12%	(11)	88%	(80)
4	121	87%	(105)	16%	(17)	84%	(88)
5	81	73%	(59)	27%	(16)	73%	(43)
Total	442	82%	(364)	17%	(61)	83%	(303)

Source: Stewart (1986, p. 28).

Table 2

Characteristics of Self-Care and Adult-Care Children by Neighborhood Type

Characteristics	School (Neighborhood)						Totals	
	Suburban		Urban		Rural			
	Self-Care	Adult-Care	Self-Care	Adult-Care	Self-Care	Adult-Care	Self-Care	Adult-Care
Sex:								
Male	46% (11)	46% (11)	63% (15)	63% (15)	58% (14)	58% (14)	56% (40)	56% (40)
Female	54% (13)	54% (13)	37% (9)	37% (9)	42% (10)	42% (10)	44% (32)	44% (32)
Race:								
Black	21% (5)	21% (5)	96% (23)	100% (24)	67% (16)	67% (16)	61% (44)	63% (45)
White	79% (19)	79% (19)	4% (1)		33% (8)	33% (8)	39% (28)	37% (27)
Age Group:								
7, 8, 9	50% (12)	50% (12)	50% (12)	50% (12)	50% (12)	50% (12)	50% (36)	50% (36)
Mean age	8.0	8.2	8.2	8.5	8.1	7.9	8.1	8.2
10, 11, 12	50% (12)	50% (12)	50% (12)	50% (12)	50% (12)	50% (12)	50% (36)	50% (36)
Mean age	10.6	10.4	10.8	10.2	10.8	10.6	10.7	10.7
Family Composition:								
One parent	8% (2)	8% (2)	75% (18)	75% (18)	36% (9)	36% (9)	40% (29)	40% (29)
Both parents	92% (22)	92% (22)	25% (6)	25% (6)	64% (15)	64% (15)	60% (43)	60% (43)
Family Social Status:								
Occupation level								
high 1	42% (10)	46% (11)	8% (2)	4% (1)	4% (1)	4% (1)	18% (13)	18% (13)
2	50% (12)	42% (10)	46% (11)	42% (10)	54% (13)	42% (10)	50% (36)	42% (30)
3	8% (2)	12% (3)	4% (1)	17% (4)	13% (3)	25% (6)	8% (6)	18% (13)
4			12% (3)	4% (1)			4% (3)	1% (1)
low 5			30% (7)	33% (8)	29% (7)	29% (7)	20% (14)	21% (15)
Mother's education								
High school or less	17% (4)	33% (8)	48% (11)	67% (16)	63% (15)	75% (18)	42% (30)	59% (42)
Above high school	83% (20)	67% (16)	52% (12)	33% (7)	37% (9)	25% (6)	58% (41)	41% (29)
Father's education								
High school or less	22% (5)	27% (6)	50% (4)	70% (7)	81% (13)	81% (13)	47% (22)	54% (26)
Above high school	78% (18)	73% (16)	50% (4)	30% (3)	19% (3)	19% (3)	53% (25)	46% (22)

Source: Stewart (1986, p. 28)

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CHAPTER IV

RESULTS

This chapter provides information regarding the tests of the three major hypotheses, of subsequent exploratory analyses, and of analyses of variation in fear measures. Each hypothesis is stated, and the detailed results concerning its acceptance or rejection are given. A summary of the research analyses concludes the chapter.

Phase I. Principle Analyses

Hypothesis 1

To test the null hypothesis of no difference between self-care children and adult-care children in the frequencies with which they report feelings of fear, standard t tests for matched or related samples were used. The purpose of the matching was to control as many variables as possible other than the experimental variable. The attempt was to make the two samples as much alike as possible, and much more alike than if they had been selected independently. Tests involved the entire sample and were conducted separately for each dependent fear variable. The results of the matched pair t tests indicate the significance of the effects on the fear variables attributable to differences in the child's care arrangement.

In order to analyze the fear data on a sample consisting of children who had been matched on numerous variables thought to impact the dependent variables, the following procedure was used. First, difference scores for all the fear variables

were computed for paired subjects to create new dependent variables. (This decreased the sample size from 144 to 72 or less if any scores were missing. In one or two instances some of the data was missing.) For each matched (ith) pair, the fear score of the adult-care subject (X_{i1}) was subtracted from the corresponding fear score of the self-care subject (X_{i2}). This computation $(X_{i2}-X_{i1})$ produced a difference score (D_i) that was treated as the dependent variable in the matched pair t test analyses. The number of degrees of freedom on which the t statistic is based is equal to one less than the number of pairs. The matched design results in a smaller standard error, which increases the value of t. Therefore, any given mean difference is likely to be more readily detected when using matched or paired samples (Welkowitz, Ewen, & Cohen, 1982).

A researcher might be tempted to use a difference-of-means test in this case. Such a procedure would be unjustified since the two groups in the sample were not independently selected. The sample size is equal to the number of pairs, rather than the number of individuals. Instead of using a difference-of-means test, a direct pair-by-pair comparison is made of the difference scores for each pair. If the null hypothesis tested is that there is no difference between the two populations, thereby assuming that the experimental variable has no effect, this is equivalent to hypothesizing that the mean of the pairwise differences in the population is zero. The problem then reduces to a single-sample test of the hypothesis of mean zero (Blalock, 1979).

Tables 3 and 4 present the results of the paired t tests which were run on five fear measures, AFTER-SCHOOL FEAR, BEDTIME FEAR, FEAR

FREQUENCY, MANY FEARS, and WAKE UP AFRAID. Operational definitions for each of these variables have already been given in Chapter III. A significant difference (p=.04) between the two child care groups was obtained only for after-school fear. (A frequency analysis indicated that 16 (22%) of the self-care children reported feeling afraid after school as compared to 6 (8%) of the adult-care children.) Thus it was found that significantly more children in self-care did report feeling afraid after school than did their matched counterparts in adult-care. No consistent trends for any of the other fear difference scores could be found. Thus, for Hypothesis 1, the null hypothesis of no difference between adult-care and self-care children was accepted for four of the fear measures tested and it was rejected for the after-school fear measure.

Hypothesis 2

Hypothesis 2 states: "There is no difference between self-care and adult-care children in the types of fears first mentioned." To test this, a likelihood ratio chi-square analysis was used to compare the frequencies of fear types for adult-care and self-care children, using the typology of eight fear categories that was adopted for this study. Statistical significance was obtained (p=.04) from these analyses comparing children's fear types. The major differences in fear types between the two care groups were that children in adult-care expressed more fears of animals/insects and of being alone or losing a family member than did children in self-care. Self-care children reported having more fears involving people, fears of violence, and fears of imaginary creatures and scary TV shows than did adult-care children.

Table 5 displays the original frequencies obtained in comparing types of fears for self-care and adult-care children, as obtained from their response to the question, "What's the one thing you are most afraid of?" The categories "Dark", "Miscellaneous", "Alone/separated", and "People" each had expected cell frequencies which were too small for appropriate use of the chi-square statistic, so the standard practice of combining any cells which could meaningfully be grouped together was employed. The categories "Dark" and "Spooks, Imaginary Creatures, and Scary TV" were collapsed into one category, and the few "Miscellaneous" fears were reassigned to the various types that seemed most related to the fear described. For example, "marsh" was reclassified as a "Natural Hazard". The only "fear" that was excluded from the analyses in the reclassification was that of "nothing". Three adult-care children and one self-care child were excluded from the analyses of the fear questions, as they each cited no fears. In the same way that the "Miscellaneous" category was eliminated, the no fear responses could not be retained, and still meet the requirements for statistical analyses. Thus the effective sample size for these analyses is 140.

Table 6 presents a composite frequency of all the fears mentioned in response to the initial fear question (Table 5) and to two probes: what else is feared, and anything else? It represents the frequencies of the total fears mentioned by self-care and adult-care children. Percentage frequencies were obtained which are similar to those presented in Table 5 which is based on only the first fear mentioned. Hence, the trends observed remained stable when the number of fears in the sample nearly doubled. Because any second and third fears mentioned are

not statistically independent from the first, the total fears data cannot be analyzed using a chi-square statistic. However, it is reassuring that the results obtained are consistent with the distributions of first fear mentioned, both before combining cells and after combining cells. The few reassignments and combinations had little effect on the results, except to enable the chi-square analyses to be conducted appropriately.

Table 7 presents the results of the likelihood ratio chi-square analysis on the six fear categories for self-care and adult-care children after the eight categories were collapsed. Table 7 presents the same data as Table 5, after the smallest cells were collapsed to insure that all requirements for the statistical analyses were met. The likelihood ratio chi-square statistic was selected for the analyses because it is less sensitive to small cell sizes than is the Pearson chi-square, and it is asymptotically equivalent (Fienberg, 1977). Significance (p=.04) was obtained from the analyses comparing fear types of adult-care children with those of self-care children. For children in adult-care, fears of "animals/insects" and of "being alone/separation or loss of family member" were found to be more prevalent than they were for children in self-care. Self-care children had more fears of people (or of interactions with people). These were the major differences between the groups that contributed most to making the chi-square statistic significant. In addition, self-care children had somewhat more fears of the "dark/imaginary/scary TV" and of "violence/death/injury", than did children in adult-care.

Table 8 presents a composite frequency of the total fears after they were collapsed into the six categories. The same trends observed in Table 6 were maintained.

Hypothesis 2 was rejected, as the distribution of fears of self-care children was significantly different from the fears of adult-care children. Self-care children reported more people interaction fears than did adult-care children, who reported more animal fears.

Hypothesis 3

Hypothesis 3 states: "There is no difference between self-care and adult-care children in the types of fear coping strategies that they employ." To test this hypothesis, the children's coping responses were classified into a typology of coping methods which has five categories. The distribution of coping methods among self-care children was compared with that of adult-care children by using the likelihood ratio chi-square statistic.

Table 9 presents the method for coping with fear that adult-care and self-care children described in answering the question, "What sorts of things do you do when you feel afraid?" Originally a typology of five different types of coping methods was utilized with the coping methods reported. Table 9 is based on the five coping methods that were proposed for use in this study. When the coping methods reported were assigned to these five categories, one of the five categories was utilized by only one child for the second coping method mentioned (in response to the probe, "Anything else?"), and so did not appear in the table of first coping method mentioned.

Table 10 presents a composite frequency of all the coping methods mentioned in response to both the initial question of what the child does when afraid (Table 9) and the probe, "Anything else?" The category of "Prayer" was utilized by only one 11-year-old girl in self-care, as the second strategy she would employ in combatting fear. In collapsing categories for statistical analyses, this category was combined with that of "Internal Self-Control". There may not even be sufficient distinction between such responses as "Try to take my mind off it" and "Prayer". The former method could in fact include a quick prayer, but no detailed exploration of what a child actually did to take his or her mind off the fear was pursued.

The frequencies of the first mentioned coping method for adult-care and self-care children (after collapsing into 3 categories) are given in Table 11. In order to meet the requirements for use of the likelihood chi-square statistic, the four categories of Table 9 were collapsed into three. It made logical sense to combine the category "inanimate objects" with that of "avoidance/escape/distractions", since the object actually served to distract the child from the fear and bring comfort. The child might similarly receive distraction and comfort from the act of getting a glass of chocolate milk, which had already been classified as an avoidance/escape coping method. After combining these two categories of inanimate objects with avoidance/escape, the remaining three categories were then analyzed using the likelihood ratio chi-square statistic. It was found that the two distributions of coping methods of adult-care and self-care children were significantly different from each other, and so the null hypothesis #3 was rejected at the .02 level of

significance. The greatest difference noted is that children in adult-care reported using an internal self-control coping method more than twice as often as did children in self-care. Most of these involved "trying to put mind on something else". Also, there was a tendency for children in self-care to report seeking support from another person more frequently than did children in adult-care. There was very little difference in the frequency of the "Avoidance/Escape" coping mechanism. This method is the primary means of coping reported by the majority of both self-care and adult-care children.

Table 12 presents the frequencies of total coping methods mentioned by adult-care and self-care children for the combined coping typologies. The information presented here is consistent with that already reported for first coping style mentioned, except that chi-square analyses could not appropriately be conducted for the total coping methods mentioned, since two coping methods were cited by each child in the sample, and thus the responses are not independent. Because the distribution of coping methods for self-care children was found to be significantly different from those of adult-care children, Hypothesis 3 was rejected.

Phase II. Exploratory Analyses

In an effort to better explain the reason why 16 self-care children and 6 adult-care children reported having after-school fears, cross-tabulation analyses were conducted using both demographic variables and variables describing attributes of the care arrangements and after-school activities. The variables included in these secondary analyses with after-school fear are: age, sex, race, neighborhood type, parental employment status, marital status of custodial parent or guardian, bedtime

fear, fear frequency, presence of a sibling, sibling conflict, mention of liking to play with a sibling, a measure of how much the current care arrangement is liked, the initiating and receiving of telephone calls after school, and restrictiveness imposed upon after-school activities. The activities included in these analyses are outside play, going to a friend's house, inviting a friend inside to play, watching TV, and the number of chores the child must do. Although significantly more self-care children reported having after-school fears than did adult-care children, the actual number of children involved (16 self-care and 6 adult-care) was too small to permit separate statistical analyses. Trends or patterns observed in cross-tabulations are reported as possible indicators for future research.

A significant sex difference (p=.03) in reporting of fear was observed for bedtime fear, but not for any of the other four fear variables. Twenty-five percent of the females reported having bedtime fear as compared with only 10% of the males. This trend was also found for after-school fear in both adult-care and self-care groups (see Table 13), although the sex difference was not statistically significant. Similarly, more self-care females reported having a fear of many things than did males in self-care.

Differences in after-school fear were observed between self-care children in the three types of neighborhoods. Table 14 indicates that fewer self-care children from the rural school reported having after-school fear than did self-care children from the suburban or urban schools.

A nonlinear relationship was found between the after-school fear score levels and one of the restrictiveness variables. Although restrictions on TV viewing for

self-care children was not associated with incidence of after-school fear, it may be associated with consistency of reporting the fear. It was found that self-care children who reported feeling afraid twice on the checklist containing the two questions on after-school fear were most likely to have no restrictions on viewing TV, while self-care children reporting feeling afraid after school in only one of the two questions presented were more likely to have restrictions on TV viewing (see Table 15).

A similar nonlinear pattern was found for after-school fear and sibling conflict among self-care children. Self-care children who reported having both after-school fear and sibling conflict were most likely to have checked feeling afraid only once. Although absence of sibling conflict was generally associated with lesser incidence of after-school fear, the fear scores were highest for 7 of the 8 children reporting some after-school fear but no sibling conflict (see Table 16).

None of these analyses could account for the significantly greater number of self-care children who reported having more after-school fear than did adult-care children. The nonlinear relationships which were identified need further exploration.

Phase III. Analyses of Variation in Fear Measures

Analyses were done to identify aspects of the self-care and adult-care arrangements that are associated with variation in the fear measures. Independent variables thought to impact fear were included in the analyses. These are age, sibling contact, telephone use, visiting and playing with friends, pet dog or cat, TV viewing, chores, liking of care arrangement, and sibling conflict. To investigate the effect that the identified independent variables have on the dependent measures of

fear, stepwise regressions were conducted. A variable was retained only if it met the criteria of a significance level of .15 for entry into and for staying in the stepwise regression analysis procedure. As the purpose of these analyses was merely to identify which variables seem to be associated with fear, and the nature of this association, the analyses will not be utilized to propose a model. Because the dependent fear variables were derived from either nominal or ordinal data, the results of the regression analyses can only be used as indicative of trends to investigate for further research. Associations or trends identified should be interpreted cautiously, since stepwise regression assumes use of primarily continuous data for the dependent variable.

The standardized and unstandardized regression coefficients for AFTER-SCHOOL FEAR, BEDTIME FEAR, and FEAR FREQUENCY are shown in Tables 17, 18, and 19. (Regression analyses were not conducted on the other two fear variables, MANY FEARS and WAKE UP AFRAID, because of the dichotomous nature of their measurement.) Each table shows only those independent variables that were included in one of the three regression analyses done for the adult-care and self-care groups combined or for each analyzed separately. Stepwise regression analyses were first conducted on the total sample using the 16 non-fear variables listed in Table 20. To investigate the possibility of an interaction effect with care type, separate analyses were run for adult-care and self-care groups. These were run in clusters of "familial" and "restrictiveness" variables to insure adequate sample size for each analysis. The familial cluster represents familial contact with members of the household, significant others, and pets. It includes presence of a sibling in

care arrangement, sibling conflict, playing with a sibling, liking of the care arrangement, and phone calls after school. The restrictiveness cluster represents the limitations imposed upon after-school activities, including outside play, playing with friends, watching TV, age, and doing chores.

As shown in Table 17, the variable LIKES CARE TYPE was the only variable that was selected in all three models as having an inverse relationship with after-school fear. For the self-care group and for the total sample, it was the only variable to meet the criterion necessary for inclusion. Thus the more a child likes the care arrangement, the less after-school fear is experienced. The model R^2 was small (less than .08), indicating that liking of care arrangement explains less than 8% of the total variance in after-school fear for the total sample. It explains even less of the variance for the self-care group. Results also indicate that children in adult-care are less likely to be afraid after school if someone phones them, if they have a pet dog or cat, or if they like their care arrangement. This model explains about 23% of the variance in adult-care children's fears.

In Table 18, the only variable that was found to be associated with bedtime fear for the total sample is SIBLING PRESENT (in care arrangement). As the association is positive, it means that children experience more fear at night when they are in after-school care with a sibling present. The very small R^2 of .02 indicates that this association could account for almost none of the variation in bedtime fear. No association was found between sibling presence and bedtime fear for the self-care children. Bedtime fear for the adult-care group was found to be associated with five variables: likes to play with sibling, sibling conflict, sibling

present in same care arrangement, someone phones child, and child can visit at a friend's house. Sibling conflict and freedom to go to a friend's house were both associated with less bedtime fear, but presence of a sibling in the care arrangement, liking to play with sibling, and someone telephones child, were all associated with an increase in bedtime fear. Although these variables collectively accounted for 23% of the variability in bedtime fear for adult-care children, the results are difficult to interpret.

Table 19 presents the variables found to be associated with fear frequency. Going to a friend's house and child phones someone were the only two variables associated with decreased fear frequency for the total sample. These variables collectively explained only 3% of the variability in fear frequency. None of the variables were found to be significantly related to fear frequency for the adult-care group. The two variables, likes to play with a sibling and limits on TV viewing, were associated with increased fear frequency for the self-care group and accounted for 13% of the variance in these children's fear frequency. These results appear to be counter-intuitive.

The correlation matrix presented in Table 20 indicates that most of the correlations among predictors are low. In the table, variables numbered 4, 5, 8, 9, 10, 11, 14, 15, 17, 20, and 21 are dummy variables (coded 1 if "yes", 0 otherwise). Dummy variable #6 is coded 1 if "adult-care" and 2 if "self-care". The highest correlation (.44) was obtained for restrictions on inviting a friend over and freedom to go to a friend's house. Two other similarly related and moderately correlated (.38) variables are: you phone someone and someone phones you. The highest

correlations for the fear measures were bedtime fears with fear frequency (.27) and after-school fear with liking of care type (-.28). The correlation matrix indicates that the 5 different fear measures are all positively associated but, as they each measured a different aspect of fear, they had very low intercorrelations.

Limitations of the Study

This study is limited by restraints common to the use of secondary analysis of data. However, the research design is well suited to the objectives of the study. Moreover, all the interviews were done by the same researcher. The data collected are nearly ideal for the purpose of studying fear differences between children in the two after-school care types. High response rates were obtained, thus reducing the risk of non-response biases.

Pilot Testing of the Instruments

One potential problem associated with the analysis of secondary data is the researcher's lack of familiarity with the data collection process and with the research instruments. To compensate for not having participated in the original interviewing, I administered the questionnaires to some local children. By doing this I hoped to identify potential sources of problems that children might have in answering the questions. This involved the interviewing of ten children between the ages of 7 and 12. These subjects came from a variety of backgrounds and family types and included children in self-care and adult-care.

The questions that presented the most difficulty were those on the Children's Interview in which the word "restrictions" was used. Several children asked what the word meant and then answered the questions after the word's meaning was

explained to them. In the children's responses to the questions involving restrictions on activities, it was noted that many children had to ask permission before going outside to play, having a friend over, or inviting a friend home. The permission was usually given and so it appears that these children had as many unrestricted socializing opportunities as did children with no restrictions. The original researcher confirmed that my understanding of considering parental permission to be a restriction was consistent with her scoring for these types of questions. The problem I found with the response categories is that they did not allow for distinguishing between children who were severely restricted and deprived of socializing opportunities and those who simply kept their parents informed of their whereabouts by "asking" permission. Because of this lack of differentiation in the measures of severity of restrictiveness, these measures may not account for the variability in fear that they would have if more levels of restrictiveness had been recorded.

Another question on the Children's Interview that posed some difficulty was #25: "What if something dangerous happened while you were alone (or with your brother or sister) in your house. What would you do?" Several children asked, "like what?" implying that what they would do depended upon the nature of the emergency. Fortunately this question is not included in any of the analyses of this study, but the difficulty presented illustrates how some children may be incapable of responding accurately to questions that are too abstract for them to process. This concern may affect other questions in the interview which were included in the analyses of this study.

Children tended to respond to a question concerning what they usually do by responding to what they did most recently. For example, one 10-year-old boy responded to question #10 concerning what he usually does when he gets home from school by reporting that he hits balls in his golf net that his father gave him the day before. A little probing revealed that he also does his homework, watches TV, rides his bike, and shoots basketballs. This case, however, illustrates the tendency that children have to think in terms of the immediate, concrete situations that have most recently affected them. Although all of the children interviewed were able to respond to the fear and coping questions without apparent difficulties, it is unknown to what extent the responses accurately represent what the children fear most. The fears expressed might have resulted from scary movies viewed the night before, or they might be fears that significantly impact the children's lives. Irrespective of the longevity of the fear, which was not measured, the matched sample design insured that the data collected for the self-care group was comparable to that of the adult-care group.

The pilot testing revealed that there was often no relationship between the fears and the fear coping methods that children reported. The fear coping methods generally had nothing to do with the specific nature of the fear reported in the preceding question. This lack of relationship between fear and coping method cited was apparent also in the responses of the 144 sample children.

The only other major problem encountered in the pilot testing was in administering the instruments to an 8-year-old girl who was in a joint custody arrangement. Every four days she had to change households, and it was evident

that this arrangement was rough on her. On the How-I-Feel instruments (Appendix B), she tried to answer how she felt at her Mom's and report also how she felt at her Dad's, which was different for several variables, including fear. More response categories were needed to capture the duality of her feelings in the two environments. It would be helpful to have instructions for handling such situations involving dual households, with perhaps a different set of rules and circumstances presented by each parent. Generally, it might work to ask children to answer the questions for the home in which they spend the most time, but in her situation, in which physical custody was being shared so evenly, that would not work.

Some children wanted a "sometimes" answer for the two How-I-Feel instruments, and even wrote it in to express some of their feelings. Instructions need to be clarified on how such answers are to be coded. Because the child acknowledged the feeling, it would seem reasonable to code it as "yes", in a forced choice dichotomy.

Aside from these few notations, the administration of the instruments went very smoothly, and the children were eager to participate in the pilot study and be interviewed. It appears that for the dependent variables being investigated--types of fear, coping, and fear frequency--that the children gave meaningful answers that would produce valid data for analysis.

Untested Constructs

The self-report estimate of fear frequency is an untested construct that was generated in an attempt to investigate the concept of having "more" or "excessive" fears, or being "more fearful". Some qualitative, subjective research has reported

greater fearfulness among children in self-care arrangements than is found among children in adult-care. Also, the self-report experiences of feeling "scared" or "afraid" either after school or in bed at night are instruments having no reported measures of validity or reliability. Similarly, the self-reported feeling of "being afraid of a lot of things" or of "waking up scared some of the time" are also instruments of unknown validity or reliability. All measures rely upon the children's accuracy in recall of feelings, and in reporting how frequent or prevalent were those feelings. Because several measures of fear were obtained using different questionnaires and different interviewing processes, internal consistency between the measures provided some measure of construct validity.

Threats to Validity

In the review of literature, several problems of published research were noted concerning issues that could adversely affect the internal and external validity of a study on latchkey children. Of particular relevance in this study is the consistency of utilization of the self-care arrangement. While strict adherence to the operational definition of "self-care" insured consistency in assignment to groups, there may be general under-reporting of part-time or sporadic self-care arrangements, which accommodate a parent's need to run errands, work late, or engage in volunteer or social activities.

The major threat to external validity is that the sample was selected in Charleston, South Carolina. Although it included matched pairs of self-care and adult-care children from urban, rural, and suburban neighborhoods, it is not necessarily representative of other areas of the country. Caution should be taken in

applying the results found in the relatively crime-free areas of Charleston, which were included in this sample, to an inner-city district of a much larger city.

The main threat to internal validity is whether the instrument enables accurate categorization of after-school care arrangement. The sample children reported being engaged in a diversity of activities after school, so they actually used a mixture of care arrangements, while meeting the minimum criteria for either adult-care or self-care. Thus the distinctions between the adult-care and self-care experiences were least for those children who did not use that one care arrangement consistently, and who engaged in a variety of after-school activities. Research has indicated that parents have a general tendency to under-report their utilization of the self-care arrangement (Long, T. J., & Long, L., 1983). Also, a child may stay with an older sibling, who is not yet an adult, but have very similar experiences to those of adult-care. As each care arrangement is unique in its composition of activities, structure, and opportunities, only by collecting a sufficiently large sample of students matched on variables known to be associated with type of care arrangement used, can the effects of care arrangement be accurately assessed.

Recommendations for Future Research

If a study similar to this one were to be conducted, an improvement could be made by changing some of the questions on the survey instruments which deal with fear coping methods used. It would be much more helpful to collect data on coping methods for each fear mentioned. The question posed might be, "And what do you do when you feel afraid of...(citing the specific fear last mentioned)?" If

the scope of the study were also expanded, information on the duration of the fears and their effects on children's lives could be helpful in identifying problem fears.

If a larger sample of matched pairs of self-care and adult-care children were selected, the influence of the time spent in the care arrangement on children's fears could be investigated. One major limitation of the data used in this study is that after-school care arrangements frequently changed with the day of the week. Both adult-care and self-care children often had organized activities that they attended, which "diluted" the major effect of care arrangement on fears. If levels of self-care usage were included in the analyses, along with duration of its use, the effects of the care arrangement might be more evident.

If a larger sample were available, the effect of neighborhood type could be examined in combination with other variables to detect the presence of interactions. Certain types of fears may be more prevalent in one type of neighborhood than in another. Also the effect of siblings in the care arrangement may differ by neighborhood type, or by the age and sex of the siblings.

The relationship between TV viewing and fears could be investigated through questions on the types of programs children watch after school and on who is at home when scary programs are viewed. More research on the promotion of fears by the media and on the duration of media-induced fears is also needed.

Longitudinal research is needed to better assess the effects of self-care on children's fears. Without knowledge of children's fears prior to their use of self-care, it is impossible to determine what fears may have developed subsequent to use of self-care. Longitudinal research could also help to ascertain whether parents

consider children's fearfulness in deciding whether or not to use self-care. It may be that children who initially profess to have few fears are more likely to be selected to use self-care. If that is the case, then the amount of fear currently being attributed to use of the self-care arrangement may, in fact, underestimate the true effect. Longitudinal research could also track the emergence and disappearance of fears, as well as the process by which fears are handled and ultimately overcome. Because fears are a normal part of children's experiences, research which identifies the processes involved in their development, reinforcement, and replacement is needed to better assess some of the risks of using self-care.

<u>Summary of Research Analyses</u>

The major (Phase I) hypotheses of the study were tested using several statistical procedures. These include the matched pair t test for the quantitative measures of fear and chi-square analyses for comparing types of fear and coping methods used by adult-care and self-care children. Before the fear types and coping methods could be analyzed, they had to be classified into typologies. These typologies were selected from the children's fear and coping methods literature to better reveal differences between the care types. The analyses resulted in rejection of all three null hypotheses for at least one of the fear measures used. For hypothesis #1, only one of the five quantitative fear measures, after-school fear, was found to be greater for self-care children than for adult-care children. No differences were found for the other fear frequency measures.

The matched pair t test was selected because the data consisted of pairs of adult-care and self-care children, who had been matched on relevant characteristics.

Research designs that incorporate comparisons of matched subjects are very common. They offer the advantages of being able to control some variables that might otherwise be confounded with the dependent or independent variables (Loether & McTavish, 1974).

Exploratory analyses (Phase II) were performed on demographic variables and variables describing after-school activities and attributes of the care arrangement to try to explain why self-care children had reported more after-school fear than adult-care children. As the numbers of adult-care and self-care children reporting any after-school fear were too small to permit separate statistical analyses, numerous crosstabulations were examined. None of these analyses could account for the higher incidence of fear reported by self-care children.

The Phase III analyses identified and measured the influence of a set of independent variables upon the different fear variables. Stepwise regression analyses were used to identify which independent variables had the most influence on the fear variables. Regular regression analyses were computed to obtain the standardized regression coefficients. The variables that accounted for the most variability (13%) in fear frequency of self-care children were "likes to play with sibling" and "limits on TV viewing" (see Table 19). Liking to play with a sibling and TV restrictions were both associated with increased fear for self-care children.

About 23% of the variability in after-school fear for adult-care children was accounted for by how much the child likes the care arrangement, having a pet dog or cat, and someone phones the child (see Table 17). All three variables were associated with a decrease in after-school fear. About 23% of the variability of

bedtime fear for adult-care children was accounted for by three variables involving siblings in the care arrangement (likes to play with sibling, sibling conflict, and sibling presence) and by two additional variables: someone phoning the child and the child's freedom to visit a friend (see Table 18). Sibling conflict and freedom to visit a friend were each associated with less bedtime fear, whereas each of the other variables was associated with increased bedtime fear.

Due to the limitations of the data utilized for these analyses, the relationships reported must be considered as tentative findings, and these findings are subject to confirmation in further research.

Table 3

A Comparison of Self-Care and Adult-Care Children on Fear Measures:

Results of t Tests for Matched Pairs

Variable	N	Mean	S.E.	t	p
1. After-School Fear	72	.222	.103	2.153*	.035
2. Bedtime Fear	72	.028	.108	.257	.798
3. Fear Frequency	72	-.111	.228	-.488	.627
4. Many Fears	71	.113	.077	1.473	.145
5. Wake Up Afraid	72	.000	.084	0.000	1.000

* Significance at .05.

Note. A positive mean difference score indicates that self-care children had the higher score; a negative mean difference score indicates adult-care children had the higher score.

P-values reported are based on a two-tailed t test, since the alternative hypotheses were bidirectional.

Table 4

A Comparison of Self-Care and Adult-Care Children on Fear Measures:

Results of t Tests for Matched Pairs

Variable	N	S-C Mean	S-C S.D.	A-C Mean	A-C S.D.
1. After-School Fear	72	.35*	.70	.13*	.44
2. Bedtime Fear	72	.31	.68	.28	.61
3. Fear Frequency	72	2.86	1.44	2.97	1.27
4. Many Fears	71	.33	.47	.23	.42
5. Wake Up Afraid	72	.36	.48	.36	.48

* Significance at .05.

Table 5

Comparison of What Children in Adult-Care and Self-Care Fear Most (prior to combining small cells for statistical analysis)

N=140	Adult-Care		Self-Care	
	%	(69)	%	(71)
Animals/Insects	20.7	(29)	13.6	(19)
People/Interactions	1.4	(2)	4.3	(6)
Dark	1.4	(2)	1.4	(2)
Spooks/Scary TV	6.4	(9)	10.0	(14)
Natural Hazards	5.0	(7)	5.7	(8)
Alone/Sep or Loss	4.3	(6)	0.7	(1)
Death/Injury/Violence	9.3	(13)	13.6	(19)
Miscellaneous Fears	0.7	(1)	1.4	(2)

Table 6

Comparison of Total Fears of Adult-Care and Self-Care Children (prior to combining small cells for statistical analysis)

N=262	Adult-Care %	(127)	Self-Care %	(135)
Animals/Insects	18.7	(49)	12.6	(33)
People/Interactions	3.4	(9)	5.7	(15)
Dark	2.7	(7)	1.1	(3)
Spooks/Scary TV	6.5	(17)	12.6	(33)
Natural Hazards	5.0	(13)	5.7	(15)
Alone/Sep or Loss	4.6	(12)	2.7	(7)
Death/Injury/Violence	7.3	(19)	10.3	(27)
Miscellaneous Fears	0.4	(1)	0.8	(2)

Table 7

Chi Square Analysis of What Adult-Care and Self-Care Children Fear Most
(after combining similar fear types)

N=140	Adult-Care		Self-Care	
	%	(69)	%	(71)
Animals/Insects	20.7	(29)	13.6	(19)
Dark/Spook/Scary TV	8.6	(12)	11.4	(16)
Natural Hazards	5.0	(7)	6.4	(9)
Alone/Sep or Loss	4.3	(6)	0.7	(1)
Death/Injury/Violence	9.3	(13)	12.9	(18)
People/Interactions	1.4	(2)	5.7	(8)

Likelihood Ratio Chi-Square = 11.5   p = .04   DF = 5

Table 8

Comparison of Total Fears of Adult-Care and Self-Care Children (after combining small cells for statistical analysis)

N=262	Adult-Care		Self-Care	
	%	(127)	%	(135)
Animals/Insects	18.7	(49)	12.6	(33)
Dark/Spook/Scary TV	9.5	(25)	13.7	(36)
Natural Hazards	5.0	(13)	6.1	(16)
Alone/Sep or Loss	5.0	(13)	2.7	(7)
Death/Injury/Violence	7.3	(19)	9.9	(26)
People/Interactions	3.1	(8)	6.5	(17)

Table 9

Frequencies of First Coping Method Mentioned by Adult-Care and Self-Care Children (before combining similar coping types)

N=138	Adult-Care		Self-Care	
	%	(69)	%	(69)
Internal Self-Control	14.5	(20)	5.8	(8)
Social Support	8.7	(12)	15.2	(21)
Inanimate Object	1.5	(2)	0.7	(1)
Avoidance/Escape	25.4	(35)	28.3	(39)

Table 10

Frequencies of Total Coping Methods Mentioned by Adult-Care and Self-Care Children (before combining similar coping types)

N=198	Adult-Care		Self-Care	
	%	(96)	%	(102)
Internal Self-Control	12.1	(24)	6.1	(12)
Social Support	9.1	(18)	15.2	(30)
Inanimate Object	1.5	(3)	0.5	(1)
Avoidance/Escape	25.8	(51)	29.3	(58)
Prayer	0.0	(0)	0.5	(1)

Table 11

Frequencies of First Coping Method Mentioned by Adult-Care and Self-Care Children (after combining similar coping types)

N=138	Adult-Care		Self-Care	
	%	(69)	%	(69)
Internal Self-Control	14.5	(20)	5.8	(8)
Social Support	8.7	(12)	15.2	(21)
Avoidance/Escape	26.8	(37)	29.0	(40)

Likelihood Ratio Chi-Square = 7.9   p = .02   DF = 2

Table 12

Frequencies of Total Coping Methods Mentioned by Adult-Care and Self-Care Children (after combining similar categories)

N=198	Adult-Care		Self-Care	
	%	(96)	%	(102)
Internal Self-Control	12.1	(24)	6.6	(13)
Social Support	9.1	(18)	15.2	(28)
Avoidance/Escape	27.3	(54)	29.8	(59)

Table 13

Crosstabulation of Sex by After-School Fear for Self-Care and Adult-
Care Children

After-School Fear

Sex Self-Care	0	1	2
Male	25	2	3
Female	31	5	6
Total	56	7	9

After-School Fear

Sex Adult-Care	0	1	2
Male	28	2	0
Female	38	1	3
Total	66	3	3

Table 14

Crosstabulation of Neighborhood Type by After-School Fear for Self-Care and Adult-Care Children

After-School Fear

Neighborhood Type Self-Care	0	1	2
Rural	22	1	1
Suburban	16	3	5
Urban	18	3	3
Total	56	7	9

After-School Fear

Neighborhood Type Adult-Care	0	1	2
Rural	21	2	1
Suburban	24	0	0
Urban	21	1	2
Total	66	3	3

Table 15

Nonlinear Relationship Between After-School Fear and Restrictions on
Television Viewing for Self-Care Children

		After-School Fear	
Restrictions on TV	0	1	2
No restrictions	37	3	8
Yes, some restrictions	19	4	1
Total	56	7	9

Table 16

Nonlinear Relationship Between After-School Fear and Presence of Sibling
Conflict among Self-Care Children

		After-School Fear	
Sibling Conflict	0	1	2
Not mentioned	42	1	7
Conflict #1 complaint	14	6	2
Total	56	7	9

Table 17

Unstandardized and Standardized Regression Coefficients Associated with After-School Fear

Variable	b Beta Total Sample	b Beta Adult-Care	b Beta Self-Care
Pet dog or cat		-.205** -.232	
Likes care type	-.258*** -.278	-.341*** -.388	-.178 -.176
Someone phones you		-.212* -.241	
F	11.88***	6.57***	2.24
R^2	.077	.225	.031
Constant	.889	1.284	.760
N	143	72	72

*   Significance at .10
** Significance at .05
*** Significance at .01

Table 18

Unstandardized and Standardized Regression Coefficients Associated with
Bedtime Fear

Variable	b Total Sample	Beta Total Sample	b Adult-Care	Beta Adult-Care	b Self-Care	Beta Self-Care
Likes play w/sib			.576	.263		
Sibling conflict			-.514*	-.194		
Sibling present	.204*	.137	.362**	.278		
Someone phones you			.286*	.236		
Free to visit friend			-.215**	-.221		
F	2.71		4.00***			
R^2	.019		.233			
Constant	.139		.187			
N	143		72			

*   Significance at .10
** Significance at .05
*** Significance at .01

Table 19

<u>Unstandardized and Standardized Regression Coefficients Associated with</u>

<u>Fear Frequency</u>

Variable	b Beta <u>Total Sample</u>		b Beta <u>Adult-Care</u>		b Beta <u>Self-Care</u>	
Likes play w/sib					.727**	.228
Limits on TV viewing					.818**	.270
You phone someone	−.377	−.139				
May visit friend	−.248	−.128				
F	2.41*				5.06***	
R^2	.033				.128	
Constant	3.445				2.386	
N	143				71	

*   Significance at .10
** Significance at .05
*** Significance at .01

Table 20 **Correlation Matrix of Variables Used in Regression Analyses**

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Bedtime fear	0.15	0.27	0.15	0.15	0.02	-0.08	0.14	0.08	0.10	-0.10	-0.08	0.03	0.08	-0.01	0.04	0.02	0.07	-0.08	0.07	0.12
2. After school fear		0.18	0.20	0.04	0.19	0.01	-0.01	0.08	-0.03	-0.04	-0.08	-0.10	-0.11	-0.09	0.05	-0.03	-0.01	-0.28	0.15	0.12
3. Frequency of fears			0.20	0.03	-0.04	0.01	0.06	-0.13	-0.08	0.03	-0.12	-0.01	-0.06	0.10	-0.07	-0.11	-0.04	-0.05	0.03	0.10
4. Fear of many things				0.05	0.12	0.06	0.07	0.02	0.01	0.07	0.03	-0.04	0.03	-0.15	-0.01	0.06	0.12	-0.07	0.11	-0.01
5. Wakes up scared some					0.00	-0.11	-0.07	-0.02	0.09	0.01	0.01	0.01	-0.03	0.15	-0.01	-0.03	-0.07	-0.01	0.10	0.02
6. Adult or self-care						0.03	0.16	0.22	0.04	0.04	-0.09	-0.20	0.01	-0.07	0.04	-0.04	-0.02	-0.33	0.32	0.25
7. Age							-0.07	0.12	0.28	-0.26	-0.05	-0.17	-0.02	0.03	0.22	0.17	0.22	0.09	-0.09	0.06
8. Sibling in same care								-0.02	-0.09	-0.14	-0.08	-0.09	0.06	0.14	-0.13	0.04	0.12	-0.05	0.23	0.23
9. You phone someone									0.38	-0.02	-0.08	-0.03	-0.06	0.02	0.01	-0.02	0.05	-0.17	-0.03	0.00
10. Someone phones you										0.00	0.07	0.22	-0.04	0.08	0.09	0.11	0.13	-0.06	0.00	-0.03
11. Plays outside freely											0.24	0.15	0.03	-0.29	0.05	-0.08	-0.13	-0.03	0.04	-0.03
12. Free to visit friend												0.44	0.09	-0.13	-0.01	-0.04	-0.02	0.06	0.09	0.02
13. May invite friend													0.16	0.00	-0.08	-0.10	-0.09	0.05	0.03	-0.02
14. Has a pet dog or cat														-0.02	-0.22	0.18	0.20	0.18	0.07	0.07
15. Limits on TV viewing															-0.18	-0.01	-0.02	-0.07	-0.02	0.02
16. Hrs of TV viewed/day																-0.10	-0.03	-0.07	-0.11	0.03
17. Does chores usually																	0.35	0.10	-0.05	-0.05
18. Number chores to do																		0.07	0.08	-0.03
19. Liking of care type																			-0.31	-0.08
20. Sibling conflict																				0.34

CHAPTER V

DISCUSSION

This study investigated the differences in fear experienced by adult-care children and self-care children. Many demographic factors that are thought to impact fear were controlled through the matching of pairs within the samples. Five quantitative self-report measures of fears were employed to investigate fear frequency and three open-ended fear descriptions and two open-ended descriptions of coping methods were utilized in comparing fears and coping methods of self-care children with those in adult-care arrangements. On each of these dependent variables, the null hypothesis tested was that there would be no differences in the fear levels or types of fears or types of coping methods reported between children in self-care and those in adult-care arrangements.

All three null hypotheses were rejected, at least in part. In testing the first hypothesis, one of the five fear measures, after-school fear, was significantly greater for self-care children than for adult-care children. For the other four fear measures, no differences were found. Thus more self-care children reported feeling fear after-school than did adult-care children.

Testing of the second hypothesis involved comparing the types of fears of self-care and adult-care children. The data concerning what a child is most afraid of were classified into one of six categories of fears for the study children. Significant differences were found between the frequencies of fears for self-care

children and adult-care children. For children in adult-care, fears of animals/insects and of being alone/losing a family member were more prevalent than they were for children in self-care. Instead, self-care children indicated having more fears of people (or of interactions with people), of violence, and of the dark/imaginary/scary TV.

The third hypothesis involved comparing the methods for coping with fear that adult-care and self-care children described in relating what they did when they felt afraid. Coping responses were assigned to one of three categories of coping methods. The frequencies of coping methods of self-care children were compared to those of adult-care children. Significant differences were noted in how the two groups cope with fear. Children in adult-care reported using an internal self-control coping method twice as often as did children in self-care. Also, there was a tendency for children in self-care to seek more support from people than did children in adult-care.

In Phase III, analyses identified variables that explained some of the variability in the fear measures. Conceptually, these variables were grouped into two clusters, one dealing with aspects of family contact, and the other with restrictions on after-school activities. Each cluster of variables was analyzed separately for each fear variable and each care group. The results did not indicate any consistent trend, although 23% of the variance in bedtime fear of adult-care children was accounted for by five variables, 23% of the variance in after-school fear of adult-care children was accounted for by three variables, and 13% of the variance in fear frequency of self-care children was accounted for by two variables.

Many of the associations were weak and tentative, and some of them are difficult to interpret.

Summary of Results

Hypothesis 1

It was hypothesized that there would be no difference between self-care children and adult-care children in the frequencies with which they report feelings of fear. Five separate measures of fear were utilized to investigate the experience of fear in general and at specific times of the day or night. These were morning fear, after-school fear, bedtime fear, fear of many things, and fear frequency. Of these measures, a statistically significant difference between self-care and adult-care children was found only for the after-school fear score. Rejection of the null hypothesis was made at the .05 level. None of the other fear difference measures were found to be statistically different from zero, indicating that for all fears other than those experienced after school the null hypothesis would not be rejected.

The fact that no fear measures, other than that of after- school fear, were significant suggests that the fear experience may be associated with particular aspects of the care arrangement and with demographic characteristics. Exploratory analyses (Phase II) did not identify any characteristics that could account for the increased after-school fear reported by self-care children. These results indicate that for the particular questions examined in the study, self-care children do not report more fears than do their matched pair counterparts in adult-care, except for fears occurring after school, before an adult arrives home. Because the fear levels of children in self-care at all other times besides after school were found to be

comparable to those of children in adult-care, it appears that the higher incidence of after-school fears among self-care children is limited to the time period spent in self-care.

Hypothesis 2

It was hypothesized that no difference would be found between self-care and adult-care children in the types of fears that they mention first. This hypothesis was rejected at the .05 level because the frequencies of fear types of adult-care children were sufficiently disparate from those of self-care children. The greatest contribution to the likelihood ratio chi-square statistic came from the differences in the fears of being alone or separated, interacting with people, and animals/insects. Children in adult-care reported 50% more fears of animal/insects than did self-care children. The fear of animals was the most common category of fears for children in both care groups. The frequency of fears in the alone or separated category was low for both groups, but more children in adult-care reported it than did self-care children. These trends also held for the distribution of total fears. Self-care children, however, reported substantially more people interaction fears than did children in adult-care.

One can only speculate about the reasons for the differences found between types of fears for self-care and adult-care children. The reasons for the differences may be multiple. The fact that children in adult-care report having more animal fears could be due to their not having other more immediate or preoccupying fears. The fear of snakes comprised over half of these fears, whereas dogs or bees, which are more commonly encountered, were responsible for only one sixth of the

category. Self-care children expressed slightly more fear of dogs, but a substantially lesser fear of animals that normally pose no real threat, such as caged or exotic animals.

The predominant fear for both adult-care and self-care children in the Dark/Spooks/Scary TV category was of scary TV/movies. Thus, the slightly larger percentage of fears in this category reported by self-care children may be due to a larger number of hours of less restricted daily TV viewing. This type of information on TV viewing, however, was not collected.

The larger number of children in adult-care reporting fear of being alone or separated from a family member may be due to a heightened attachment and dependence upon the adult caretaker. Also, this discrepancy in fear prevalence could be due to selection bias into self-care, since children who are afraid of staying alone may not be required to do so, and any who were fearful before trying it may have overcome the fear after successfully surviving the experience. The self-care experience itself fosters a spirit of independence and self-sufficiency which could lessen the fear of being left alone (Gallogly, 1985).

The larger number of children in self-care reporting fear of people interactions could be due to greater isolation from peers and adults during the after-school hours, and the lesser amount of time in which they have access to someone with whom to discuss matters. The counsel of a mature adult could help children better understand both sides of an issue and to explore the various options available to remedy the feared situation or relationship. Also, since parents often defend

children, children in self-care may feel more vulnerable and alone in trying to defend themselves.

Hypothesis 3

It was hypothesized that there would be no difference between self-care and adult-care children in the types of fear coping strategies that they employ. Rejection of this null hypothesis was made at the .05 level.

The most significant difference found in coping methods between the two care groups was that children in adult-care reported using an internal self-control coping method about twice as often as did children in self-care. Most of these involved "trying to put my mind on something else". Children in self-care reported seeking support from another person more frequently than did children in adult-care.

The reason that adult-care children may utilize self-control coping methods more frequently is that they may have more opportunities to discuss their fears and to be instructed on how they can be overcome. Thus, they may learn to use an internal self-control method to manage their fears sooner, because they have more opportunities of having appropriate adult counsel at the critical times when the fears occur. Self-care children who must manage alone for portions of the afternoon may seek the comfort of personal contacts in combatting their fears because they have additional needs for nurturance and companionship. Also seeking solace for their fears may serve as a means of acquiring the attention they need from adults. Although there are many plausible explanations for the results obtained, we can only speculate until more research is done.

Analyses of Variability in Fear Measures

Analyses were conducted on three of the fear measures to determine what effect the independent variables had on after-school fear, bedtime fear, and fear frequency. The variable "likes care arrangement" was the only variable that was selected in all three models as having a relationship with after-school fear. It was found that the more children like their care arrangement, the less after-school fear is experienced. The association assumes no direction or causation. Children in adult-care were less likely to be afraid after school if someone phoned them, if they had a dog or cat, and if they liked the care arrangement.

The two variables associated with decreased fear frequency for both care groups combined are going to a friend's house and child phones someone. When the data were analyzed separately for each care group, the variables liking to play with a sibling and TV restrictiveness were both associated with increased fear frequency. It seems that presence of a sibling and TV viewing were mixed blessings in promoting fear or helping to alleviate it for children in self-care in particular. Often the same children reported that the thing they liked most about their care arrangement was playing with their sibling and then later reported that the thing they disliked most about the care arrangement was the presence of sibling rivalry. The interviewer also commented on the "mixed blessing" aspect of the self-care arrangement (Stewart, 1986). The increased and unsupervised sibling contact could result in an increased sharing of fears. Increased TV restrictiveness, especially for children in self-care, might inhibit its use as a fear distractor or as a means of drowning out "creaky" house noises. Many children reported turning up

the volume of their TV or changing channels as a means of coping with their fears. Children reported liking the scary TV shows or movies that may have caused their fears initially. Thus it seems that both TV and siblings may be mixed blessings in self-care arrangements.

<u>Classification of Fears and Coping Methods</u>

The classification of fears and coping methods into appropriate categories was generally straightforward. On a few occasions, for coping methods, not enough information had been given to make an unequivocal assignment. For example, the distinction between "Internal Self-Control" and "Escape/Avoidance" was ambiguous when children responded, "do something...to get it off my mind." This response was classified as an escape method. Since no specific activity was mentioned, this response could conceivably have been coded similarly to "try to put mind on something else", which was coded as a method of internal self-control. The distinction made was that of doing an activity (coded as "Escape/Avoidance") as opposed to processing the fear mentally (coded as "Internal Self-Control"). Similarly, another child reported "clearing her mind and checking for snakes". This was classified as internal self-control, since the mental process was mentioned first.

In classifying fears, the distinction between the "Violence/Death/Injury" and "People" classifications was hard to make at times. For example, one child reported fearing karate lessons. That fear type had been classified under fear of injury originally, but when the verbatim responses were re-examined, the explanation of "because other kids knew how to do it" revealed that the underlying issue was one

of fearing interactions with people (particularly social failure), rather than fear of a potential injury.

This study illustrates why children's fears need to be analyzed both quantitatively and qualitatively. Quantitative analyses of fears do not reveal some of the elaborations which could be provided to give a better picture of the child's rationale and behavior. Similarly, without the quantitative analyses, it could not have been determined that children in self-care report more after-school fear than do children in adult-care, but that no differences in fear frequency were reported for the other measures of fear. The Longs (1983) cite hiding as a common coping method for latchkey children, and they enumerate various places that children hide. This method of reporting gives the impression that the practice of hiding is extensively used by latchkey children. In the current study, 5% of the self-care group and 3% of the adult-care group reported some form of hiding as a fear coping method that they used. Quantification of the extent that hiding is used by each care group reveals that, for the sample of children in the present study, hiding was not a common coping method.

Qualitative data can provide a better picture of types of fears prevalent for each group and the verbatim responses revealed some of the rationale behind the fears or coping methods. For example, in response to the question, "What sorts of things do you do when you feel afraid?" one 8-year-old girl said that she runs upstairs to her room and covers up her head with her pillow if her Mom is not home. Other things she reported doing were: She runs next door to a neighbor; and she locks doors (using 3 chairs for fortification), jumps on the couch, and goes to

sleep. If only the first activity were reported, the image projected would evoke pity at her retreat into total isolation with a pillow over her head. Her total repertoire of coping strategies, however, revealed alternative actions she was prepared to take in dealing with her fears.

All of the fear descriptions collected in response to three open-ended questions regarding what the child feared the most, and then what else, and finally anything else, provided an opportunity for the child to reflect on fear concerns and divulge them. Only the analysis of the second and third fears mentioned presented some methodological problems in distinguishing what was an elaboration of the previous fear, and where a new fear began. To insure uniformity in the classification of second and third fears, only the first fear among several similar ones cited (similar in that they all belonged to the same category) was utilized in the total fear analyses. Thus, if other types of fears were mentioned, too, they had an opportunity of being included in the frequency analysis for total fears. This procedure did not affect the statistical analyses, which were performed only on the first fear mentioned. It served to eliminate duplication of fears in the total fear distribution, and to include secondary and tertiary fears with diverse classifications.

Implications for Research on Children's Fears

A major conclusion of the study is the important influence that contextual factors have upon children's fears. This conclusion is in keeping with the research literature on children's fears, although the critical importance of contextual factors is not always recognized. In the present study a significant difference was found between self-care and adult-care children on after-school fear. Since it is the after-

school situation that is most clearly different for the two groups of children, the finding that more self-care children report after-school fear documents the importance of this situational context. This conclusion is further supported by the finding that there were no significant differences between the two groups of children on four other measures of fear. It thus appears that the difference on after-school fear has not generalized to other times of the day or to other situations. Such generalization may, of course, occur at a later time, but these research data on children's fears, collected at one point in time, do not provide an answer to that question.

A qualitative analysis of the children's fears provides further confirmation of the importance of the after-school context. Some of the specific fears of self-care children seem to be associated with their after-school arrangement. For example, the fears of a "creepy house", strange noises, "someone knocking (who might break in)", and being alone, are fears that would probably not occur if an adult were present. Many other fears, such as getting beaten up, being picked on, being threatened with a gun, fire, or thunder, might not be as frightening if an adult were in the house.

This research suggests that the context of fears--namely the type of after-school arrangement--may impact both the types of fears and the fear coping methods, as well as increase the likelihood of fears for some children. Children in self-care did report more fears of interactions with people, fears of violence, and fears of scary TV, than did children in adult-care. Also self-care children reported

using more fear coping methods of the escape or avoidance genre than did adult-care children who used more methods involving internal self-control.

Investigation of other variables, including the effects of sex, neighborhood, and major activities, such as TV viewing, on incidence of fears support the thesis that children's fears are contextually bound. The fear literature suggests that females often report having more fears than males. The present research supports this finding, as females reported having significantly more fear at bedtime than did males. This trend was also noted for other fear variables as well, although the differences were not significant.

The effect that TV has on children's fears varied. For some children, certain types of TV programs provoked fears. In the qualitative analyses of children's fears and fear coping methods, scary TV and movies were more frequently reported as fears by self-care children. At the same time, many children, particularly those in self-care, reported watching TV or changing channels when they felt afraid. Thus TV viewing was found to have a dual effect on the fears of children. Like fear itself, this effect appears to depend upon other contextual factors which interact with TV viewing.

The neighborhood (urban, rural, suburban) effect on after-school fear, which was observed only for self-care children, indicated that less fear was reported from the rural residents than from the urban and suburban residents. Other researchers of children's fears have reported that the fears of children may be associated with the local crime rate and safety of the neighborhood in which the child lives. Galambos and Garbarino (1983) concluded that the context in which children live, including

community and neighborhood characteristics, received too little attention in research. The present study confirms the importance of neighborhood and other demographic variables in research on children's fears.

Fear questions similar to those used in this study have been used in the previous research. During the pilot testing of the instruments used for this study, it was noted that children tended to respond to questions regarding what they usually do in the afternoon after school by relating what they did most recently. Thus, it may be that some of the fears reported may relate to a specific incident in the recent past, and that a child might report different fears if questioned about them a month or two later. Derevensky (1974) warned that he was not sure that the children in his study reported the fear that most concerned them. Although children in this study were asked specifically to report what they were most afraid of, it is unknown to what extent they actually did this. Some of the responses given (see Appendix E) do not appear to represent what a child would actually fear the most.

The questionable accuracy of children's responses to the fear questions could be investigated using several approaches. An ideal approach would be to conduct a follow-up interview a few months later. This longitudinal component could help to evaluate the longevity of the fears and determine the degree to which children were able to recall and report the fears that most concerned them.

Another method which could be used to better ascertain response accuracy would be to ask the child more specific questions about the fears reported. Questions could be devised which ask children to recall a specific incident that frightened them or which occurred in some specific context. Questions could also

relate the coping method used to the context of the fear that was reported. Many children did not associate the two automatically in their responses to what they did when they felt afraid. Without knowing the fear stimulus, its context, and other circumstances involving the child's options for dealing with the fear, it is difficult to evaluate the appropriateness of the child's fear coping strategy, or to assign the coping method to a category for statistical analysis.

Recommendations for Research on Children's Fears

Fears may have survival value when they are handled appropriately. For example, in some areas in which crime is more prevalent, the fears of children may be needed to encourage them to ensure that doors and windows are kept locked and to practice other safety precautions with strangers. The context in which the fear occurs may be as important to study as the fear itself. It may be inappropriate and even life-threatening for a child to have too little fear of a dangerous activity. For example, children are often unaware of the risks involved in riding their bicycles on busy streets. More research is needed to determine the functional role of fear and how the positive aspects of fear can be promoted to foster the child's growth and development.

The child's reaction to fear and its potential for having negative effects may depend upon the child's preparation for dealing with the fear stimulus. The child may have been taught what to do when confronted with a particular fear. After the child copes with fears successfully, mastery over the fears may develop, and the child may enjoy new opportunities or responsibilities as a result of the acquired

coping skills. The successful mastery of fears helps children to become more independent and achieve maturity.

Information on types of children's fears is more prevalent than is information on methods used for coping with fears and overcoming them. If fears are accumulated rather than conquered, then children may be facing more fears than they can tolerate. This could happen to children in self-care who live in high-crime areas, or in neighborhoods in which no accessible adults serve as resources in case of emergencies. The fear stimulus itself may be less problematic than the lack of a means by which to handle a crisis or a fear.

Most children cope with fears through escape or avoidance. It is not known how successful this method is for overcoming fears. It may be more appropriate for some fears under some circumstances than for others. Children must learn to face and control some fears in order to overcome them. Many mild, transient fears are common in childhood. They may be related to age or level of development and disappear spontaneously with the passage of time. Other fears are problematic and need to be treated to prevent their being generalized to other areas. The coping methods that children use to combat fears may be as important to study as are the fears themselves in determining the impact of fear on children's lives. Coping methods cannot be effectively evaluated outside the context of the fears that they purport to handle.

The process by which children develop a sense of control over their fears needs to be investigated. Of particular interest would be research on how children cope with fears, including such methods as direct instruction, modeling, peer

influences, or observation. Other questions to be researched are: Is there a preferred coping method for each fear type? How are coping methods developed?

The study of children's fears is still in its infancy. The classic 1935 study of Jersild and Holmes is still widely cited, although it is now over 50 years old. Notably lacking in the literature is longitudinal research on children's fears that tracks the development and dissipation of fears over time. The lack of agreement on a classification system for children's fears was suggested as being a major impediment to progress in research.

Research on children's fears should involve the total environment of the child. As there are so many options on the TV or VCR to view, and a diversity of after-school activities to pursue, it is difficult to acquire an accurate profile of the child's environmental exposures on a questionnaire.

The role that TV and movies play in instilling fear still needs to be researched. Many children in this study reported liking to watch scary TV programs and movies. Their antidote for fears resulting from media presentations was often multiple viewings of the scary scenes, if they could be replayed on the VCR. The timing of TV viewing and the effect of the presence of an adult or other person when a scary program is viewed have not been investigated. Without knowledge of such circumstances, it is difficult to evaluate the impact of TV viewing on fear development in children.

In summarizing, any study of children's fears should encompass the children's environment and experiences, as fears may have many sources. Derevensky (1974) proposed that many of the fears that children have are

environmentally induced and are learned through experience. Research has indicated that fears are largely determined by the individual's personal and social situation and experiences, and that fears are appropriate to age, social class, culture, and even moment in history (Graziano, DeGiovanni, & Garcia, 1979).

The literature reviewed on children's fears emphasized the multiple influences that can contribute to children's fears. For this reason, a matched pair design is particularly suited to examining the effect of one variable, such as the type of after-school child care arrangement. Caution should be taken in interpreting results, however, as it might not be the care arrangement per se that affects the outcome variables, but possibly some characteristic of the specific care arrangement. The entire context surrounding children's fears and fear coping methods needs to be investigated. It is evident that more research is needed to determine how context, fears, and fear coping methods interact to impact children's lives.

Recommendations

This study was successful in identifying several aspects of fear experienced by children in self-care that differ from those of children in adult-care arrangements. It is evident from the diverse measures and verbatim responses given that most of these children were not reporting extensive or excessive fears. It is possible that the presence of excessive fears among self-care children that has been reported by other researchers may be due to demographic variables, to neighborhood factors, or to other characteristics of the care arrangement itself. These characteristics may have rendered self-care use less appropriate for the children involved. Factors such as safety of the neighborhood and proximity of friends and neighbors need to be

considered in determining whether the self-care arrangement is suited to the needs of a particular child.

As most children have the experience of having to stay alone or with young siblings at least occasionally, all children should be instructed on what to do in case of an emergency and on routine safety measures. Contacts with neighbors, friends, or relatives should be maintained so that a child at home alone is able to make contact with at least one person should he or she ever feel afraid or have a problem. By making such arrangements ahead of time and instructing children on whom they might contact should they need someone's assistance before the parents return, the slightly higher amount of after-school fear observed in this study might be diminished.

Although three different types of neighborhoods were included in this study, none of these would be considered as dangerous for a child in self-care. Thus the results of this study may be applicable only to relatively safe kinds of neighborhoods. To determine if the results obtained can be generalized to self-care arrangements in higher risk areas, a study similar to this, using the matched pair design, would be recommended.

Because of the matched pair design used for sample selection, much of the sample variation in the dependent fear measures was controlled and the results obtained were easier to interpret. When only type of care arrangement is varied between relatively similar pairs of children, the final results offer reasonably straightforward interpretations of how the fear measures are affected.

As scary TV programs or movies was found to be a frequently cited source of fears, parents of children in self-care could be instructed to encourage the viewing of other types of programs during the after-school hours when children are more susceptible to fears, and viewing of the scary programs could be done when parents are home. Parents could help children identify good channels to select when they feel afraid, since TV viewing was also cited as a method for overcoming fear by many children. More research is needed to determine the role that TV may play in promoting or alleviating children's fears.

Despite the statistically significant results obtained in this study, the research questions have not been resolved. Several issues need to be addressed in future studies. A larger sample of matched pairs of children in adult-care and self-care arrangements is needed to replicate current findings and ascertain whether self-care children do in fact have fewer fears of being alone or losing a family member than do children in adult-care. If that is in fact the case, then it would be helpful to know whether this fear was present prior to using self-care or whether it developed from use of self-care. The positive developmental aspects of the self-care arrangement have not been sufficiently explored in research. Also the ideal characteristics of the self-care environment and the personality characteristics of children which make them best suited to the self-care arrangement need to be identified. A more appropriate selection of type of after-school care could be made if further research more accurately identified which children, under which circumstances, were more likely to do well in self-care or in other types of child care arrangements.

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APPENDIX A

PARENTS' QUESTIONNAIRE ON CHILD CARE ARRANGEMENTS

FOR ELEMENTARY SCHOOL CHILDREN

QUESTIONNAIRE ON CHILD CARE ARRANGEMENTS
FOR ELEMENTARY SCHOOL CHILDREN

Child's Name:_____ Age:____ Sex: Male_____

Female_____

Child's School:_____

Teacher:_____ Grade Level:_____

Parent's or Guardian's Name:_____

PLEASE PUT A CHECK ( ) BESIDE YOUR ANSWERS:
1. What is your relationship to this child?
   Mother_____
   Father_____
   Grandparent_____
   Guardian_____
   Other (Please Explain)_____

2. Are you employed outside the home?

   ____No   Yes,   ____Full-time (35+ hours per week)
                    ____Part-time (20-34 hours per week)
                    ____Part-time (Less than 20 hours per week)

3. If you are married and living with your husband/wife, is
   he or she employed outside the home?

   ____No   Yes,____Full-time (35+ hours per week)
                    ____Part-time (20-34 hours per week)
                    ____Part-time (Less than 20 hours per week)

   ____Does not apply to me.

4. Because of work and other activities, parents cannot
   always be at home with their children before and/or after
   school. Are you or your husband/wife usually at home
   with this child before and after school hours?

   ____Yes   ____No

IF "NO", PLEASE GO ON TO QUESTION 5 (page 2).

IF "YES", PLEASE SKIP QUESTIONS 5 and 6 AND GO TO
QUESTION 7 (page 3).

1

5. On this page I would like some information on the care
   arrangements you use on a regular basis for this child
   before and after school. Please check each arrangement
   that you use. (If you are using more than one care
   arrangement, please check all that you use.) Also,
   please tell me how many hours per week you use each
   arrangement and how long you have been using it.

Check here if you use it.	Care Arrangements	Hours per week you use it.	How long have you been using it?
A. ____	Taken care of in your home by a relative over 18.	____	____
B. ____	Taken care of in your home by a babysitter.	____	____
C. ____	Taken care of at the home of a relative.	____	____
D. ____	Taken care of at the home of a friend.	____	____
E. ____	Taken care of at a day care center.	____	____
F. ____	Takes care of self--alone at home.	____	____
G. ____	Takes care of self--older brother(s) or sister(s) at home. (How old is/are older brother(s) or sister(s)?_____	____	____
H. ____	Takes care of self--younger brother(s) or sister(s) at home. (How old is/are younger brother(s) or sister(s)?_____	____	____
I. ____	Other care arrangements. Please explain. _____ _____ _____	____	____

PLEASE GO ON TO PAGE 3

2

6. IF YOU CHECKED F, G, or H ABOVE, PLEASE ANSWER THIS
   QUESTION: Some parents leave their children to take
   care of themselves because the parents prefer it to
   other care arrangements. Others do it because they
   feel they don't have any choice. How about yourself?

   I prefer it. _____   I have no choice. _____

7. How satisfied are you with the care arrangements(s) you
   are using for this child?

   1. _____Very satisfied
   2. _____Somewhat satisfied
   3. _____Somewhat dissatisfied
   4. _____Very dissatisfied

8. Why have you chosen the care arrangement(s) you are using?
   (Please check all answers that are true.)

   _____You like it.
   _____Your child likes it.
   _____Other arrangements are too expensive.
   _____It is convenient.
   _____Other (Please describe)

   _____

   _____

9. Did you know that Charleston County offers an after-
   school care program at one elementary school in the
   district?
   _____Yes
   _____No

10. Would you be interested in having an after-school care
    program available at a school near you?

    _____Yes   _____Maybe   _____No

    IF "YES" OR "MAYBE", PLEASE GO ON TO QUESTION 11 (page 4).

    IF "NO", WHY NOT?

    _____

    _____

    IF YOU ANSWERED "NO" TO QUESTION 10, PLEASE ANSWER
    QUESTION 16 (page 4) AND FILL IN THE INFORMATION ON
    PARENTS OR GUARDIANS.

11. Would your child need transportation to a program if it were not at his/her school?

_____Yes
_____No

12. To serve my child care needs, an after-school program would have to be open until _____o'clock.

13. Would your child need transportation home from a program?

_____Yes
_____No

14. What type of activities would you like offered at an after-school care program?

_____Supervised recreation
_____Supervised time for homework
_____TV
_____Snacks
_____Arts and crafts
_____Other (Please specify)

_____

_____

15. For an after-school program that met my child care needs, I would be willing to pay $_____ a week.

16. PLEASE FILL IN INFORMATION ON PARENTS OR GUARDIANS.

Mother's or female guardian's highest grade or education level completed: _____

Mother's or female guardian's occupation: _____

Father's or male guardian's highest grade or education level completed: _____

Father or male guardian's occupation: _____

Parents' or guardians' marital status:
_____married, living together   _____separated
_____divorced   _____widowed

THANK YOU FOR YOUR TIME AND COOPERATION.
PLEASE RETURN THIS QUESTIONNAIRE TO SCHOOL WITH YOUR CHILD
TOMORROW. THANK YOU!

4

APPENDIX B

HOW-I-FEEL QUESTIONNAIRES I AND II

HOW-I-FEEL QUESTIONNAIRE I

Name: _____ Age_____Date_____

School _____ Teacher _____

Directions I want you to imagine that you have just gone to bed
at night. Is there someone in the room with you at bedtime or
are you alone? (Pause) Now I want you to think about the way
you are feeling at bedtime. I am going to read some sentences
that tell how you may be feeling. If the sentence tells the way
you feel, circle "Yes." If it doesn't, circle "No."

1.	I feel good.	YES	NO
2.	I feel scared.	YES	NO
3.	I feel worried.	YES	NO
4.	I feel happy.	YES	NO
5.	I feel afraid.	YES	NO
6.	I feel sad.	YES	NO
7.	I feel bored.	YES	NO
8.	I feel lonely.	YES	NO
9.	I feel nice.	YES	NO

HOW-I-FEEL QUESTIONNAIRE II

Name: _____ Age_____ Date_____

School _____ Teacher _____

Directions I want you to imagine that you have just come home
from school. Who is at your house when you get home? (Pause)
Now, I want you to think about the way you are feeling while you
are in the house (alone, with your Mom, with your sister, etc.).
I am going to read some sentences that tell how you may be
feeling at this time after school. If the sentence tells the way
you feel, circle "Yes." If it doesn't, circle "No."

1.	I feel good.	YES	NO
2.	I feel scared.	YES	NO
3.	I feel worried.	YES	NO
4.	I feel happy.	YES	NO
5.	I feel afraid.	YES	NO
6.	I feel sad.	YES	NO
7.	I feel bored.	YES	NO
8.	I feel lonely.	YES	NO
9.	I feel nice.	YES	NO

APPENDIX C

CHILDREN'S INTERVIEW

INTERVIEWER: Before interview begins make sure that each child's participation is voluntary.

1. Where do you live?
_____House, single family or duplex
_____Townhouse or condominium
_____Apartment
_____Mobile home
_____Other, specify_____

2. Tell me who lives with you?

Relation to you	Age	Usually at home before you go to school	Usually at home in the afternoon	In past 5 days No. of times at home before school	In past 5 days No. of times at home after school
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

3. How do you get to/from school?

to school
_____walk
_____bicycle
_____auto
_____school bus
_____public bus
_____taxi
_____other: specify_____

from school
_____walk
_____bicycle
_____auto
_____school bus
_____public bus
_____taxi
_____other: specify_____

4. At what time does your school usually end each day?

_____

5. Where do you go after school?

_____home

_____relatives

_____sitters

_____friend's or school mate's house

_____stay at school as long as possible

_____other: specify_____

6. Who is at your house (or the place in which you are cared for after school) when you arrive or who arrives there with you?

_____no one

_____mother

_____father

_____siblings: list sex and age

_____

_____

_____

_____relative: specify

_____

_____

_____sitter

_____friend or other non-related person: specify_____

7. At what time does the first adult usually arrive home (or at the place you go after school)?

_____who is it? _____time?

_____adult already there

8. How do you get into your house (or the place you usually go) after school?

_____Someone is already there, specify_____

_____Has a key.

_____Other method of entry: specify_____

9. If you lost your key (or otherwise could not obtain entry) what would you do?

_____wait until an adult appeared.

_____go to another location: specify_____

_____obtain a key elsewhere: specify_____

_____other: specify_____

10. What do you usually do when you get home? Start with the first thing you usually do and tell me everything you do until dinner. (INTERVIEWER: Be sensitive to any indicators of fear and anxiety. Write them verbatim.)

11. Do you usually telephone someone after you are home?
    (May have been answered in #10)

    _____Yes   _____No

    If yes, who_____

12. Does someone usually telephone you after you are home?

    _____Yes   _____No

    If yes, who_____

13. Are you allowed to play outdoors after you arrive home?

    _____yes, whenever I choose
    _____yes, occasionally, under these circumstances_____
    _____

14. If you are allowed to play outdoors, where are you allowed
    to play?
    _____yard only
    _____only on the block
    _____yard, block and/or park or school property
    _____other, specify_____
    _____no restrictions

15. Are you allowed to visit a friend's house after school?

    _____yes, no restrictions
    _____yes, with the following restrictions_____
    _____
    _____no

16. Are you allowed to have a friend over after you arrive home?

    _____yes, no restrictions
    _____yes, with the following restrictions_____
    _____
    _____no

17. Is there anything you would like to do that you usually
    cannot?
    _____yes   What: Specify:_____
    _____no

18. Do you have a pet?
    _____yes   Describe it:_____
    _____no

19. Do you have any chores you must do at home:

 _____yes   What are they:_____
 _____no

20. Do you do them?
 _____usually or most of the time
 _____sometimes or occasionally
 _____seldom or never

21. Do you have a T.V.?
 _____yes
 _____no

22. Are you allowed to watch T.V.?
 _____yes, no restrictions
 _____yes, some restrictions   Specify_____
 _____no

23. How much T.V. do you watch each day?

 _____0 - 1/2 hours   _____4 - 5 hours

 _____1/2 - 2 hours   _____5 - 6 hours

 _____ 2 - 3 hours   _____6+   hours

 _____ 3 - 4 hours

24. How happy or sad do you feel about what you do after school:
 between the time school is out and supper time?
 _____very happy
 _____a little bit happy
 _____not happy, not unhappy
 _____a little bit unhappy
 _____very unhappy

25. What if something dangerous happened while you were alone
 (or with your brother or sister) in your house.
 What would you do?

 _____call on parent: which one first, specify_____
 _____call police or fire department (see if they know the
      number or where to obtain it_____)
 _____leave the house (see where they would go_____)
 _____handle the situation by oneself (query as to what the
      child would do_____)
 _____call on a nearby adult (ascertain whom_____)
 _____cry, hide or some other type of relative inaction

26. What did your parent/guardian tell you to do if something dangerous happened?

27. Do you ever practice what to do if something dangerous happened at your house, like have fire drills at home?

    _____yes, often
    _____yes, sometimes
    _____no, never

28. Has anything dangerous, like a fire or someone breaking into your house, ever happened when you were at home?

    _____yes   Obtain as many details for each occurrence
                as possible.
    _____no

    For each dangerous occurrence mentioned ask: "Who was with you when that emergency occurred?"

    For each dangerous occurrence mentioned ask: "What did you do?"

29. If you are home alone (or with your brother or sister) and you need help, are there adults living or working near you that you can call on?

    _____yes, usually or most of the time
    _____yes, occasionally or sometimes
    _____no, very seldom

30. If yes, who are they and how would you get in touch with them?

31. All of us are afraid of something. What's the one thing you are most afraid of?
    (record verbatim)

    (probe) What are some other things you are afraid of?
    (record verbatim)

    (probe) Anything else?

32. What sorts of things do you do when you feel afraid?
    (record verbatim)

    (probe) Anything else?

33. All of us get pretty scared sometimes. How often do you feel pretty scared?

_____several times a day
_____about once a day
_____about once a week
_____about once a month

34. Who takes care of you when you are sick and can't go to school?

_____mother
_____father
_____sibling
_____self, no one
_____relative
_____sitter
_____other: Specify_____

35. Who takes care of you when there is no school and your parent(s) has/have to work or otherwise find it difficult to stay with you?

_____sitter
_____relative
_____sibling
_____self, no one
_____other: Specify_____

36. Who takes care of you during vacation periods, like summer?

_____mother
_____father
_____sitter
_____relative
_____sibling
_____self, no one
_____camp
_____summer school
_____other: Specify:_____

37. How satisfied are you with the care arrangement you have now?

_____like it a lot
_____like it a little
_____don't like it

38. If you could have any of these after-school care arrangements you wanted, which one would you choose?

     _____take care of yourself--just you at home
     _____take care of yourself (brother and/or sister at home)
     _____cared for in your home by your mom or dad
     _____cared for in your home by a babysitter
     _____cared for in a friend's or relative's home
     _____cared for in a day-care center
     _____other (please describe):_____

39. Are there some things about your care arrangement that you really don't like?

Yes_____   No_____
(If yes): Tell me what they are.

_____

_____

40. Are there some things about your care arrangement that you really like?

Yes_____   No_____
(If yes): Tell me what they are.

_____

_____

I've enjoyed talking with you. Thank you for your time.

APPENDIX D

CLASSIFICATION CRITERIA FOR FEARS AND FEAR COPING METHODS

FEAR TYPES

1= ANIMALS/INSECTS (live or stuffed)

2= DARK/SPOOKS/IMAGINARY CREATURES/BAD DREAMS/SCARY TV/MOVIES

3= NATURAL HAZARDS/WAR/HEIGHTS/NOISES/MACHINERY
Machinery includes anything man-made, like car or plane travel; and natural hazards refers to any natural danger, such as drowning, woods, or storms.

4= ALONE/SEPARATION/LOSS OF FAMILY MEMBER (resulting from separation, illness, death, or divorce of significant other)

5= VIOLENCE/DEATH/INJURY TO SELF/KIDNAPPERS/BURGLARS/RAPISTS or anyone feared because that person might severely hurt or kill the child (excluding fear of punishment). Injury is inflicted by someone or by an illness. Child is afraid of death to self as opposed to death of significant others.

6= PEOPLE/INTERACTIONS/STRANGERS
Strangers refers to persons who are not identified as having an intent to injure child, but child is bothered by their presence.

COPING METHODS

1) INTERNAL SELF-CONTROL AND PRAYER
This category includes self-talk, thinking of something else, and the mindset of realizing that there is nothing to fear. It also includes vague answers, such as "I don't know".

2) SOCIAL SUPPORT
This category includes any semblance of an interaction with other people, including talking, crying, yelling, whether or not any other person is mentioned. It is presumed that when one cries or yells or talks, someone else is usually involved.

3) AVOIDANCE OR ESCAPE
This category includes any action taken to avoid, escape, or distract self from the fear, which does not involve social support. Examples include change of TV channels, getting something to eat, hiding, running, panicking, turning or or off of lights, and holding a stuffed animal or pet.

APPENDIX E

LISTINGS OF FEARS AND FEAR COPING METHODS

LISTING OF DISTINCT FEARS

1) SCARY TV/MOVIES
2) FIRE
3) GHOSTS
4) WITCHES
5) DOGS
6) SNAKES
7) WILD ANIMALS
8) RATS
9) BIG LIZARDS
10) KITTENS AND SOME DOGS
11) BABY SISTER FALLING
12) DEATH
13) GETTING RABIES
14) GETTING BITTEN BY DOG
15) KING COBRA
16) WATER MOCCASIN
17) LIONS/TIGERS
18) WORMS
19) NOISE OF GUNSHOT
20) BURGLARS/ROBBERS
21) KARATE LESSONS..BECAUSE OTHER KIDS KNEW HOW TO DO IT
22) SNAPPING TURTLES
23) GUNS
24) STORM
25) WALK ALONE OR RIDE BIKE ON STREET
26) KIDNAPPERS
27) ALLIGATORS
28) BEARS
29) GETTING BEAT
30) FIGHTING
31) BEES
32) CHILDREN WHO PICK ON ME
33) SPIDERS
34) FROGS
35) BEING ALONE
36) STRANGERS
37) FOXES
38) BOOGER MAN
39) SHADOWS
40) DARK
41) DRIVING
42) BEING WITH BOYS
43) ALONE AND BEING PULLED INTO CAR
44) SLEEPING WITH WINDOW OPEN BECAUSE OF CHILD NEXT DOOR,
    WHO MIGHT HURT ME
45) SOMEONE KILLING SOMEONE IN MY FAMILY
46) MOTHER
47) INSECTS
48) WASPS
49) SISTER IN SCARY COSTUME
50) FLIPPING CURTAINS IN THE WIND
51) SCARY DREAMS/NIGHTMARES
52) MOTHER'S SHOE

53) SIBLING BEATING ON CHILD
54) BOBCAT
55) RAIN/THUNDER
56) SOMEONE AIMING A GUN AT ME
57) WAITING ALONE IN A CAR
58) PARENTS FIGHTING
59) HARM TO MOTHER, FATHER OR OTHER MEMBER OF FAMILY
60) ATTIC
61) NUCLEAR WAR
62) WOODS
63) MOTHER DYING
64) PARENTS AND/OR SISTER DYING
65) RAPE
66) SOMEONE TRYING TO KILL CHILD
67) NOTHING
68) BEING SUFFOCATED BY SOMETHING OVER MY FACE
69) HEIGHTS
70) WALKING ALONE..PEOPLE STARING AT ME
71) FATHER STARTLES ME UNEXPECTEDLY
72) STRANGE NOISES
73) SHARKS
74) SUPERNATURAL THINGS
75) TORNADO
76) DROWNING
77) GOING TO MR. LEE (PRINCIPAL)
78) HALLOWEEN HOUSE
79) BIG CATS
80) MOUSE
81) STUFFED BIRD
82) SISTER'S E.T. DOLL
83) JACK O'LANTERN
84) SOMEONE FOLLOWING ME THAT I DON'T KNOW
85) TO GET INTO TROUBLE
86) MARSH
87) ANYONE TRYING TO FRIGHTEN ME
88) BLACK PANTHER
89) CREEPY HOUSE
90) GETTING VERY SICK
91) GETTING HURT IN SERIOUS ACCIDENT
92) FLUNKING
93) GETTING YELLED AT
94) WIND
95) STRANGE OLD RELATIVE
96) SOMEONE KNOCKING..A BREAKIN?
97) BROTHER'S FRIEND WEARING A MASK

DISTINCT FEAR COPING METHODS

1) WATCH TV
2) CALL FRIEND
3) CALL MOM OR DAD
4) READ
5) CRY
6) GO TO BED
7) HIDE
8) I DON'T KNOW
9) SCREAM
10) RUN AROUND THE HOUSE
11) I CAN'T REMEMBER
12) GO TO (RELATIVE'S) HOUSE
13) GO GET A GLASS OF COLD CHOCOLATE MILK
14) GET BEHIND SISTER
15) GO UNDER BED
16) GO UNDER MATTRESS
17) NOTHING
18) GO OUTSIDE
19) CLEAR MY MIND/CHECK FOR SNAKES
20) TRY TO PUT MY MIND ON SOMETHING ELSE
21) HUG SISTER/CRY
22) RUN/GO PLAY WITH FRIENDS
23) GO TO SLEEP
24) TALK ON PHONE
25) TRY TO SNEAK BY IT
26) TELL SOMEONE I TRUST
27) LOCK DOORS
28) GO OUTSIDE AND HIDE
29) RUN
30) PLAY
31) GO TO BEDROOM
32) SIT BY MOTHER
33) SCREAM, RUN, PICK UP OBJECT (FOR DEFENSE)
34) IF ALONE, CUT OUT ALL LIGHTS IN HOUSE
35) CALL (A RELATIVE) TO COME OVER
36) GET OBJECT TO USE AS A (PROTECTIVE) WEAPON
37) STAY CALM
38) GO IN HOUSE
39) GO TO BED WITH SOMEONE
40) TALK WITH MOTHER/FATHER
41) CAN'T THINK OF ANYTHING
42) GO TO GRANDPARENTS' HOUSE
43) GET SHAKY
44) SIT UP IN BED AFTER FRIGHTENING DREAM
45) PANIC
46) GET AWAY
47) HOLD DOLL/STUFFED TOY/OTHER OBJECT
48) LEAVE ROOM
49) ASK SITTER TO SWITCH CHANNELS
50) LOOK FOR COMPANY
51) TALK WITH SISTER
52) TALK TO SELF AFTER BAD DREAM
53) PUT ON NIGHT LIGHT
54) READ IN BED

55) LOOK AROUND
56) CALM MYSELF DOWN BY TALKING TO MYSELF
57) LAY ON COUCH
58) TURN OFF TV OR SWITCH CHANNELS
59) JUMP
60) GET SOMETHING COLD TO DRINK
61) TALK TO AUNT/UNCLE
62) PLAY WITH ATARI
63) EAT
64) SIT ALONE
65) CALL POLICE
66) HOLLER FOR HELP
67) ASK TO SLEEP WITH MOTHER
68) PRAY
69) SIT DOWN
70) TAKE MEDICINE
71) CHECK OUT HOUSE
72) GO TO NEIGHBOR
73) CLOSE AND COVER EYES

APPENDIX F

RESPONSE CODES FOR INDEPENDENT VARIABLES

RESPONSE CODES FOR INDEPENDENT VARIABLES

The independent variables are coded as follows:

care group
        1="Adult Care"
        2="Self Care"

age range: 7 to 12

presence of a sibling
        0="No"
        1="Yes, a sibling is present"

child phones someone
        0="No"
        1="Yes/sometimes"

someone phones child
        0="No"
        1="Yes/sometimes"

child can play outside
        0="No" or "Yes, only if certain conditions are met"
        1="Yes, when I want to"

child can go to friend's house
        0="No I can't visit a friend"
        1="Yes, but with restrictions"
        2="Yes, when I want to"

child can invite a friend inside
        0="No friends allowed"
        1="Yes, but with restrictions"
        2="Yes, when I want to"

dog or cat as pets
        0="No dog or cat pets"
        1="Dog(s) &/or cat(s)"

restrictions on TV viewing
        0="No restrictions"
        1="Yes, TV viewing is restricted"

hours of daily TV viewing
        1="0 - 1/2 hr"   4="3-4 hrs"   7="6+ hrs"
        2="1/2 - 2 hrs"   5="4-5 hrs"
        3="2 - 3 hrs"   6="5-6 hrs"

chore compliance
        0="Rarely/occasionally"   1="Usually"

number of daily chores
        1="No"   4="Yes, 4 chores"
        2="Yes, 1 or 2 chores"   5="Yes, 5 chores"
        3="Yes, 3 chores"   6="Yes, 6 or more chores"

amount child likes care arrangement
        1="Doesn't like" 2="Likes a little" 3="Likes a lot"

complaint of sibling conflict
        0="Not cited as a complaint re care"
        1="Sibling conflict is cited as a complaint re care"

child likes to play with sibling
        0="Siblings not cited as reason for liking care"
        1="Likes to play with sibling cited as reason for liking care"