

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Order Number 9208300

**After-school activities and care arrangements of early
adolescents: An exploratory study**

Bey, Kathleen Anne, Ph.D.

The University of North Carolina at Greensboro, 1991

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

AFTER-SCHOOL ACTIVITIES AND CARE ARRANGEMENTS OF EARLY
ADOLESCENTS: AN EXPLORATORY STUDY

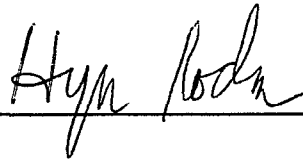
by

Kathleen A. Bey

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
1991

Approved By



A handwritten signature in cursive script, reading "Hym Roda", is written over a solid horizontal line.

Dissertation Advisor

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.

Dissertation Advisor

Hym Nohm

Committee Members

Doug Pratto

Carol E. Mackinn

J. Allen Watson

June 26, 1991

Date of Acceptance by Committee

June 26, 1991

Date of Final Oral Examination

BEY, KATHLEEN ANNE, Ph.D. After-School Activities and Care Arrangements of Early Adolescents: An Exploratory Study. (1991) Directed by Dr. Hyman Rodman. 124 pp.

This study examined the after-school activities and care arrangements of 10- to 14-year-old early adolescents. It investigated the type and extent of several after-school activities and care arrangements as well as amounts of time spent in each by child's age and location of residence. Responses were collected with an instrument designed by the researcher and completed with input from parents and children.

The three after-school activities investigated were watching television, doing homework, and participating in organized recreation. Care arrangements investigated included adult-care and self-care. The study also examined the amount of time the child is away from the home after school ends and the extent of adult supervision during this time period.

The responses of 211 urban and rural early adolescents and their families were used to examine the following research questions: (1) What are the after-school activities and care arrangements of early adolescents and how much time do they spend in these activities? (2) Does the amount of time spent in after-school activities and care arrangements differ with age of child and/or location of residence? (3) What characteristics of the child and the family account for

the variation in the amount of time spent in self-care?

Descriptive statistics show that the typical early adolescent is likely to be watching television in the afternoon and to be under adult supervision. Age of child influences both the amount of time the child is in self-care and time spent away from home, with greater time amounts as the child's age increases. Rural children tend to spend more time watching television and under adult-care than do urban children. Regression analyses were performed with selected independent variables which might account for the variation of amount of time spent in self-care. The independent variables found to be significant were maternal employment and marital status, educational level of the mother, age at which the child is judged competent by the parents to have a friend over when the parents are not home, and location of residence.

Recommendations for further instrument development and future applications were provided.

ACKNOWLEDGEMENTS

Special recognition is more than deserved by my committee chair, Dr. Hyman Rodman, without whose support and encouragement this dissertation would not have been completed.

I would also like to express my appreciation to my committee members, Dr. David Pratto, Dr. Carol MacKinnon, and Dr. J. Allen Watson.

Additional acknowledgements and gratitude are due to the administration, faculty, students, and families at Greensboro Schools, Thomasville Schools, and Greensboro Day School; as well as to the counselors and staff of Youth Services Bureau and Lexington Youth and Family.

Through a difficult period in my life I have enjoyed the support and encouragement of fellow students, faculty, and staff at the University of North Carolina at Greensboro. I appreciate your concern and caring.

To my mother, Estelle (1916-1986), and my father, Alexander (1911-), who taught their five children the love of learning and the value of persistence and determination;

To my children, Alexis and James Kerry Lindamood, who grew up believing that mothers spend vast numbers of hours in libraries and can not be spoken to during finals week;

Finally, to Edward Costello, Eugenie Egan Zorb, and
Suzanne Brannon, whose strength and encouragement helped me
over the rough spots;

I express my eternal gratitude.

TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
CHAPTER	
I. INTRODUCTION	1
Purpose	10
II. REVIEW OF LITERATURE	13
Characteristics of the Child	14
Maternal Characteristics	23
Characterisitics of the Family	29
III. METHODS	34
Source of Data	34
Dependent Variables	36
Independent Variables	36
Hypotheses	39
IV. RESULTS	42
Description of the Sample	43
Research Questions 1 and 2	47
Research Question 3	70
Test of Hypotheses	74
Summary of Results	80
V. SUMMARY AND DISCUSSION OF OBJECTIVES, METHODS, AND RESULTS	83
After-School Activities	85
Care Arrangements	89
Independent Variables	92
Limitations	97
Implications and Conclusions	100

BIBLIOGRAPHY	104
APPENDICES	116
Appendix A	116
Cover Letter	116
Appendix B	118
Confidential Family Questionnaire	118

LIST OF TABLES

TABLE	Page
1. Family Income by Location	44
2. Hours of Maternal Employment by Location	45
3. Sample Population by Age and Location	46
4. Time Spent in After-School Activities for Ten-Year-Olds by Location	49
5. Time Spent in After-School Activities for Eleven-Year-Olds by Location	50
6. Time Spent in After-School Activities for Twelve-Year-Olds by Location	51
7. Time Spent in After-School Activities for Thirteen-Year-Olds by Location	52
8. Time in After-School Activities by Age and Location	53
9. Time Spent in Care Arrangements for Ten-Year-Olds by Location	56
10. Time Spent in Care Arrangements for Eleven-Year-Olds by Location	58
11. Time Spent in Care Arrangements for Twelve-Year-Olds by Location	60
12. Time Spent in Care Arrangements for Thirteen-Year-Olds by Location	62
13. Time Spent in Care Arrangements by Age and Location	64
14. Amount of Time in Self-Care by Age and Location	68

15. Amount of Time Spent away from Home by Age and Location	69
16. Regression of Time Spent in Self-Care on Independent Variables	72
17. Regression of Time in Self-Care on Five Independent Variables	73

CHAPTER I
INTRODUCTION

Between 1946 and 1964 the United States experienced a record number of births. These "baby boomers" are now producing children of their own and the birth rate has again increased after a decline in the 1970's. By the end of 1990 the number of preschoolers is expected to be only slightly lower than the number of children born during the baby boom. School-age children (ages 6 to 13) continue to show the greatest population growth (U.S. Bureau of the Census, 1987). Estimates show that there are currently 40,000,000 children in American schools (U.S. Bureau of the Census, 1987). To try to accommodate a growing school-age population, elementary and secondary schools are being built at a rate equalled only during the baby boom. Schools that previously stood vacant are now pressed into double sessions in heavily populated areas like California and Florida. Florida projects adding 103,000 new students statewide each year (The Palm Beach Post Outlook, January 27, 1990).

Many public and private school systems have adopted the middle school format for grades 6, 7, and 8. These 10-through 13-year-olds seem to be in a transition phase for the educational system: too old for the constant supervision of an elementary school and too young to assume the independence needed for high school. These early adolescents present a

problem for after-school care as well. Most commercial day care stops at 5th grade because school-age children may not be happy with going to a child care center with preschoolers. Organized activities such as athletics and clubs meet when adults are available, usually after 6 p.m. Since middle school children are too young to drive or to get jobs, most return to their homes when the school day ends.

For some of these children, adults supervise their after-school time. Many others, however, assume responsibility for their own care and, in some cases, for younger siblings as well. Parents may be seeking care for their children, but find that they may be limited by the age of their children, by what is available in their community, and by what they can afford. In some areas community organizations like the YM/YWCA as well as a few employers have set up information and referral services for child care. In most cases parents are on their own, depending on more than one type of child care and often patching together a complex set of arrangements that might include parental care, other adult care, and self-care.

The phenomenon of school-age children who are responsible for their own care has increased steadily since World War II. The factors that produced the self-care child then (maternal employment, father absence, and economic necessity) are even more in evidence today; and these factors, along with the scarcity and expense of day care, the

reduction of extracurricular school activities, and the changes in family structure, form the basis for current concerns about child care arrangements (Samuelson, 1986).

Faced with increasing day care costs as well as scarcity of qualified places, parents are sometimes able to use extended family members for child care. In today's economy, however, teens can earn more money working at other part-time jobs than they can babysitting. Grandparents and other older relatives used to be reliable child care providers but now they may be enjoying an active retirement life and/or may be still employed themselves. Family members may have moved to distant areas and therefore are not available for babysitting. Some parents have resorted to the ingenious (and unsafe) practice of taking children to malls, libraries, parks, and other public places hoping that the adults there will watch the child or that a public place with many adults will provide a safe place for the child. For most parents, child care, particularly for the school-age child, remains an unsolved problem.

For school-age children, the school is the major caretaker, along with adult (parental or familial) supervision before or after the school day. Adult care, however, may not be continuous or full-time; the degree of adult supervision varies with the child's age. Caring for a child of 5 or 6 years requires constant supervision while a 12- or 13-year-old might be in telephone contact with an

adult and still be considered by the parent as under adult supervision (U.S. Bureau of the Census, 1987). This problem of accurately defining what constitutes "care" is a concern to researchers.

Some attempt has been made to define "self-care" by variables such as time and condition. Diamond, Kataria and Messer (1989) define a "latchkey" child as one who is alone or with younger siblings at least 2 hours per day after school; "semi-latchkey" children as those who are at home with older siblings up to 16 years or without supervision 3 to 5 hours per week; and "nonlatchkey" as a child who has a parental figure 17 years or older at home every day after school.

Rodman, Pratto, and Nelson (1985) suggest that care is delineated by the child's age and that self-care includes children from 6 to 13 years; "these school-age children are arguably old enough to care for themselves for limited amounts of time yet young enough to require adult care most of the time" (p. 294). The issue of defining "self-care" becomes more complex as we move to the higher end of this age range. Children in middle school (ages 10 to 13 years) are moving away from dependence upon parents and striving for independence. Peer groups become increasingly important as agents of socialization for these early adolescents. Schools, communities, and parents foster this growing sense of independence by sponsoring adult-supervised activities

such as sports, clubs, dances, and athletics after the school day ends. Many children rush home from school, change clothes, and rush out, not to be seen again by the parents until dinner. Some of these children go to sports activities; others spend the afternoon outside playing, or at a mall or park where there is no supervising adult present. In organized after-school activities children can be labelled "adult-care" easily since a supervising adult is present. In other cases, since the child first goes home, they also may be termed under adult-care; in reality, children who go to a store or to play at a park are not spending the afternoon with their caretakers.

Steinberg (1988) questions what to call these "millions of American youngsters who care for themselves on weekday afternoons but are neither supervised nor at home after school" (p. 295). He suggests that the term "self-care" may be interpreted to mean children who care for themselves or others. When the definition assumes that self-care means home-care, researchers have a problem when trying to classify children whose parents supervise them "in absentia". In trying to clear up some of this confusion about self-care arrangements, we will adopt the definition proposed by Rodman, Pratto and Nelson (1988): "A self-care child is one between the ages of approximately 6 and 13 years who spends time at home alone or with a younger sibling on a periodic basis" (p. 294).

Many parents use a variety of care arrangements for their growing children. If the parents are working, as the majority of parents of school-age children are, they face major decisions regarding the type and extent of child care that they will use. Parents feel increasing social and economic pressures to consider the self-care arrangement alternative as the child moves through his/her later school years. Many parents leave their older children at home alone because they are not able to afford extended day care. Other parents do not have day care available. Other parents, though, leave their children at home alone because they think their ten-, eleven-, and twelve-year-olds are mature enough to care for themselves. By the time the child enters middle school, children may be in self-care for a short period of time, usually after school, and the adult is present for the majority of the afternoon.

Previously, children who cared for themselves after school wore a house key on a cord around their neck, and thus became known as "latchkey" children. They were school-age children who were without adult supervision when they were not in school (School-Age Child Care Project, 1987). The term "latchkey" became synonymous with deprived, neglected and/or poor children and assumes that the parents have deliberately placed an unprepared child in an unattended position during nonschool hours. The amount of unsupervised time might account for a substantial part of the child's day

if it includes before- and after-school time as well as holidays, teacher in-service days, winter and spring vacations, and summer months.

The term "latchkey", which is often used in the media, has negative connotations and tends to produce guilt in parents (Bundy and Popper, 1989). The focus in research which examines child care arrangements is presumed nonjudgmental. In order to keep to nonpejorative terms, children will be termed "self-care" to indicate those who care for themselves and/or others for some period of time during the weekday.

The self-care arrangement can best be studied as a continuum, the amount of time that the child is responsible for his or her care. By using intervals of time we avoid labeling the child as exclusively self- or adult-care. Defining "self-care" arrangements on a time/interval basis frees us from the confines of the traditional definition of "latchkey" children who are home alone on a regular basis (Rodman and Pratto, 1987; Bundy and Popper, 1989).

An important question that seems to surface on a regular basis is the issue of who "owns" the problem of child care. Should parents be solely responsible for the child's care, or should schools provide supervision both before and after school hours? Today fewer than 10% of U.S. families consist of a father who goes to work and a mother who stays home with the children (U.S. Bureau of the Census, 1987). In 1983 almost one half of the 13 million children aged 13 and

younger whose parents were fully employed got along without direct adult supervision during some portion of the weekday (Seligson, Gensser, Gannell, and Gray, 1983). Two-thirds of school-age children currently have mothers in the work force. The proportion of children with employed mothers is expected to increase to three-quarters over the next ten years (Hofferth and Phillips, 1988).

To help these working parents, many organizations have set up "survival" kits, telephone hotlines, and other guides to help self-care children. But critics argue that these aids condone self-care. Further, these critics emphasize the negative aspects of self-care such as fear, isolation, and helplessness (Long and Long, 1982; Heath and McKenry, 1989).

When schools are asked to become involved in child care, more questions are raised about the limits of the school's responsibility to parents and children. Some critics argue that if schools follow through on providing before- and after-school care, they may be construed as condoning maternal employment. However, they may also be accused of promoting self-care by children if they do not provide these services (Strother, 1986).

A 1988 survey of principals by the National Association of Elementary School Principals found that 84% of those principals thought that children in their community needed supervision during the hours that school was not in session, but only 22% of their schools offered any such care

(Thompson, 1990). Obviously, the issue of who provides care and how care is provided for school-age children is far from being solved.

Palm Beach County, Florida, is considered one of the fastest growing areas in the country and as such magnifies the extent of concern and public reaction to school-age child care needs. In 1972 principals in inner city schools were concerned about the numbers of children who "hung out" at the school before and after school hours. Many children were at the school campus from 6 a.m. until 6 p.m., primarily because the parents considered the school to be a safe place for the child to go when no adult was in the home. The first after-school program was established in 1973 serving 2 elementary schools. The School-Age Child Care program has expanded to its current status of serving over 7000 children with 59 of 68 elementary schools having extended day programs for their students. Broward County (Fort Lauderdale area) serves over 12,000 children in after-school programs, and Dade County (Miami area) serves over 20,000 children in school year 1990-91. Yet, these figures represent only a portion of the children who need adult supervision during non-school hours. Palm Beach County alone has 106,000 students in the public school system, and after-school care is provided only through 5th grade in all Florida counties (Bey, 1990).

Purpose

The purpose of this study is to investigate the after-school activities and care arrangements of early adolescents. We will examine what characteristics of the child and the family influence the decision to use the self-care arrangement. Social disapproval of self-care arrangements is giving way slowly to accommodation. Such factors as increased maternal employment and changes in family structure may be contributing to this arrangement, especially for older children. But as more information is reported (and perhaps distorted) by the media, the increased numbers of self-care children have led to public concern about this phenomenon. As more parents are considering and using the self-care arrangement, questions are being raised about the consequences for unsupervised or partially supervised children. This concern is reflected in the increase of resources allocated to help parents make appropriate care decisions and to provide schools and communities with assistance in formulating policy and developing programs for child care options (Strother, 1986; Alexander, 1986; Press-Dawson, 1987; Rodman and Cole, 1987; Seligson, 1990; Thompson, 1990).

Very limited research has been done on after-school care arrangements of adolescents. Collecting data on adolescents is a difficult task. Even under apparent adult supervision the child could be spending the afternoon away from the home

engaging in activities of which the adults are not aware. The dramatic rise in adolescent pregnancies and drug experimentation indicates that adolescents are not always under direct adult supervision. If the child is in an unsupervised situation, and especially if the child is responsible for the care of younger children, parents may be reluctant to acknowledge this arrangement for fear of legal consequences. Many parents may not be aware of what the child is doing when he or she is alone in the house or away from the home without direct adult supervision. When parents alone are asked to give information about their child's after-school activities, an accurate account may not be presented.

Through the collection and analysis of data we propose to answer the following research questions:

1) What are the after-school activities and care arrangements of early adolescents and how much time do they spend in these activities and arrangements?

2) Does the amount of time spent in after-school activities and care arrangements differ according to the age of the child and/or location of residence?

3) What characteristics of the child and the family account for the variation in amount of time spent in self-care?

The major objective of this study is to collect data about the after-school activities and care arrangements from

the families as a unit, with input from both the parent and the adolescent. Through this method we obtain descriptive information about the activities and care arrangements of early adolescents. We will also investigate what characteristics account for the variance in the time spent in self-care. The interval dependent variable of time spent in self-care will be regressed on selected independent variables such as age of child, sex of child, competence of child, race of family, size of family, income, maternal employment, maternal marital status, educational levels of parents, proximity to other family members, and satisfaction with care arrangements. Operational definitions of these variables will be presented in later chapters.

CHAPTER II
LITERATURE REVIEW

American concern about child care during nonschool hours is not a temporary problem facing a few isolated families. The U.S. Department of Labor (1982) estimated that as many as 7 million children under the age of 11 are without adult supervision for significant portions of the day while the Bureau of the Census in 1987 reported that 2.1 million children were in self-care during after-school hours. The New Jersey Child Care Advisory Plan (1989) reports that, in 1980, 666,000 New Jersey children ages 6 to 13 years were in need of child care services after school and predicts that 800,000 children in 1990 and 851,000 in 2000 will be needing before- and after-school care. This need is apparently not being met by existing extended day programs. In a 1986 Columbus, Ohio, survey of households with children aged 12 and under, 22% of parents reported that they looked for and could not find suitable child care (Child Care Information Exchange, November 1989). Much research has been done to establish the extent of need. The question of the kinds of child care as well as the consequences of differing care arrangements is currently the issue most in need of examination.

In examining the research that has been done to date on the pressing problem of self-care, many of the factors

investigated fall into three areas of concern: child characteristics, maternal characteristics, and family characteristics. We will first examine the research dealing with the characteristics of the child: age, gender, and competency. We will then look at maternal characteristics of employment and marital status. Familial characteristics include race, income, and location. Our emphasis is on research dealing with children from 10 to 13 years termed "early adolescents".

Characteristics of the Child

Researchers have found that the age of the child is an important factor in determining the type of care arrangement that the parents use. Next to adult care, staying home alone or with a sibling is the most prevalent arrangement for children ages 5 to 14. According to Nichols and Schilit (1988) between 15% and 30% of children in that age range care for themselves before and after school. The U.S. Bureau of the Census (1987) reports that the proportion of children who regularly care for themselves varies markedly with age, from 1% of 5-year-olds to 14% of 13-year-olds. Younger children (grades K-3) were found to be in self-care less frequently than older children in grades 4-6 (Robinson, Rowland and Coleman, 1986). In a survey conducted in Columbus, Ohio, 9% of the parents with children under the age of 12 used care by older siblings, and 15% used self-care arrangements (Action

for Children, 1987b). Because of strong societal pressure on parents to provide supervision for children, the numbers of parents who report self-care may be under-reported. The same survey asked parents at what age could their children be left alone for a period of one hour or longer. Seven percent indicated they approved of self-care for that time period when the child reached the age of 8 years; 6% said 9 years; 27% said 10 years; 11% indicated 11 years; and 48% said 12 years or older. Afternoon is the most common time parents report leaving children alone at home. Of the parents who leave children alone, many reported that no formal day care programs existed for their child. Baden, Genser, Levine and Seligson (1982) report that older children are neither interested in nor served by current child care programs. Perhaps because of this lack of readily available extended day care, there have been dramatic increases in the number of early adolescents who routinely care for themselves for some part of each day, and this number is increasing in all economic brackets (Long and Long, 1982; Robinson, Rowland and Coleman, 1986).

Research has typically focused on care arrangements of younger children (Long and Long, 1982; Baden, Genser, Levine and Seligson, 1982), and few studies focus exclusively on adolescents (Seligson and Fink, 1986). Young adolescents traditionally have been an underserved and understudied group due to their diversity and rapidly changing needs, and

"developmental information and services are lacking in most fields" (Lipsitz, 1979, p. 11). Early adolescents are often defined by the characteristics they share both with children and adults. Thus, a 12-year-old girl may look like an adult, may assume the responsibilities of a caretaker, and may have the ability to become a parent, yet may still act, think, and have the judgment of a child. The cartoon of a young adolescent with a bikini in one hand and a teddy bear in the other represents the neither-child-nor-adult essence. Lefstein (1987) states, "There is an appalling lack of consensus about the needs of this age group" (p. 24).

Community agencies and schools acknowledge and are actively involved in meeting the need for after-school care for younger children, and the needs of older adolescents are partially met through job skills and employment opportunities. Early adolescents, however, do not easily fit into concerns defined as "child care" or "youth employment".

In thinking about leaving a child alone, whether for a short or long time, parents have many factors to consider. Parents in all states are legally responsible for their children's welfare until they reach adulthood. Part of caring for children is providing adult supervision until they can care for themselves (Thompson, 1990). The question then becomes: at what age does the child develop the independence and self-reliance necessary for self-care? Most parents are quick to say that a 5-, 6-, or 7-year-old needs after-school

care. But with 8-, 9- or 10-year-olds, some parents arrange for children to supervise themselves while other parents allow self-care out of necessity. Cole and Rodman (1987) and Bundy and Popper (1989) suggest that 8 years is the minimum age at which children should be left alone. Many older children may not be comfortable with the self-care arrangement but may be reluctant to ask for support. Nichols and Schilit (1988) analyzed 2495 calls to KIDLINE, a community telephone "warmline" that provided information, support and assistance to self-care children. The majority of all calls from all ages were conversational; 80% of the calls were from children aged 7-11 years and 19% from adolescents aged 12-16 years.

The wide range of ages at which the child assumes self-care is remarkable. Parents have no firm guidelines as to when the child is ready for his or her own care. Parents may feel that the age of the child is the most important deciding factor in self-care. Robinson, Rowland and Coleman (1986) state, "In practice, parents still use age as a benchmark for latchkey status" (p. 7). Parents may feel that age of the child also indicates competence, especially in the self-care arrangement. Brown, Pratto and Rodman (1988) found one contributor to mother's satisfaction with the self-care arrangement was the child's age. Parents of older children reported more satisfaction with self-care. Other studies which showed the effect of child's age on greater use of

self-care arrangements include Rodman and Pratto (1987), U.S. Bureau of the Census (1987), and Strother (1986).

Older children are more likely to be in self-care and their parents are more likely to report satisfaction with the arrangement if it is a voluntary choice among various options. Many families do not have any option other than self-care. Even when the self-care is not a voluntary choice, few parents or children express dissatisfaction. Nichols and Schilit (1988) and Zill, Greveaus and Woysner (1977) found that children under 11 years have more fears about self-care than older children. Parents may not be aware of or understand these fears and thus may report satisfaction with self-care arrangements.

The gender of the child has also been considered to be a factor in the self-care decision. McAninch (1987) found that while the developmental sequence, as perceived by mothers, was very similar for boys and girls, girls were considered ready to "work as a babysitter", to "regularly care for a sibling after school", and to "stay home alone with a cold" before boys were. If mothers consider girls to mature earlier than boys, then the girl may also be considered mature enough to take over some parental responsibilities after school such as care of younger children, making supper, and other traditionally female responsibilities before boys assume corresponding male responsibilities.

Powell and Widdows (1987) found that while most parents

indicate that the sex of their child did not influence their child care decision, more than 60% of the children placed in school-age child care programs are boys. "Perhaps parents were of the opinion that boys might be more prone to mischievous behavior in a self-care situation. . .in the future investigations may wish to examine specific attributes of perceived maturity level, especially in the situational context of activities after school" (p. 280).

Gold and Andres (1978) studied 10-year-olds whose mothers either were employed full-time or did not work outside the home. They found that these children's academic achievements were related to the employment status of the mother and to the child's gender. When the sons of employed mothers were studied as a separate group, boys who took care of themselves during nonschool hours ranked lower academically than boys who received adult supervision, but the difference between the two groups was not statistically significant.

Diamond, Kataria and Messer (1989) found that latchkey boys (defined as being alone or with a younger sibling at least two hours per day after school) tended to have more parent-acknowledged behavior problems and a trend towards lower academic achievement when compared to nonlatchkey boys. However, Lovko and Ulman (1989) found no differences between self-care and adult-care boys in anxiety, self-perceived social ability, and behavior problems. In a interesting

study by Block and Block (1988), family environments described as "loosely maintained, unstructured, and laissez-faire" were related to drug use in adolescent girls but not in boys. It would appear that there may be an understudied interaction between family environment and the child's gender.

Females have traditionally been the more verbally expressive gender. Nichols and Schilit (1988) found differences between boys' and girls' calls to a telephone assistance service for self-care children. Boys made fewer conflict calls (sibling[s], parent[s], friend, relative, teacher, bully) than girls as well as fewer support calls (depression, suicide, runaway, move/moving, divorce/death). Girls made a higher percentage of safety calls (accidents, sick). Their conclusion was that "latchkey boys fail to use available resources to respond to their loneliness and fear as latchkey children" (p. 5). In a related study, Zill, Greveaus and Woyshner (1977) found that in a survey of children from 7 to 11 years, 32% of the boys and 41% of the girls said that they worried when they had to stay home alone without an adult; 30% of the girls and 20% of the boys said they were afraid to go outside to play. Social roles and expectations may influence the child's response to the self-care arrangement.

When parents begin to think about the self-care arrangement, they assess the capability of the child to care

for him/herself as well as to handle additional responsibilities equated with being home alone after school, such as safety, decision-making, and social/emotional stability. With school-age children, parents' perception of when children are capable enough to take care of themselves usually involves children's performance on a variety of activities. Robinson, Rowland and Coleman (1986) claim that "There is a wide range of social and emotional maturity rates that differ for each child" (p. 6).

Many parents of early adolescents use the self-care arrangement as a means to promote the child's independence from adult supervision. Other parents use the same arrangement but their motives are different. Economic pressures or the entry of the mother into the work force may make the self-care arrangement the result of circumstances beyond the family's control.

The question of assessing the competence of the child in decision-making and behavior is important to researchers who study child care arrangements. Middle school children in particular have many opportunities to practice decision-making because they are moving away from the constant adult supervision of childhood and thus are free to try out new challenges and behaviors. Behan (1985) suggests that there is no exact age at which children can be said to be ready for self-care but many 11- and 12-year-olds are considered mature enough to be babysitting younger children.

Parents seem to find some way to evaluate their child's level of competence before assigning more independence.

In research that has looked at after-school care, self-care and adult-care children were compared on various dimensions. Woods (1972) found that among fifth graders, unsupervised girls had lower academic achievement and social adjustment than supervised girls. Galambos and Garbarino (1983; 1985) found that unsupervised children did not differ significantly from supervised children on these dimensions. Long and Long (1982) found that unsupervised children experienced more fear and less flexible home routines. Grief (1986) showed that children in a self-care situation may be more competent in home responsibilities than adult-care children. Rodman, Pratto and Nelson (1985) found that unsupervised children did not differ significantly from supervised children in self-esteem, social adjustment, and locus of control. Steinberg (1986) found that adolescents who are without adult supervision are more susceptible to peer pressures. Clearly, the research to date is not conclusive. It would seem that some of the preconceptions of the researcher and the consumers of research come into play when the data are interpreted. It would also seem that "competence" means different things to different people.

Rodman (1980), Rodman, Pratto and Nelson (1985), and McAninch (1989) looked at mothers' perceptions of children's age of maturity using an instrument called the Perceived Age

of Maturity (PAM) Scale, which measured competency on several dimensions. Mothers tended to view girls as maturing earlier than boys on 14 items while boys were perceived as maturing significantly earlier than girls on only 4 items. Age and gender may show an interaction effect which influences the parent's perceptions of the child's maturity.

Maternal Characteristics

No issue can more quickly polarize people who are addressing child care issues than maternal employment. Most people in American society still regard the mother as being primarily responsible for child rearing and child caring. There is growing acceptance for working women but less tolerance for working mothers. Many employers are reluctant to allow child care responsibilities to enter into the work place. Scarr (1984) states that

in the 1980's we have not yet resolved the costs and benefits of maternal employment to anyone's real satisfaction. I feel that the lack of resolution results more from conflicting cultural values about women and children than from any good or bad effects of mothers' working or staying home (p. 10).

Studies conducted by numerous researchers have shown a clear correlation between maternal employment and increased use of the self-care arrangement (Alexander, 1986; Rodman and Pratto, 1987; Risman and Park, 1988; Messer, Wuensch and Diamond, 1989).

Some researchers are adamant that use of the self-care

arrangement is a cause for concern and that these children are at a disadvantage when compared to adult-care children (Long and Long, 1982; Garbarino, 1984; Steinberg, 1986).

Postman (1982) rebukes working parents by reminding them that adult maturity is measured by the degree of responsibility assumed for the care of the young.

Other researchers found no differences between self-care and adult-care children when compared on various dimensions (Stewart, 1981; Galambos and Garbarino, 1983; Rodman, Pratto and Nelson, 1985). In 1982, 70 to 75% of employed mothers with preschool children used some form of nonparental adult care for the child. For families with school-age children, a sizable proportion are able to meet child care needs through combinations of parental care and self-care, with increasing reliance on self-care for children 10 years and older. By 1995 the number of school-age children with an employed mother are expected to reach 3.4 million, 37% larger than in 1980 and 34% larger than in 1985 (Hofferth and Phillips, 1988). As we can see, the "traditional nuclear family" of an employed father and a mother who stays at home to care for the children is far from realistic.

Maternal employment may be less at issue as time advances, and researchers may instead concentrate on types and consequences of the various care arrangements used by all parents.

In the past little research was devoted to the question

of preference for child care arrangements. It was assumed that care by a child's mother was predominantly preferred by American families.

However, asking parents to state the degree of satisfaction with the type of child care they preferred and are using results in responses that are both complex and ambiguous. For example, researchers can predict both a positive and a negative relationship between income and satisfaction with care arrangements. A positive relationship between income and satisfaction with care arrangements would exist if the higher income allows parents to use the care arrangements of choice. Of course, some parents may also express satisfaction with the child care arrangement even when family income is low because they had wanted to stay home to care for the child. A negative relationship would exist if employment (and its attendant higher income) prevents parents from providing desired care arrangements because they are forced to work outside the home. A higher family income in this case might mean that the parents work and someone else provides care for the child that one of the parents really wanted to assume (Mason and Kuhlthau, 1989).

When looking at parental satisfaction with choice of care arrangements, related factors need to be identified and controlled. Cain and Hofferth (1989) suggest four variables that contribute to parental choice and satisfaction with parental care vs. self-care: need, quality, cost, and

preferences. However, what parents regard as "parental care", especially for older children, is not examined.

The degree of parental satisfaction with child care arrangements they use comes from their ability to choose freely from among the options. Parents can sometimes rearrange their schedules so that one adult is in the home to provide child care while the other works or studies. This option is not available to single parents who are employed outside the home, and so their options are narrowed to nonparental care vs. self-care. The first decision parents face is whether or not to care for the child themselves. Although parental care has no direct financial cost, it could result in the restriction of other activities for the parent. The greater the mother's educational and income levels, the higher the cost of limiting her time and activities (Leibowitz, Waite and Witsberger, 1988). At higher levels of income and education, the cost of providing child care by others is lower when compared to the cost of parental care.

The U.S. Bureau of the Census (1987) indicated that employed mothers are more likely to use nonparental and self-care for their children. The greater the amount of time the child spends in nonparental care, the greater the cost; mothers may use self-care as an option for older children since school consumes such a large portion of the child's day.

When mothers are asked to indicate their satisfaction

with the child care arrangements they are currently using, rationalization may be the underlying process that results in a satisfaction score. Rationalization occurs when the mother matches her child care ideals against the current type of child care she is using. "If child care ideals are a reflection of personal situation, then one would expect married and nonemployed women to favor parental care more than do women without a male partner or who are working outside the home--women who are often unable to provide parental care full-time" (Mason and Kuhlthau, 1989, p. 595).

It is women with husbands who are more likely to be highly satisfied with parental or adult-care arrangements. Traditionally oriented women prefer parental or adult care for children of all ages. On the other hand, women who are more committed to work, whether for financial or personal gain, express satisfaction with alternative forms of child care (Mason and Kuhlthau, 1989).

Need, quality, and cost are easy to establish. Preference and satisfaction are more difficult to ascertain. Researchers can hypothesize the greater the need, the higher the perceived quality of the environment, the lower the cost, and the greater the preference for self-care, the greater the degree of satisfaction with the self-care arrangement that will be reported.

Evidence is clear that women in families with children are more likely than men to have responsibility for, and to

perform, household tasks such as cooking and child care. This is true regardless of whether the mother is married, is employed, or is involved in career pursuits. Even when fathers are present in the home, the amount of care provided by the father peaks at two hours regardless of how much child care time is required. There is no peak for mother care; over 90% of mothers are primary caregivers regardless of the amount of time that child care is needed or what other responsibilities the mother undertakes (Broman, 1988).

Higher divorce rates, diminished family support systems, and a social welfare system which encourages abandonment of familial responsibilities may be the factors which account for the steady increase in the number of female-headed families supported by one source of income. In 1960, 46% of divorced mothers with one child lived with relatives, but by 1976 the number decreased to only 14% (U.S. Bureau of the Census, 1985). More single parents are now responsible for their own households instead of the multigenerations previously living together.

Married mothers are more likely to be in a traditionally oriented household and to enjoy more income, to have less concerns about unemployment, and to benefit from extended support systems. In contrast, single mothers tend to have less traditional households and more demands upon already limited resources such as income and time. Single mothers are more likely to be in the work force and to have less

available money to spend on child care.

In 1988, single working mothers with a median income of \$15,077 expended 23% of that income on average-priced care for one child (Child Care Information Exchange, December, 1989).

Single parents are more likely to report child care problems than married parents. Many single parents also report they are not well-informed about child care choices. This lack of information is especially troublesome since single parents are more likely to say they are unable to find suitable child care and to believe that lack of child care has limited their employment opportunities. Single parents may be late to work or have to leave early to supplement child care while sick children may cause single parents to miss work altogether. Lack of income thus limits child care options and children often find themselves in a self-care situation before they are ready. While child care arrangements remain primarily a family concern, the community at large is affected by the choices that parents make.

Characteristics of the Family

Some of the trends in child care arrangements that have been presented in this review are also characterized by differences between races. There are no differences between blacks and whites in the proportion of mothers in the labor force as of 1985. However, if trends continue as they have

over the last 15 years, by 1995 a larger proportion of white than black school-aged children will have mothers employed outside the home (Hofferth and Phillips, 1988). According to the U. S. Bureau of the Census (1987), 51% of black children and 15% of white children lived in households headed by women, with 41% of black and 35% of white children having mothers whom worked full time. Parental supervision does not differ for black and white children, but supervision by other relatives is higher for blacks, and supervision by nonrelatives and self-care is higher for white children. Nonadult supervision was 15% for white vs. 7% for blacks. "Other relatives" may include adult siblings and extended family members. The difference between care arrangements by race may be explained by the greater proximity to family members by blacks.

Evidence suggests that the division of household responsibilities also differs by race. The division of families into stereotypically male and female roles, including child care duties, is more characteristic of white families than of black families. Black and white women alike report that they do most of the household chores but child care seems to be more shared among black than among white parents with black fathers reporting more child care responsibilities than white fathers (Broman, 1988).

Household income is also related to choice of child care arrangements. Lower income families show more concerns about

costs of after-school care for children when parents are unavailable for child care (Powell and Widdows, 1989). A lack of affordable child care prevents 60% of mothers on AFDC from participating in education and training programs (Child Care Information Exchange, December 1989). Children in higher income homes were more likely to be in self-care arrangements and these arrangements may be more a matter of parental choice rather than affordability. Higher income families may live in neighborhoods perceived as safe for children in self-care, and "self-care may be a product of confidence in the child and in the environment for some parents as well as produced by the lack of alternatives or the inability to pay for care among others" (U.S. Bureau of the Census, 1987, p. 4).

Family income is related to other family variables such as educational levels and residence. Families with higher educational attainments and the attendant higher income may move away from family support systems and to more affluent areas with greater opportunities for advancement, and families who have lower educational attainments and lower income levels may tend to stay where they have greater family support systems and more secure employment.

Location may also influence the household division of duties with rural families exhibiting more traditional male and female roles. However, differences exist here. A low crime, high income urban area is vastly different from a low

socio-economic urban area, and a rural area that is agricultural may differ from a rural vacation area. Male and female roles may also differ according to the culture of their location of residence.

Families assess the safety of the neighborhood when making decisions about child care arrangements. If the neighborhood is considered safe, then the parents may be more apt to consider the possibility of self-care for the child. If the parents feel the child may be confronted by a neighborhood situation which the child is not mature enough to handle, then parents will consider adult care and supervision for the child. Areas of residence have been traditionally divided into urban, suburban, and rural areas. Generally urban areas are considered the most dangerous with suburban next, and rural areas the least dangerous. Rural families may be far from heavily populated areas and also tend to remain near extended family members and other adults may be available for child care duties. Urban families enjoy closer proximity to stores and parks but have fewer family members available for help in child care. Therefore, location of the family's residence as well as the parents' perceptions of safety influence the decision about child care arrangements (Cain and Hofferth, 1989).

Conclusions about the safety of the neighborhood, proximity to adult supervision, and economic necessity may precede parental decisions about self-care arrangements.

Parents may also be concerned about the consequences of self-care upon the child as well. If the child care for him or herself because the family is isolated, poor, and unable to find or finance adult care, the consequences to the child as well as to the family may be disastrous (Seligson, Genser, Gannett and Gray, 1983). If, on the other hand, middle-class parents in safe neighborhoods choose self-care for more mature, responsible children, then the consequences may be benign. It is important to identify which characteristics of the child, mother, and family are influential in the choice of child care arrangements (Cain and Hofferth, 1989).

CHAPTER III

METHODS

Source of Data

The data for this exploratory study were collected in two surveys conducted in middle schools located in urban and rural areas of Piedmont North Carolina. A pilot study of 20 families was done in September, 1987, to assess the instrument. Following the pilot study, the first survey was distributed in 1987 to urban early adolescents and the second survey was conducted in 1988 with rural children. The instrument in both surveys was a self-administered questionnaire covering descriptions of after-school activities and care arrangements of the child, and included questions on family structure and demographics.

The first survey (Phase I) was distributed October through November, 1987, to two middle schools in an urban area of North Carolina. One school was part of the public school system and its students resided within the city limits; the other school was a private nonreligious school whose students lived within the city limits as well as in the neighboring suburbs. Since both schools were located within the city limits, they were designated as "Urban". In the private school, questionnaires were distributed at a PTA meeting; at the public school, questionnaires were given out in homerooms, at after-school activities, and at neighborhood functions. The families were instructed in a cover letter to

return the questionnaires in the enclosed addressed envelope (See Appendix A). In this survey, 258 questionnaires were distributed and 106 responses were received for a response rate of 41%.

The instrument was then modified to exclude redundant questions and to add questions requested by area YMCA and YWCA organizations to assess family day care needs (See Appendix B). The second survey (Phase II) began in January, 1988, and continued through March. Questionnaires were mailed to parents of middle school children located in a rural area of Piedmont North Carolina and designated as "Rural". The parent lists were provided by the school system. Questionnaires were mailed at two week intervals on a Monday, Tuesday, or Friday so that the families would not receive them on a weekend, since the questionnaire asked about activities on a school day. Of the 450 instruments mailed, 42 were returned undelivered, 58 were returned incomplete, and 105 were returned with usable data, for a response rate of 23% for all mailings and 45% for delivered mailings. The sample thus consisted of 106 urban and 105 rural families for a total of 211.

In addition to the questionnaire, a cover letter explaining the objectives of the study (Appendix A), and a pre-addressed, stamped envelope were distributed. The questionnaire was designed by the researcher.

Dependent Variables

The first dependent variable that is addressed in this study is the amount of time in self-care. Self-care is defined as being home without an adult over the age of 14 years. Self-care time is measured on a continuum of 6 steps ranging from virtually no time (less than 15 minutes) to the entire afternoon (3 to 4 hours; see Appendix B, item 4). More information about the child in self-care is gained through Appendix B, items 5a and 5b, which ask where the child goes after school and if a supervising adult is present. Items 7 and 8 ask about the extent to which the early adolescent is responsible for the care of younger children.

The second part of this study examined after-school activities. These activities are defined as watching television, doing homework, and participating in organized recreation. Responses ranged from zero minutes to 3 hours and 15 minutes. The mean time for these after-school activities is based on responses to items 1, 2, and 3 in Appendix B.

Independent Variables

Measures for the independent variables were also obtained from responses to the questionnaire shown in Appendix B.

(1) Characteristics of the Child include the child's age, gender, and parental perceived age of maturity.

- a. Age was provided by the family's response to item 23.
- b. Gender was provided by the family's response to item 23.
- c. Perceived age of maturity (or the competence of the child) is based upon factors generated from the Perceived Age of Maturity (PAM) Scale. Defined as the age at which parents generally expect children to be socially and emotionally mature in selected circumstances, the responses to items in the questionnaire reflect parents' perceived age of maturity of their early adolescent. The items include activities thought of as typically male (run a lawnmower) as well as typically female (work as a babysitter). Two activities which indicate maturity in self-care arrangements are "occasionally stay at home alone for an hour or two" and "have a friend over when parents are not home".

(2) Characteristics of the mother include her employment and marital status.

- a. Maternal employment is measured by item 18 which asks the mother to indicate (in hours) how much time she is employed

outside the home in an average week. The answers were expected to run from zero to 40 or more hours per week. Responses such as "Not Applicable" or "Not Employed" were counted as zero hours.

- b. Maternal marital status was ascertained by item 19 and classified into three categories: (1) Married, (2) Separated/Divorced, and (3) Single.

(3) Characteristics of the family include size, race, income, educational levels of parents and location of residence.

- a. Family size was obtained from item 23 which asks the parent to list the first name of each person who lives in the house, age, and relationship to the parent. Responses to this item provide the number of people in the family, marital status, other people in the home, early adolescent's age and sex, and the number of children older and younger than the target early adolescent.
- b. Race was determined by item 24 and divided into three categories: "Black", "White",

- and "Other".
- c. Family income was determined by item 25. Total family income before taxes was measured on a 6-point scale ranging from (1) "Under \$10,000" to (6) "Over \$35,000".
- d. Educational levels of parents were determined by items 20 and 21. Responses ranged from "Some High School or less" to "Graduate or Professional Degree". In item 20, father's educational level, the category "Not Applicable or Not in the Home" was included.
- e. Location of residence was determined by zip code and entered on the questionnaire before it was distributed. The schools that were used to obtain subjects were designated as "urban" or "rural" by their location.

Hypotheses

- H₁ Among the after-school activities investigated, more children will watch television between 3 p.m. and 7 p.m. than any other activity.
- H₂ Among the child care arrangements investigated, early adolescents will spend the largest proportion of time between 3 p.m. and 7 p.m. under adult care.

H₃ The amount of time in self-care will increase with the child's age.

H₄ Urban children will spend more time in self-care than rural children.

H₅ The independent variables will account for a significant amount of the variation in the amount of time spent in self-care.

To more clearly define H₅, the following expectations are presented. The mother's employment status is expected to have a significant positive correlation with time in self-care. As the fully-employed mother spends more time away from the home, the amount of time the early adolescent spends in self-care is expected to increase.

Income and educational levels are expected to correlate positively with time spent in self-care. Higher educational levels result in higher income. Higher income may also be the result of two parental incomes. When both parents work or are engaged in activities outside the home they are more likely to use self-care, especially for older children.

The age of the child is expected to contribute to the variability of time in self-care. The older early adolescent is more likely to be perceived as being mature and self-reliant by virtue of age. It is therefore expected that the amount of time the child spends away from direct adult supervision will increase with the child's age.

Girls are judged to be more competent and mature than boys where child care arrangements are concerned. The sex of the child will influence the extent of self-care with girls spending more time in self-care than boys.

Family's race is expected to factor significantly into the amount of time spent in self-care. Black families traditionally enjoy the benefits of extended family members who are available for child care. White early adolescents will therefore spend more time in self-care than will black early adolescents.

Perceived competence of the child is expected to correlate significantly and positively with amounts of time in self-care. As early adolescents are judged to be mature and competent, they are more likely to be allowed to stay home alone and care for younger children.

Maternal marital status is expected to contribute to the self-care arrangement. Single and/or divorced mothers will use self-care more often than married mothers. Married mothers are more likely to have another adult in the home with whom to share child care responsibilities.

CHAPTER IV

RESULTS

This chapter presents a description of the sample, the major findings of the study, and a brief discussion of the results. Hypotheses are stated and the findings which confirm or disconfirm them are presented.

The objectives of this study were to answer the following research questions: (1) What are the after-school activities and care arrangements of early adolescents and how much time do they spend in these activities and arrangements? (2) Does the amount of time spent in after-school activities and care arrangements differ according to the age of child and/or location of residence? (3) What characteristics of the child and the family account for the variation in amount of time spent in self-care?

In answer to research questions 1 and 2, data describing the type of after-school activity and the amount of time spent in each are presented across age and location variables. Also to answer research questions 1 and 2, data describing the type of care arrangement used and the amount of time spent in each are presented across age and location as well. In answer to the third research question, the contributions of the independent variables to variation in the amount of time spent in self-care are presented and compared. Before the results are presented, a description of

the demographic characteristics of the sample are presented.

Description of the Sample

Two hundred eleven families responded to the survey instrument and were included in this study. Descriptive statistics on family income and maternal employment are presented in Tables 1 and 2.

Table 1 shows income levels of the 211 families by location. Twenty-seven of the 105 rural families report median incomes under \$10,000 compared to only one of the 106 urban families. Twenty rural families report an annual income over \$35,000 while 58 of the urban families report that income level. Thirteen percent of the sample families have an annual income of under \$10,000 while 39% have an annual income in excess of \$35,000.

Racially, 72 sample families are black and 139 are white. No family in this sample reported any other racial designation. Rural families divided into 42 black and 63 white; 35 of the urban families were black and 71 were white.

Table 2 depicts the maternal employment for the rural and urban mothers in our sample. Seventy-three rural mothers are employed 40 hours per week or more, compared to 42 of the urban mothers. Fifty-one urban mothers are not employed outside the home compared to 29 rural mothers. Fifty-four

Table 1

Family Income By Location

	Urban	Rural	Total	Percent
Under \$10,000	1	27	28	13.3
\$10,000 to \$14,999	4	12	16	7.6
\$15,000 to \$19,999	6	11	17	8.0
\$20,000 to \$24,999	19	16	35	16.6
\$25,000 to \$34,999	18	19	37	17.5
Over \$35,000	58	20	78	37.0
Totals	106	105	211	100

Table 2

Hours of Maternal Employment By Location

	Urban	Rural	Total	Percent
Zero hours	51	29	80	37.9
1 to 15 hours	5	0	5	2.4
16 to 39 hours	8	3	11	5.2
40 hours	38	58	96	45.5
Over 40 hours	4	15	19	9.0
Totals	106	105	211	100

Table 3
Sample Population by Age and Location

Age	Rural n	Urban n	Total N
10	17	18	35
11	19	23	42
12	31	27	58
13	<u>38</u>	<u>38</u>	<u>76</u>
Totals	105	106	211

percent out of 211 mothers were employed at least 40 hours per week. Thirty-eight percent (80 of 211) are not employed outside the home.

If we examine Table 1 and Table 2, we see that urban mothers are less likely to be employed outside the home. Rural mothers are more likely to be fully employed than urban mothers. However, urban mothers enjoy a considerably higher annual family income; 58 of the 106 urban families have an annual income exceeding \$35,000 compared to 20 of 105 rural families. Marital status does not appear to be a factor in these income figures. For both urban and rural mothers in the sample, 80% were married and 20% were separated, divorced, or single parents. However, the inclusion of private school families may skew the findings toward lower levels of full employment as well as higher income for the urban sample.

Table 3 shows the population by age and location.

Research Questions 1 and 2

Research questions 1 and 2 attempt to ascertain the type of after-school activities and care arrangements used by early adolescents, to determine the amount of time spent in these activities and care arrangements, and also to see if these activities and care arrangements vary by location or age. Tables 4 through 8 present activities by age and location as reported by the sample. Tables 9 through 13 present the care arrangements by age and location.

Tables 4 through 7 show the average amount of time spent in three typical after-school activities: watching television, doing homework, and participating in organized recreation. Responses to items 1 to 3 (Appendix B) were calculated by time, age, and location. Responses of zero minutes correspond to "NO" answers on the indicated variable. Means are shown for each activity by age and location. Table 8 summarizes these results for comparison purposes. Neither the watching television nor the doing homework category is intended to imply adult or self-care. Organized recreation is defined as Scouts, clubs, school activities, sports, YMCA, YWCA or other groups having some form of adult supervision and is intended to imply adult-care for the participants.

The majority of early adolescents report they watch television after school ends, and the range of means for the eight age x location cells is 20.6 to 123.9 minutes, for a grand mean of 69.9 minutes over all age groups (see Table 8). Rural children watch more television in the afternoon than do urban children, 87.4 minutes compared to 50.5 minutes. Rural 13-year-olds log the most viewing time, 123.9 minutes per afternoon compared to 59.6 minutes for urban children of the same age. Urban 10-year-olds in this sample spend the least amount of time in front of the television, 20.6 minutes compared to the 40.3 minutes of the same rural age group.

Table 4

Time Spent in After-School Activities for Ten-Year-Olds by Location

	Minutes	Frequencies		Reporting	Total
		Rural	Urban	After-School	Sample
		n	n	n	N
TV	0	2	6	8	35
	10	1	1	2	
	15	1	1	2	
	20	0	1	1	
	25	0	1	1	
	30	7	6	13	
	45	1	0	1	
	60	2	2	4	
	75	1	0	1	
	90	1	0	1	
	120	1	0	1	
		17	18		
Means		40.3	20.6	30.4	
HK	0	9	7	16	35
	5	1	0	1	
	10	1	2	3	
	15	2	1	3	
	30	4	5	9	
	45	0	1	1	
	60	0	2	2	
		17	18		
Means		9.7	19.4	14.7	
OR	0	9	5	14	35
	30	0	2	2	
	60	0	3	3	
	90	0	4	4	
	120	1	1	2	
	150	1	0	1	
	180	4	3	7	
	210	2	0	2	
		17	18		
Means		82.9	70	76.3	

TV= Television Viewing

HK= Homework

OR= Organized Recreation

Table 5

Time Spent in After-School Activities for Eleven-Year-Olds by Location

	Minutes	Frequencies		Reporting After-School Activities n	Total Sample N
		Rural n	Urban n		
TV	0	5	9	14	42
	15	1	0	1	
	30	1	3	4	
	45	1	1	2	
	60	4	4	8	
	90	3	2	5	
	120	1	2	3	
	180	2	1	3	
	210	1	1	2	
		19	23		
Means		67.9	51.5	58.9	
HK	0	10	10	20	42
	15	1	1	2	
	20	2	4	6	
	30	4	7	11	
	45	2	1	3	
			19	23	
Means		13.8	15.2	14.6	
OR	0	11	17	28	42
	90	0	1	1	
	120	1	0	1	
	150	2	1	3	
	180	3	4	7	
	210	2	0	2	
			19	23	
Means		72.6	41.7	55.7	

TV= Television Viewing

HK= Homework

OR= Organized Recreation

Table 6

Time Spent in After-School Activities for Twelve-Year-Olds by Location

	Minutes	Frequencies		Reporting After-School Activities n	Total Sample N
		Rural n	Urban n		
TV	0	6	5	11	58
	15	0	1	1	
	30	3	11	14	
	60	5	3	8	
	90	8	1	9	
	120	4	1	5	
	150	1	3	4	
	180	3	2	5	
	210	1	0	1	
	Means	80.3	57.2	69.6	
HK	0	22	12	34	58
	10	1	1	2	
	15	1	2	3	
	20	2	1	3	
	30	3	5	8	
	45	1	4	5	
	60	1	2	3	
Means	8.4	18.9	13.1		
OR	0	26	22	48	58
	60	2	2	4	
	90	1	1	2	
	120	1	2	3	
	180	1	0	1	
Means	16.5	16.7	16.6		

TV= Television Viewing

HK= Homework

OR= Organized Recreation

Table 7

Time Spent in After-School Activities for Thirteen-Year-Olds
by Location

	Minutes	Frequencies		Reporting After-School Activities n	Total Sample N
		Rural n	Urban n		
TV	0	6	12	18	76
	15	0	1	1	
	30	0	7	7	
	60	0	3	3	
	90	6	4	10	
	120	8	5	13	
	150	4	6	10	
	180	11	0	11	
	210	3	0	3	
			38	38	
Means		123.9	59.6	98.6	
HK	0	20	21	41	76
	15	0	1	1	
	20	1	0	1	
	30	10	9	19	
	45	4	4	8	
	60	3	2	5	
	90	0	1	1	
			38	38	
Means		17.9	17.8	17.8	
OR	0	27	34	61	76
	60	1	0	1	
	90	2	1	3	
	120	2	3	5	
	150	1	0	1	
	180	5	0	5	
			38	38	
Means		40.3	11.8	26	

TV= Television Viewing

HK= Homework

OR= Organized Recreation

Table 8
Time in After-School Activities by Age and Location

Age		Rural		Urban		Total Reporting After-School Arrangements	Total Sample
		Time	n	Time	n	Time	N
10	TV	40.3	17	20.6	18	30.4	35
	HK	9.7	17	19.4	18	14.7	
	OR	82.9	17	70.0	18	76.3	
11	TV	67.9	19	51.5	23	58.9	42
	HK	13.8	19	15.2	23	14.6	
	OR	72.6	19	41.7	23	55.7	
12	TV	80.3	31	57.2	27	69.6	58
	HK	8.4	31	18.9	27	13.1	
	OR	16.5	31	16.7	27	16.7	
13	TV	123.9	38	59.6	38	98.6	76
	HK	17.9	38	17.8	38	17.8	
	OR	40.3	38	11.8	38	26.0	
Totals							
	TV	87.4	105	50.5	106	69.9	211
	HK	12.9	105	17.7	106	15.3	211
	OR	46.0	105	29.4	106	37.7	211

TV = Television Viewing
 HK = Homework
 OR = Organized Recreation

Rural 10- and 13-year-olds watch approximately twice the amount of television as do urban 10- and 13-year-olds. Fifty-one report they watch no television in the afternoon.

Table 8 shows that the mean number of minutes spent on homework across eight age x location cells range from 8.4 minutes to 19.4 minutes, with a grand mean of 15.3 minutes for all children. According to Tables 4 through 7, 111 early adolescents do not do any homework between the hours of 3 p.m. and 7 p.m. We would expect that the amount of homework would increase with the child's age but we see that the urban 13-year-olds report less time doing homework than the urban 10- and 12-year-olds (see Table 8). Urban 10- and 12-year-olds do twice the amount of homework as do their rural age mates, while the amounts reported by the 11- and 13-year-olds in both locations are approximately the same. In general, rural and urban early adolescents average 15.3 minutes of homework but the urban children report approximately 5 minutes more per afternoon (12.9 to 17.7); the difference results from the amounts reported by the urban 10- and 12-year-olds.

Only 60 of 211 sampled children indicate that they participate in some form of organized recreation after school, as shown in Tables 4 through 7. Mean amounts of time across the age x location cells range from 11.8 for the urban 12-year-olds to 82.9 minutes for the rural 10-year-olds, with a grand mean of 37.7 minutes across all age categories (see

Table 8). Urban children average less time in organized recreation than do rural children, 29.4 to 46 minutes. Urban children may have access to forms of recreation other than organized activities such as neighborhood parks.

Tables 9 through 12 present after-school care arrangements by time increments, age and location. The time increments are the ones designated in item 4, Appendix B. Means for each time range are given and averages for the age x location cells are also shown. A summary of time spent in care arrangements by age and location is shown in Table 13.

When we look at Tables 9 through 12, we see that adult-care is more frequently used than self-care. Ninety-six children report spending between 180 and 240 minutes in adult-care on an average afternoon, and an additional 44 report spending between 120 and 180 minutes in adult-care. Only one early adolescent reports spending less than 15 minutes in adult-care.

Decreasing amounts of time are spent in adult-care with increasing ages of the children. No 10- or 11-year-old spends less than 60 minutes under adult supervision in the home. Four 12-year-olds and six 13-year-olds report less than 30 minutes under adult supervision (see Tables 9 through 12). In Table 13, amounts decrease from 194.6 minutes for 10-year-olds to 123.2 for 13-year-olds.

Table 9

Time Spent in Care Arrangements for Ten-Year-Olds by Location

Minutes	Frequencies		Total Reporting Care Arrangements		Total Sample
	Rural	Urban	Time Averages	n	N
AC	n	n			
0-15	0	0	0	0	
15-30	0	0	0	0	
30-60	0	0	0	0	
60-120	0	1	90	1	
120-180	2	5	150	7	
180-240	15	12	210	27	
Totals	17	18			35
Means	190.6	198.3	194.6		
YC					
0-15	13	16	7.5	29	
15-30	2	2	22.5	4	
30-60	1	0	45	1	
60-120	1	0	90	1	
120-180	0	0	0	0	
180-240	0	0	0	0	
Totals	17	18			35
Means	16.3	9.2	12.6		
NH					
0-15	14	4	7.5	18	
15-30	2	0	22.5	2	
30-60	0	2	45	2	
60-120	1	8	90	9	
120-180	0	3	150	3	
180-240	0	1	210	1	
Totals	17	18			35
Means	14.1	83.3	49.8		

(table continues)

SC	0-15	16	15	7.5	31
	15-30	1	2	22.5	3
	30-60	0	1	45	1
	60-120	0	0	0	0
	120-180	0	0	0	0
	180-240	0	0	0	0
		<hr/>			
	Totals	17	18		35
	Means	8.4	11.3	9.8	

AC = Adult Care
 YC = Younger Child in the Home
 NH = Not at Home
 SC = Self-Care

Table 10
Time Spent in Care Arrangements for Eleven-Year-Olds by
Location

Minutes	Frequencies		Total Reporting Care Arrangements		Total Sample N
	Rural n	Urban n	Time Averages	n	
AC					
0-15	0	0	0	0	
15-30	0	0	0	0	
30-60	0	0	0	0	
60-120	0	1	90	1	
120-180	4	3	150	7	
180-240	15	19	210	34	
Totals	19	23			42
Means	197.4	196.9	197.1		
YC					
0-15	18	21	7.5	39	
15-30	1	1	22.5	2	
30-60	0	1	45	1	
60-120	0	0	0	0	
120-180	0	0	0	0	
180-240	0	0	0	0	
Totals	19	23			42
Means	8.3	9.8	8.6		
NH					
0-15	12	11	7.5	23	
15-30	5	0	22.5	5	
30-60	1	1	45	2	
60-120	1	5	90	6	
120-180	0	4	150	4	
180-240	0	2	210	2	
Totals	19	23			42
Means	17.8	69.5	46.1		

(table continues)

SC	0-15	14	19	7.5	33
	15-30	3	1	22.5	4
	30-60	1	1	45	2
	60-120	1	2	90	3
	120-180	0	0	0	0
	180-240	0	0	0	0
		<hr/>			
	Totals	19	23		42
	Means	16.2	16.9	16.6	

AC = Adult Care
 YC = Younger Child in the Home
 NH = Not at Home
 SC = Self-Care

Table 11

Time Spent in Care Arrangements for Twelve-Year-Olds by Location

Minutes	Frequencies		Total Reporting Care Arrangements		Total Sample N
	Rural n	Urban n	Time Averages	n	
AC					
0-15	1	0	7.5	1	
15-30	1	2	22.5	3	
30-60	2	8	45	10	
60-120	8	3	90	11	
120-180	8	6	150	14	
180-240	11	8	210	19	
Totals	31	27			58
Means	140.3	120.6	131.1		
YC					
0-15	23	18	7.5	41	
15-30	5	0	22.5	5	
30-60	2	2	45	4	
60-120	0	5	90	5	
120-180	0	2	150	2	
180-240	1	0	210	1	
Totals	31	27			58
Means	18.9	36.1	26.1		
NH					
0-15	12	6	7.5	18	
15-30	3	0	22.5	3	
30-60	9	4	45	13	
60-120	5	6	90	11	
120-180	1	8	150	9	
180-240	1	3	210	4	
Totals	31	27			58
Means	44.3	96.1	68.1		

(table continues)

SC	0-15	16	14	7.5	30
	15-30	4	2	22.5	6
	30-60	9	4	45	13
	60-120	2	3	90	5
	120-180	0	3	150	3
	180-240	0	1	210	1
		<hr/>			
	Totals	31	27		58
	Means	25.6	46.7	35.4	

AC = Adult Care
 YC = Younger Child in the Home
 NH = Not at Home
 SC = Self-Care

Table 12

Time Spent in Care Arrangements for Thirteen-Year-Olds by Location

	Minutes	Frequencies		Total Reporting Care Arrangements		Total Sample N
		Rural n	Urban n	Time Averages	n	
AC						
	0-15	0	0	0	0	
	15-30	1	5	22.5	6	
	30-60	5	10	45	15	
	60-120	3	13	90	16	
	120-180	11	7	150	18	
	180-240	18	3	210	21	
	Totals	38	38			76
	Means	156.5	89.8	123.2		
YC						
	0-15	25	27	7.5	52	
	15-30	5	8	22.5	13	
	30-60	1	0	45	1	
	60-120	4	0	90	4	
	120-180	2	3	150	5	
	180-240	1	0	210	1	
	Totals	38	38			76
	Means	32.6	21.9	27.1		
NH						
	0-15	15	6	7.5	21	
	15-30	7	3	22.5	10	
	30-60	8	6	45	14	
	60-120	6	10	90	16	
	120-180	2	10	150	12	
	180-240	0	3	210	3	
	Totals	38	38			76
	Means	38.7	89.8	64.2		

(table continues)

SC	0-15	17	25	7.5	42
	15-30	2	3	22.5	5
	30-60	9	3	45	12
	60-120	8	3	90	11
	120-180	2	2	150	4
	180-240	0	2	210	2
<hr/>					
	Totals	38	38		76
	Means	42	36.3	39.2	

AC = Adult Care
 YC = Younger Child in the Home
 NH = Not at Home
 SC = Self-Care

Table 13

Time Spent in Care Arrangements by Age and Location

		Rural		Urban		Sample
10	AC	190.6		198.3		194.6
	YC	16.3		9.2		12.6
	NH	14.1		83.3		49.8
	SC	8.4		11.3		9.8
Sample Size			17		18	35
11	AC	197.4		196.9		197.1
	YC	8.3		9.8		8.6
	NH	17.8		69.5		46.1
	SC	16.2		16.9		16.6
Sample Size			19		23	42
12	AC	140.3		120.6		131.1
	YC	18.9		36.1		26.1
	NH	44.3		96.1		68.1
	SC	25.6		46.7		35.4
Sample Size			31		27	58
13	AC	156.5		89.8		123.2
	YC	32.6		21.9		27.1
	NH	38.7		89.8		64.2
	SC	42		36.3		39.2
Sample Size			38		38	76
Totals						
	AC	164.6	105	139.3	106	152.0
	YC	21.5	105	25.9	106	20.9
	NH	32.6	105	79.0	106	59.3
	SC	27.0	105	30.5	106	28.8

AC = Adult Care

YC = Younger Children in the Home

NH = Not at Home

SC = Self-Care

For the sample as a whole, rural children spend more time in adult-care. Rural children have a grand mean of 164.6 minutes to the urban grand mean of 139.3 minutes in adult-care (see Table 13). This trend is more apparent when we look at Tables 9 through 12; 10 urban 12-year-olds spend 60 minutes or less in adult-care compared to four rural 12-year-olds while 15 urban 13-year-olds spent 60 minutes or less compared to eight rural children.

Rural and urban 10- and 11-year-olds spend relatively little time at home with younger children present compared to the 12- and 13-year-olds. None of the 10- or 11-year-olds spend more than 120 minutes and only three spend more than 30 minutes home with younger children. In contrast, nine 12- and 13-year-olds spend more than 120 minutes and 23 12- and 13-year-olds spend more than 30 minutes at home with younger children. However, there is a problem in defining what is meant by "younger". For a 13-year-old, children 12 years and under could be considered "younger" and this category is not intended to imply self-care but only the presence of younger children in the home.

In the category Not At Home, children across the age ranges reported a grand mean of 59.3 minutes away from the home. We see the a pattern of change from 10- and 11-year-olds to the 12- and 13-year-olds. The younger children tend to remain in the home with approximately 50% reporting less then 15 minutes away from the home. In

contrast approximately 28% of the 12- and 13-year-olds spend less than 15 minutes away from the home. Urban 12-year-olds report the largest amount of time, 96.1 minutes (see Table 13). We see that when urban early adolescents leave the home, they spend more time away than do rural children. Urban early adolescents' grand mean of 79 minutes far exceeds the grand mean of 32.6 reported by rural early adolescents as can be seen in Table 13.

When we look at the self-care category, the grand mean across all ages is 28.8 minutes. Rural children have a grand mean of 27 minutes compared to the urban 30.5 minutes (see Table 13). In Tables 9 through 12, twenty-nine of 33 10-year-olds and 32 of 41 11-year-olds report less than 15 minutes of self-care on an average afternoon; 30 of 58 12-year-olds and 37 of 66 13-year-olds report less than 15 minutes. No 10- or 11-year-old is in self-care for more than 120 minutes; 9 older children are alone from 120 to 240 minutes per day. Both rural and urban 10- and 11-year-olds report approximately the same amounts of time in self-care. Rural and urban 12- and 13-year-olds report different amounts of time in self-care. Urban 12-year-olds report 46.7 minutes compared to rural 25.6 minutes; yet rural 13-year-olds report 42 minutes to the urban 13-year-olds' 36.3 minutes. The location of residence may be a factor in determining whether the 13-year-old needs to remain in the home when alone since greater amounts of time away from the home are also reported

by urban 13-year-olds.

We examined the extent of time the child who is in self-care spends in that arrangement on an average afternoon (see Table 14). In order to focus on those children who use self-care, the category response "zero to 15 minutes" was omitted. The 70 responses shown in Table 14 reflect self-care for at least 15 minutes per weekday afternoon. In this Table, we see that self-care increases with age, from 28.1 minutes for 10-year-olds to 79.9 minutes for 13-year-olds. If we look at mean time in self-care, urban children report more self-care than do rural children. Of particular interest is the low number of urban 13-year-old responses; yet these 8 children record the greatest amount of time in self-care at 105.9 minutes.

Table 15 shows the amount of time the child spends away from the home during the afternoon. Again, as with Table 14, response category "zero to 15 minutes" was omitted. Here we have 123 responses out of the 211 sampled. In self-care we saw that the average time reported increased with the age of the child with lesser amounts for 10- and 11-year-olds and greater amounts for the 12- and 13-year-olds. The pattern of increasing time amounts for older early adolescents is not seen in this Table. Eleven-year-olds have a mean time of 103.7 minutes compared to the 95.8 of the 12-year-olds and the 76.3 of the 13-year-olds. Urban 13-year-olds have mean amounts less than those reported by the other urban age

Table 14
Amount of Time in Self-Care by Age And Location*

Age	Rural		Urban		Total Reporting Self-Care		Total Sample
	Mean Time	n	Mean Time	n	Avg Time	n	N
10	22.5	1	30.0	3	28.1	4	35
11	40.5	5	61.9	4	50.0	7	42
12	45.0	15	88.9	13	65.4	28	58
13	70.0	21	105.9	8	79.9	29	76
Totals		42		28		70	
		105		106			211

* The response category "zero to 15 minutes" is omitted in these calculations.

Table 15

Amount of Time Spent Away From Home by Age and Location*

Age	Rural		Urban		Total Reporting Time Away From Home		Total Sample
	Mean Time	n	Mean Time	n	Avg Time	n	N
10	45.0	3	105.0	14	94.4	17	35
11	35.4	7	126.3	12	103.7	19	42
12	67.5	19	121.4	21	95.8	40	58
13	59.0	23	92.8	24	76.3	47	76
Totals		52		71		123	
		105		106			211

* The response category "zero to 15 minutes" is omitted in these calculations.

groups. Urban children are, however, in general more likely to spend time away from the home than to remain in the home under self-care.

In looking at Tables 9 through 13, and then at Tables 14 and 15, it is clear that when children report self-care, they may also report that they are away from the home. When asked where they go when they leave the home (items 5a and 5b, Appendix B), 72 early adolescents reported they went "to the park", "to a friend's house", or "to a store or mall". Of these respondents, 70 reported no supervising adult was present at the place they went after school.

Research Question 3

To answer research question 3, we considered which of the variables would have an effect on the amount of time spent in self-care. The variables included in this study were chosen based upon their importance in previous research studies. The variables represent characteristics of the child (age and sex) as well as those parental-perceived competencies which relate to self-care: the age at which the child can stay home alone, to babysit, to watch younger siblings, and have friends over when the parents are not home. Characteristics of the mother include marital status and maternal employment. Family characteristics include income, educational levels of parents, race, and residence location.

We used a multiple regression model (General Linear

Models) to indicate the relative importance of the independent variables in explaining the dependent variable, amount of time in self-care. This program prints the sums of squares due to regression and error, and tests the statistical significance of the regression sum of squares. This is equivalent to testing the null hypothesis that the effect parameters corresponding to the different levels of the single variable are equal to each other. The program also calculates estimated contrasts among the parameters. The advantage of using a procedure such as SAS's GLM is that we can test as many different hypotheses concerning the regression parameters as desired in a single run. The regression sum of squares due to each factor is adjusted for the remaining factors in the model. Each factor is adjusted to also test for significance (Dunteman, 1987).

Table 16 presents the results of the regression analysis of time in self-care on the independent variables. All responses were considered in these regression analyses, including the first category "zero to 15 minutes". Forty-seven percent of the variance of time spent in self-care was accounted for by the independent variables. In examining the influence of each independent variable on time in self-care, we will use $p < .05$ as the level of significance.

Table 16

Regression of Time Spent in Self-Care on Independent Variables

<u>Independent Variables</u>	<u>DF</u>	<u>Type III SS</u>	<u>F Value</u>	<u>PR > F</u>
Marital Status	2	3.113	1.90	0.038
Income	5	0.428	0.08	0.899
Race	1	0.804	2.20	0.143
Location	1	4.399	5.37	0.024
Child's Age	1	0.002	1.82	0.959
Child's Sex	1	0.007	0.60	0.929
Mom's Work Hours	1	6.906	8.44	0.0002
Stay Home Alone	1	1.022	1.25	0.267
Age to Babysit	1	0.874	1.07	0.305
Watch Siblings	1	0.103	0.13	0.724
Have Friend Over	1	8.269	10.10	0.001
Mother's Education	1	3.473	4.24	0.044
Father's Education	1	0.464	0.56	0.456

Adjusted R-Square: 0.4710

Corrected Variance: 35.252

Weighted Grand Mean (Self-Care): 2.566

F Value: 2.59

PR > F: 0.0001

Table 17

Regression of Time Spent in Self-Care on Five Independent Variables

<u>Independent Variables</u>	<u>DF</u>	<u>Type III SS</u>	<u>F Value</u>	<u>PR > F</u>
Marital Status	2	2.131	0.73	0.537
Location	1	8.477	0.19	0.004
Mom's Work Hours	1	16.512	16.89	0.0001
Have Friend Over	1	2.611	2.61	0.104
Mother's Education	1	6.891	7.05	0.009

Adjusted R-Square: 0.2120

Corrected Variance: 35.786

Weighted Grand Mean (Self-Care): 2.756

F Value: 6.47

PR > F: 0.0001

The column headed by $PR > F$ is the probability of obtaining a F value larger than the calculated F value. Significant are the independent variables of Marital Status (0.04), Location (0.02), Mom's Work Hours (0.0002), Mother's Education (0.04), and Have a Friend Over (0.001). The Weighted Grand Mean (Self-Care) indicates that the mean amount of time in self-care fell between the second time category ("15 to 30 minutes") and the third time category ("30 to 60 minutes").

Table 17 shows the results of the regression analysis of time spent in self-care on the five independent variables that were found significant in Table 16. These variables account for 21% of the variance in self-care time. The strongest relationship evidenced by the independent variables is for maternal employment at $p < .0001$. Four of the five independent variables are significant at the $p < .05$ level.

Test of Hypotheses

H_1 Among the after-school activities investigated, more children will watch television between 3 p.m. and 7 p.m. than any other activity.

The grand mean for all age groups for television viewing is 69.9 minutes. The mean for the rural children is 87.4 minutes and the mean for the urban children is 50.5 minutes. The grand mean for homework is 15.3 minutes with 111

reporting they do no homework in the afternoon. Only 60 early adolescents report they participate in organized recreation on an average afternoon. The grand mean for organized recreation is 37.7 minutes. When we compare the number of responses as well as the grand mean in each of the activities, early adolescents are more likely to watch television than to participate in organized recreation or to do homework in the afternoon. Hypothesis ₁ is supported by the data presented.

H₂ Among the child care arrangements investigated, early adolescents will spend the largest proportion of time between 3 p.m. and 7 p.m. under adult-care.

Tables 9 through 13 show that adult-care is the most common method of child care used by the families in our sample and these amounts of time in adult-care far exceed the amounts of time in self-care as even the most casual inspection of Tables 9 through 13 will show. Hypothesis ₂ is also supported by the data presented.

H₃ The amount of time in self-care will increase with the child's age.

Tables 9 through 13 show the amounts of time spent in self-care by the 10-, 11-, 12-, and 13-year-olds in this study. A grand mean of 9.8 minutes was reported by the 10-year-olds, 16.6 minutes for 11-year-olds, 35.4 minutes for

12-year-olds, and 39.2 minutes for 13-year-olds. Additionally, twenty-nine of 35 10-year-olds indicate less than 15 minutes in self-care as do 32 of 42 11-year-olds. Thirty of 58 12-year-olds report less than 15 minutes compared to 37 of the 76 13-year-olds. Since a time range of from zero to 15 minutes was used, these reports may actually indicate zero minutes in self-care.

Table 14 shows those early adolescents who use self-care for a period greater than 15 minutes. Rural children range from a low of 22.5 minutes for 10-year-olds to a high of 70 minutes for the 13-year-olds. Urban children go from 30 minutes in self-care at 10 years to 105.9 minutes in self-care at 13 years. Hypothesis H_3 is supported by the data presented.

H_4 Urban children will spend more time
in self-care than rural children.

Tables 9 through 13 show care arrangements for rural and urban early adolescents. Urban early adolescents spend more time in self-care than rural early adolescents, 30.5 minutes to 27 minutes when all time frames are considered (see Table 13). In Table 14, rural early adolescents who use self-care for more than 15 minutes report they spend between 22.5 minutes and 70 minutes in self-care while urban early adolescents spend between 30 minutes and 105.9 minutes each day in self-care. It is also important to look at the category called Not at Home, shown in Table 15. When they

are away from the home for more than 15 minutes, 52 rural children spend from 35.4 to 67.5 minutes away from the home on an average afternoon for a grand mean of 32.6 minutes; 71 urban children are gone from 92.8 to 126.3 minutes each day for a grand mean of 79 minutes. Participation in organized recreation does not account for the numbers of children who report they leave the home. If we look at the answers given to Appendix B, items 5a and 5b, 72 children leave the home "to go to the park", "to a friend's house", or "to the store or mall". Responses indicate that in most of these locations, no supervising adult is present.

Urban children are more likely than rural children to be away from the home and from direct adult supervision in the afternoon hours due to their proximity to malls, parks, and neighbors. Rural children tend to remain home when they return from school. When we consider self-care to include time when children are not under direction adult supervision in or away from the home, H_4 is accepted.

H_5 The independent variables will account for a significant amount of the variation in the amount of time spent in self-care.

Thirteen independent variables (maternal marital status, parental educational levels, family income, family race, family location, child's age, child's gender, hours of maternal employment, and the child competence factors of

staying home alone, age to babysit, age to care for siblings, and age at which a friend can come over when the parents are not home) were entered into a multiple regression analysis with time in self-care as the dependent variable. Table 16 reported the results of that analysis. The thirteen variables taken together yield a coefficient of determination (R^2) of .47, indicating that the combination of independent variables accounts for 47% of the variance in time in self-care.

In operationalizing these variables, graded responses were arranged lowest to highest, as for example in income and employment hours. Categorical variables were arranged from least likely ("0" or "No") to most likely ("6" or "Yes") depending on their influence on the amount of time in self-care. Mother's marital status, for example, was coded "1" for married (since the presence of other adults in the home might influence self-care) to "3" for single mothers (to tend to rely more upon self-care for their early adolescents). Location was coded "0" for rural families who are less likely to use self-care and "1" for urban families who are more likely to use self-care for early adolescents.

In the second analysis shown in Table 17, the amount of time in self-care was regressed on the most significant independent variables found in Table 16. These five independent variables in combination, with a R^2 of .212, explained 21% of the variance of time in self-care. The

overall F was significant; thus, H_5 was supported.

The five independent variables showed a positive relationship with time in self-care. As the variables were operationalized or coded, the increments went from least to most likely to influence time in self-care. The higher the educational attainments, the higher the family income. The higher the income, the more likely the mother is married as well as employed and not available for child care. Both of these factors influence self-care time for early adolescents. Higher degrees of competence of the children as perceived by the parents is evidenced by being allowed to have a friend over when parents are not at home. This competency increases the possibility of time in self-care. Location of residence indicates that urban families are more likely to use self-care for early adolescents than are rural families.

The best predictors of time found in this study in self-care were maternal employment and marital status, mother's educational levels, location, and having a friend over. Time in self-care is positively related to maternal employment and mother's educational levels; the greater the family income and the more hours the mother is employed outside the home, the greater the amount of time the child will spend in self-care. Parents who judge the child to be mature and competent to care for him/herself are more likely to use self-care than parents who judge the child to be immature and irresponsible. Having a friend over when

parents are not home indicates a high degree of perceived competence and trustworthiness in the child. Implicit in permission to have friends over when parents are not there to provide direct supervision is the assumption that not only is the child capable of caring for himself or herself, but also to assume responsibility for a peer's behavior. The location of the family residence is important when parents consider using self-care. Rural areas can be considered unsafe for self-care children because of their remoteness. Some urban families enjoy a higher annual income and move into neighborhoods considered "safe; it thus may be easier for some urban early adolescents to use the self-care arrangement.

Summary of Results

All of the five hypotheses were supported by the data presented. The typical early adolescent spends the majority of the afternoon watching television and is likely to be in adult-care. When self-care is used, the amount of time increases with the child's age. Rural children were less likely to be in self-care than urban children when self-care was used for a period exceeding 15 minutes and when the factor of leaving the home was considered. Urban early adolescents spent more time in self-care and away from the home than did rural early adolescents. Hypotheses 1, 2, 3 and 4 were supported by the data presented.

As was expected, the independent variables in combination predicted a significant amount of the variance in the dependent variable of self-care. The thirteen independent variables selected represent characteristics of the child, the mother, and the family, and these variables account for 47% of the variance in the amount of time spent in self-care. The five variables that were found to be significant accounted for 21% of the variance of time in self-care. Maternal employment was the best predictor of self-care. Location and mother's educational level were the second and third best predictors respectively. Being judged competent by the parents to have friends over when the parents are not home was also considered to be significant in predicting time in self-care. Hypothesis 5 was supported.

Hypotheses 1 and 2 as well as the descriptive data presented provided the answer to research question 1: What are the after-school activities and care arrangements of early adolescents and how much time do they spend in these activities?

Hypotheses 3 and 4 as well as the descriptive data presented provided the answer to research question 2: Does the amount of time spent in after-school activities and care arrangements differ according to age of child and/or location of residence?

Hypothesis 5, descriptive data, and the data analyses provided the answer to research question 3: What

characteristics of the child and the family account for the variation in the amount of time spent in self-care?

CHAPTER V

SUMMARY AND DISCUSSION OF OBJECTIVES, METHODS, AND RESULTS

The investigation of type of after-school activities and child care arrangements as well as the amount of time spent in each is of interest not only to parents but also to schools and other agencies which influence or make public policy. While some data about younger children exist, little research has looked exclusively at early adolescents, those children aged 10 to 13 years. The objectives of this exploratory study were to answer the following research questions:

- (1) What are the after-school activities and care arrangements of early adolescents and how much time do they spend in these activities?
- (2) Does the amount of time spent in after-school activities and care arrangements differ with age of child and/or location of residence?
- (3) What characteristics of the child and the family account for the variation in the amount of time spent in self-care?

Data for this exploratory study were collected through an instrument designed by the researcher and distributed to middle school children (ages 10 to 13 years) in a rural and

an urban location in Piedmont North Carolina. Two hundred eleven families provided usable responses to both Phase I and Phase II survey instruments and were included in this study. The sample was divided into approximately one-half rural and one-half urban families. The sample was further divided into 4 age groups with 2 locations for each group: 10-year-old urban, 10-year-old rural, etc. Twenty-seven rural families and one urban family report family income to be under \$10,000 per year while 20 rural and 58 urban families are above \$35,000 per year. Seventy-two families are black and 139 are white. Twenty-nine rural and 51 urban mothers are not employed outside the home while 73 rural and 42 urban mothers work at least 40 hours a week outside the home.

This study used the responses to the questionnaire in Appendix B to describe the type of after-school activities and child care arrangements as well as time spent in each activity and care arrangement. Typical activities included watching television, doing homework, and participating in after-school recreation. Care arrangements included adult-care and self-care. This study divided the sample into age and location categories to determine whether these factors would show differences in what the children did after the school day ended, in the type of care arrangement the family used for the early adolescent, or in the amounts of time spent in each activity and care arrangement. Additionally, through the use of multiple regression, the

data were used to test the hypothesis, "The set of independent variables will account for a significant amount of the variation in the amount of time spent in self-care."

After-School Activities

The most popular after-school activity for these early adolescents is watching television. Television has become an acceptable part of everyday living and many children would regard not being allowed to watch television as cruel punishment. Busch (1978) found that one-third of fourth, fifth, and sixth graders watch an average of 50 hours per week. The attitude of children toward school achievement is an important indicator of how much the child watches. Good students in high school preferred not to watch television, considering it stupid and a waste of time. Poor students, however, found television a highly desirable and even a necessary form of relaxation. Busch (1978) also found that while the average time spent in watching television tapers off by seventh grade, poor seventh-grade readers watch as much as younger children. Her findings confirmed an earlier study by Schramm, Lyle and Parker (1961) which found that television viewing by 13- and 14-year-olds has a negative effect on educational achievement. Williams, Haertel, Haertel, and Walberg (1982) found that television viewing seems to have a mildly positive effect on school achievement as long as it is confined to 10 hours or less per week, but that additional hours generally have a negative effect.

Inasmuch as the grand mean in our study is 69.4 minutes each weekday afternoon (which does not include additional viewing that the child might do in the evening hours or on the weekends), the negative impact of excessive exposure might be a matter of concern for parents as well as for the educational system. Television viewing time appears to be largely unaffected by adult-care or self-care arrangement. Although a strong argument can be made that children who are left home alone may be more inclined to use television as an electronic babysitter than children who can interact with an adult, the data on television viewing do not support this argument.

Not only is the amount of time invested in an essentially passive activity considerable, the content of what these impressionable early adolescents see on television is largely nonproductive. Afternoon television consists of soap operas, music videos, and cartoons, very few of which can be remotely categorized as "prosocial" or "constructive".

The issue of time spent doing homework is one that is frequently raised when looking at after-school care arrangements. Multinational surveys conducted by the International Association for the Evaluation of Educational Achievement show that in the United States 12th grade college preparatory students spend an average of 6 hours per week doing homework (Wolfe, 1979). This is significantly less than the amounts reported in other countries which ranged

from 8 hours per week in Chile, Scotland and Sweden, to 17 hours in Iran.

Parents in other countries are expected to help their children with homework. Students' performance on school assignments is taken as an indication of how well parents are fulfilling their roles.

Parents in the United States are more varied in their attitudes toward homework. Some parents have high ambitions for their children and see homework as an extension of the learning process begun during the school day. Other parents are concerned about their children having too much free time and look to homework assignments as giving children something constructive to do after school.

There is little doubt, however, that the time spent doing homework is related to overall academic success. Keith (1982) found that the correlation between homework time and grades was both significant and positive (.32). In his study, low-ability children who spend 10 or more hours per week on homework got higher grades than high-ability students who did no homework.

In our study we found that the grand mean for students who are 10 to 13 years old is 15.3 minutes from 3 p.m. to 7 p.m. on homework. Rural and urban children spend approximately the same amount of time per afternoon on homework; however, urban children report they are more likely to be away from the home in the afternoon and have less time

to spend on homework than if they stayed at home.

While this homework activity report at first glance may be disturbing, it is helpful to remember that many families plan for recreational time in the afternoon for their child. Homework may then be done during a major portion of the evening when parents are at home to supervise their children. As the child grows older, the scope of classwork and homework becomes more advanced. Parents may prefer to supervise homework completion while they are present rather than to leave it up to the child to complete on his or her own in the afternoon. For those children who have parental help with homework, children's questions about homework can be answered with closer interactions between parent and child.

Only a few adolescents in our survey participate in organized recreation after school. The most often mentioned activity is "sports" followed by "YMCA-YWCA" and/or "Boys and Girls Club" (Appendix B, item 5a). Adults are present to supervise the children at these after-school activities. However, in many cases, these activities may cost a fee and/or require transportation to and from the site. For many parents, especially for those fully employed, work hours coincide with the organized activity time; the child may wait a significant amount of time for the parent to pick them up when the activity ends or may not be able to participate at all.

In survey Phase II, Appendix B, items 26 and 27, parents

were asked to indicate if they would participate in after-school care at a local school or site near the home. The majority of those who responded indicated they would not send their child to this after-school care. Reasons most often cited were "Not Interested", "Not Necessary", and "Need Child to Watch Younger Children". Two families wrote lengthy responses indicating that they preferred self-care so that the child could learn "independence" and "responsibility". Four families responded by saying that they arranged for parental supervision in absentia and felt that this was the best arrangement for their children. While organized recreation (with the attendant adult supervision as an important factor) might be more of an option for the young child, parents of older children may feel that their child can participate in play or sports without the presence of a supervising adult.

Care Arrangements

When we look at the type and extent of care arrangements used by the families in our sample, we see that the majority of these 10- to 13-year-olds report they are supervised by adults after school ends. Adult-care is defined as the physical presence of and direct supervision by an adult over 14 years of age in the home. This definition puts restrictions on what can be called "adult-care" and excludes sites such as a friend's house, park, or even supervision in absentia such as telephone contact. This study found that

amounts of time under adult supervision in the home decreased with the advancing age of the child. Greater amounts of adult-care time were found for 10- and 11-year-olds than for the 12- and 13-year-olds. These findings are consistent with the findings of other researchers on care arrangements used with children under the age of early adolescence (Cain and Hofferth, 1989; Mason and Kuhlthau, 1989; Presser, 1982).

It seems unrealistic to assume that these early adolescents who are in the process of searching for independence will remain in the house for the entire afternoon even when an adult is present. The category "Not at Home" indicates the amounts of time the child spends away from the home. According to Table 15, when children spend at least 15 minutes away from the home, 123 of the 211 had mean averages from 94.4 to 103.7 minutes away from the home each afternoon. Children's mean responses range from a low of 35.4 minutes for rural 11-year-olds to a high of 126.3 minutes for the urban 11-year-olds. Fifty-two of 105 rural children are gone for an mean range of 35.4 to 67.5 minutes while 71 of 106 urban children said they are gone for an mean range of 92.8 to 126.3 minutes per afternoon. Seventy-two children indicated they are without adult supervision during these time periods. Most stated they went to a park, mall or a store. Even when the responses indicated they went to a friend's house, virtually all of these children stated that there was no adult supervision at the place they went after

school ends.

As we have seen, few children (60 of 211) report they participate in organized recreation, yet 123 of 211 report they are away from the home at least 35.4 minutes in the afternoon. When the child is away from the home, his or her activities may or may not be directly supervised by adults. For children who report they go to organized recreation or sports, adult supervision is assumed. When the child reports going to places like the mall or the park or to a friend's house, adult supervision cannot be assumed. Future studies might consider children who are away from the home but in organized recreation as "adult-care" while those children who are away from direct adult supervision, whether in a home or elsewhere, as part of the "self-care" time intervals. When we look at types of care arrangements and time intervals used in this study, we see that the single care arrangement designated as "Home Alone" may not be sufficient to capture the extent of self-care for early adolescents. For, as we see in the response to being home alone after school (Table 14), 70 children indicate they are in self-care for a period greater than 15 minutes; yet 123 children indicate they are away from the home for the same time period each afternoon. By expanding the self-care definitions to include those children who are away from direct adult supervision when they leave the house, as well as the traditional definition of staying in the home, we have a more accurate picture of

self-care for early adolescents.

Many younger children are allowed outside to ride bikes and play when the parent is in the home; older adolescents may be allowed to go to a friend's house or to a nearby store for a few hours. Children can be asked to indicate the times when they leave the home and whether they are under direct supervision by an adult during these time frames.

Researchers can then designate these intervals of time as either "adult-care" or "self-care". Steinberg (1986) emphasized the importance of examining the degree of supervision that the child was under, whether or not an adult was physically present. He found that the further removed the adolescents were from direct adult supervision, the more susceptible they were to peer pressure to engage in antisocial behaviors. But, to date, little research has been done on the extent and type of indirect supervision parents use with older self-care children. Do telephone contact, "house rules", a watchful neighbor, playing near the house, and similar practices, represent varying degrees of adult supervision that affect the child's behavior?

Independent Variables

Research question 3 looks at the effects of selected independent variables on the amount of time the child spends in self-care. Characteristics of the child included age, sex, and parental perception of competency as pertains to self-care: the age at which the child can stay home alone

and can have friends over when the parents are not home. Characteristics of the mother included marital status and maternal employment. Family characteristics included income, educational levels of parents, race, and location.

Location of the family's residence is an important factor when differences occur in type and extent of care arrangements of early adolescents. Decisions about care arrangements may depend quite heavily on the location where the child will spend his or her time after school. Urban families tend to have higher annual income and may therefore be able to live in neighborhoods that are perceived as safe for children in self-care. Rural families may feel that their relative isolation may present problems that the early adolescents may not be able to handle on his/her own. They would thus rely more upon adult supervision. Urban families may also live closer to malls and parks where the reasonably mature child can play until an adult arrives home while rural families may be removed from recreational and shopping areas.

Rural children spend approximately the same amount of time as urban children in self-care, overall. When self-care is used for more than 15 minutes on an average afternoon, urban early adolescents are in self-care for longer periods than rural early adolescents. Further, in looking at the time the child spends away from home, urban children report they are away from home after school for longer periods than rural children. Rural families may have less access to

resources for recreation and entertainment, especially for older children, and therefore rely on the child to care for him/herself for a few hours after school in the home. Urban families have more flexibility and resources to provide recreation alternatives, transportation to sites, and financial support. Once self-care rural adolescents go home, they are more likely to stay there than are urban self-care children. Urban areas have malls, parks, stores, and neighbors that are easily accessible to early adolescents.

Time in self-care, either home alone or away from the home, increases with the child's age (Cain and Hofferth, 1989). Across the age range, children in this study indicate they are primarily home with adults after school; when we look at children in individual age groups who are home alone for a period exceeding 15 minutes, 13-year-olds report 79.9 minutes in self-care compared to the 28.1 minutes of the 10-year-olds. Ten and 11-year-olds in general tend to stay at home with an adult. Older children may be considered more competent by parents and thus able to care for themselves in or away from the home. In lengthy responses to Appendix B, item 27, three parents indicated they felt their 13-year-old needed no adult supervision after school.

In research that has focused on the younger child, the child's age and sex, mother's marital status, and competence of the child to care for younger children have all been found to be significant factors in determining variances in the

extent of self-care (Mason and Kuhlthau, 1989; Cain and Hofferth, 1989; Bruno, 1987; Leibowitz, Waite, and Witsberger, 1988). In the findings of this study, the number of hours of maternal employment proved to be most significant. When the mother works, she is less likely to be at home with the child in the afternoon. When asked if mothers had changed their employment hours due to child care needs (Appendix B, items 10a and 10b), seven mothers indicated that they had, primarily by going from full-time employment to part-time employment or to not being employed outside the home.

Few studies have looked at the competence of the early adolescent in determining self-care. The variable found to be significant was to be able to have a friend over when the parents were not at home. Being judged by the parents as mature enough to stay home alone seems to be an obvious factor in the self-care decision, but to have a friend over without direct adult supervision indicates a higher level of maturity from the parents' viewpoint. This is surprising in view of the fact that parental perception of competence in caring for younger siblings or other children was not significant in this study. Many 10-, 11-, and 12-year-olds babysit on a regular basis and a sizeable number of children in our study reported the presence of younger children in the home after school. Yet, parents seem to place greater reliance upon the ability of the child to handle him/herself

responsibly in the face of peer pressures than ability to care for younger children in judging the maturity and competence of their early adolescent.

When parents consider the places that early adolescents frequent when they are not at home, such as parks and malls, they need to be aware of the lack of adult supervision and its possible consequences. Parents and communities need to concern themselves with the relative freedom of these children. Many of the parents in this survey report their child to be mature and competent to be left alone or to leave the home after school on a regular basis. Some parents indicated that they have formulated expectations of behavior for their children, such as following "house rules" or staying in telephone contact with their parent, thus supervising the children "in absentia". Many parents may be justified in the confidence they place in their child's decision-making capabilities; for some parents, however, this confidence may be misplaced.

For younger children, adults spend time supervising after-school activities while simultaneously allowing many older children to be relatively unsupervised. Parents in this survey indicated they would not avail themselves of after-school care at a nearby school or other site. This may be a result of refusals by the child to be "treated like a baby" as well as a result of economic and/or transportation problems. A major piece of information gained from this study

is that a large number of 10- to 13-year-olds are away from direct adult supervision during after-school hours and that this absence is known to the parents.

Limitations

This study was designed as an exploration of the type of after-school activities and care arrangements of early adolescents, and the amount of time spent in each. The independent variables were chosen based on a literature research and on the personal experience of the researcher. Other factors may be relevant that were not included in this exploratory study. One limit of this study and of other studies of self-care is a focus on the after-school time period. It would be useful to collect information about self-care in other time periods. For example, self-care may be used by families in the morning before school as well as in the evening, and information on use and extent of self-care during these periods is lacking.

Location of the family's residence may also need to be more clearly defined. Decisions about care arrangements may depend quite heavily on the location where the child will spend his or her time after school. A family that perceives that they are in a "good" neighborhood or in a house with few potentially dangerous things may decide on self-care if other factors are equal. The quality of the location can be assessed by using a measurement called a Standard Metropolitan Statistical Area (SMSA); SMSA/Central city,

SMSA/Suburban, and non-SMSA. Central city areas are more crowded and consequently perceived as more dangerous; suburban areas may present less risk, and rural areas may be considered to be the safest of all (Cain and Hofferth, 1989).

This study used a private nonreligious school as part of its urban sample. The children in this school come from families that may not be representative of urban families in the community, and the findings can not be readily generalized.

The decision about self-care may also be influenced by the ease with which parents can communicate with the child at home. For example, parents may consider the time and distance it would take them to return to the home in the event of an emergency, the degree of flexibility in the job to permit quick and easy access to the child by phone, and the extent of preparation the mother is able to make to cover the cost of additional phone calls or an unexpected trip away from work (Cain and Hofferth, 1989).

The child's grades in school may also be an indication of how competent he or she is viewed by parents. The type of friends the child associates with or who live in the neighborhood may influence the amount of time the child is in self-care or is allowed to leave the home.

Another limitation could be flaws in the instrument that was designed for this study when no comparable questionnaire could be found. The lack of clarity in certain questions,

the use of arbitrary time periods, and the failure to collect critical information need to be addressed. For example, clarification of what constitutes "younger" children and who assumes the care of these children would be helpful in looking at parental perceptions of competencies of early adolescents. It would also have been beneficial to indicate a "zero" time category for care arrangements to distinguish between self-care vs. nonself-care time periods. Additional testing of the instrument as well as possible modifications might be necessary for further studies. Since it might be advisable to look closely at the issue of self-care when the child is away from the home, the questionnaire could address questions specifically aimed at whether and when the child leaves the home and where he or she goes after school as well as the kind of adult supervision present at that location. It also might be helpful to ask parents their reasons for using the various care arrangements to see what factors influence the use of one type of care arrangement over another.

Another limitation is that the study was conducted during one time period only (winter), and that colder weather may have kept rural children indoors since they are removed from easy access to stores and friend's homes. Spring and/or fall might have yielded different results for these children.

No attempt was made to adjust for the multicollinearity of selected independent variables since this was an

exploratory study. Further research may also want to look at the interaction of variables, such as location and income, on parental perception of child's competence and on parental decisions about using self-care.

Finally, there was some lack of precision in defining categories of activities and care arrangements in a mutually exclusive manner. For example, if a child did homework while watching television, it was not clear whether to include all of the time in both categories, or to divide time between the two. This may have created confusion for some parents. It did not create major problems, however, since there were only a few cases in which total time in all care and activity categories exceeded four hours.

Implications and Conclusions

Studies on how children spend their time show that children have about 55 hours per week for personal activities. Younger children (ages 6 to 8) like to spend their time playing but older children (9 to 11 years) spend an average of 2 1/2 hours a day watching television (Institute for Social Research, 1985).

At some point in the child's life, decisions about behavior and activities begin to shift from the control of the parents to control of the child. During the school-age years and early adolescence, the need for the constant adult control or regulation of the child's activities that is present in early childhood is diminished. The child

gradually assumes more self-regulation and self-control. Early adolescence is a time for a transition; the child and the parent "co-regulate" with shared decision-making and joint responsibility for the child's behavior and activities. "Parents continue to exercise general supervisory control, while children begin to exercise moment-to-moment self-regulation" (Maccoby, 1984, p. 191). This process of co-regulation reflects the child's growing need to assume independence. While still ego-centered, early adolescents begin to coordinate their own needs with those of their parents, and to anticipate how their parents or other authority figures would want them to behave in settings where no direct adult supervision is present.

Co-regulation is a cooperative process; it succeeds only when communication between child and parent is present and clear. If children do not let parents know where they are going when they leave the home and what they are doing, or if parents are preoccupied and do not take an interest in their children, the parents will not know when problems develop and when they need to step in with interventions and help. To make this transition of responsibility work, parents need to supervise the children when they are home and to monitor the behavior when they are not, by indirect supervision such as "house rules", telephone contact, or through a neighbor. It is most important that the child be given freedom to recognize how to regulate his or her own behavior.

Maternal employment is of concern to social scientists who see its effects on child care arrangements and maternal-child interactions. Children of working mothers may complain about not spending enough time with their mothers; however, for early adolescents, who are attempting to become more independent, mother's attempts to direct activities, offer advice, or ask questions may be interpreted as prying and are often rejected.

Children of working mothers seem to have advantages over children of mothers who are homemakers. They tend to live in more structured homes with clear-cut rules giving them more responsibilities and opportunities for decision-making and they are encouraged to become more independent than children whose mothers are not employed outside the home. There is a negative side as well: early adolescents who are left home alone tend to spend less time on homework, and more time away from the home. With less direct adult supervision they may become more subject to peer pressures leading to behavior problems (Maccoby, 1984).

The results of this exploratory study show that while many early adolescents remain under direct adult supervision after school, others spend a large part of each afternoon alone and/or away from the home. They are thus responsible for their own behaviors. The majority of parents in this study indicated that current care arrangements and after-school activities were satisfactory. Many felt that

the decisions the child was making concerning activities and care arrangements indicated some degree of self-control and competence, especially for the older early adolescent. The process of co-regulation seems to be well established by the time the child leaves middle school. The tendency toward self-care and freedom to leave the home increases as the child gets older until the child becomes largely independent of full parental regulation concerning after-school care arrangements and activities. This study has also shown that location of residence is influential in parental decisions about self-care and activities. Rural children tend to remain at home under adult supervision to a greater extent than urban children.

In conclusion, this exploratory study has presented new information about the after-school activities and care arrangements of early adolescents as well as a different concept of what constitutes self-care for these children. By expanding the concept self-care to include time when the child is away from the home and not under direct adult supervision, we have a more complete picture of the extent to which self-care is being used by early adolescents and their parents.

Bibliography

- Action for Children. 1987. When can your child stay home alone? School-Age Child Care Project. Columbus, Ohio: Action for Children School-Age Child Care Project.
- Action for Children. 1987b. Child Care Action for Children Survey. Columbus, Ohio: Action for Children.
- Alexander, N. 1986. School-age child care: Concerns and challenges. Young Children, 42, 3-12.
- Amato, P., and Ochiltree, G. 1987. Interviewing children about their families: A note on data quality. Journal of Marriage and the Family, 49, 669-675.
- Baden, R., Genser, A., Levine, J., and Seligson, M. 1982. School-age child care: An action manual. Boston: Auburn House Publishing Co.
- Barcilowski, R. S. 1983. Computer packages and research design: With annotations of input and output from the BMDP, SAS, SPSS and SPSSX statistical packages. New York: University Press of America.
- Bass, A. 1988. Researchers debate day care's effect on kids. Boston Globe, Monday, July 11, 29-31.
- Behan, R.A. 1985. Should Johnnie or Janet "sit" themselves? PTA Today, 10, 27-28.
- Belsky, J. and Steinberg, L. 1978. The effects of day care: A critical review. Child Development, 49, 989-96.

- Bey, K. 1990. Current status of after-school child care programs in Southeast Florida. Address to the Florida Adult and Community Education Conference. Tampa, Florida.
- Block, J. and Block, J. 1988. Longitudinally foretelling drug use in adolescence: Early childhood personality and environmental precursors. Child Development, 59, 336-355.
- Broman, C.L. 1988. Household work and family life satisfaction of blacks. Journal of Marriage and the Family, 50, 743-748.
- Brown, J., Pratto, D., and Rodman, H. 1989. Social relationship and determinants of parental satisfaction with self-care arrangements for children. Journal of Clinical Child Psychology, 18, 8-15.
- Bruno, R. 1987. After-school care of school age children: December 1984 (Current Population Reports, Series P-20, No. 411). Washington, D.C.: U.S. Government Printing Office.
- Bundy, M. and Boser, J. 1987. Helping latchkey children: A group guidance approach. School Counselor, 35, 58-65.
- Bundy, M., and Popper, W. 1989. Children in self-care arrangements. Journal of Counseling and Development, 67, 592-593.

- Burden, D. 1986. Single parents and the work setting:
The impact of multiple job and homelife
responsibilities. Family Relations, 35, 37-43.
- Busch, J. S. 1978. Television's effects on reading:
A case study. Phi Delta Kappan, 59, 668-671.
- Buzzelli, G. 1989. Parents' perceptions of responsibility
for promoting children's social competence. Child
Study Journal, 19, 273-284.
- Cain, V. and Hofferth, S. 1989. Parental
choice of self-care for their school-age
children. Journal of Marriage and the Family, 51, 65-77.
Child Care Information Exchange, November 1989,
69, 7-11.
- Child Care Information Exchange, December 1989
70, 6-9.
- Children's Defense Fund. 1982. Employed parents
and their children: A data book. Washington, D.C.:
Children's Defense Fund.
- Cole, C.M., and Rodman, H. 1987. When school-age
children care for themselves: Issues for family
life educators and parents. Family Relations,
36, 92-96.
- Coleman, M., Robinson, B., and Rowland, B. 1984.
Latchkey children and their families.
Dimensions, 13, 23-4.

- Cutright, M., Marshall, T., and Craven, M. March, 1990.
PTA reports: Child care in the '90's. Redbook, 83-90.
- Devall, E., Stoneman, Z., and Brody, G. 1986. The impact of divorce and maternal employment on children.
Family Relations, 35, 153-159.
- Diamond, J., Kataria, S., and Messer S. 1989. Latchkey children: A pilot study investigating behavior and achievement. Child and Youth Quarterly, 18, 131-140.
- Dillman, D. 1978. Mail and telephone surveys: The total design method. New York: John Wiley and Sons.
- Dunteman, G. 1987. Introduction to linear models. Beverly Hills: Sage Publications.
- Education Week September, 1989. Alcohol and drug abuse among latchkey children. 19-21.
- Fink, D. 1989. School-age children with special needs: What do they do when school is out? Wellesley, Mass.: SACC Publishers.
- Galambos, N.L., and Garbarino, J. 1983. Identifying the missing links in the study of latchkey children.
Children Today, 2-4, 40-41.
- Galambos, N.L., and Garbarino, J. 1985. Adjustment of unsupervised children in a rural ecology.
Journal of Genetic Psychology, 146, 227-231.
- Garbarino, J. 1980. Latchkey children: Getting the short end of the stick? Vital Issues, 30, 3-5.

- Garbarino, J. 1984. Can American families afford the luxury of childhood? University Park: Pennsylvania State University Press.
- Greif, G. 1986. Children and housework in the single father family. Family Relations, 34, 353-57.
- Gold, D., and Andres, D. 1978. Developmental comparisons between 10-year-old children with employed and nonemployed mothers. Child Development, 49, 75-84.
- Heath, D. and McKenry, P. 1989. Potential benefits of companion animals for self-care children. Childhood Education, 65, 311-314.
- Hofferth, S., and Philips, D. 1988. Child care in the United States, 1970-1995. Journal of Marriage and the Family, 50, 559-571.
- Institute for Social Research. 1985. How children use time. Time, goods, and well-being. Ann Arbor: Univ. of Michigan.
- Isaac, S. and Michael, W. 1981. Handbook in research and evaluation. San Diego, California: EdITS Publishers.
- Keith, T. Z. 1982. Time spent on homework and high school grades: A large-sample path analysis. Journal of Educational Psychology, 74, 248-253.

- Lavee, Y., McCubbin, H., and Patterson, J. 1985. The double ABCX model of family stress and adaptation: An empirical test by analysis of structural equations with latent variables. Journal of Marriage and the Family, 47, 811-825.
- Leibowitz, A., Waite, L., and Witsberger, C. 1988. Child care for preschoolers: Differences by child's age. Demography, 25, 205-220.
- Lefstein, L. 1987. The center for early adolescence. T.E.A.M., 1, 23-27.
- Lipsitz, J. 1979. Barriers. New York: Ford Foundation.
- Long T., and Long, L. 1982. Latchkey children: The child's view of self-care. Washington, D.C.: Catholic University of America. (ERIC Document Reproduction Service No. ED 211 229).
- Lovko, A. and Ullman, D. 1989. Research in the adjustment of latchkey children: Role of background/demographics and latchkey situation variables. Journal of Clinical Child Psychology, 18, 16-24.
- Maccoby, E.E. 1984. Middle childhood in the context of the family. In W.A. Collins (Ed.) Development during middle childhood. Washington, D.C.: National Academy.
- Mason, K. and Kuhlthau, K. 1989. Determinants of child care ideals among mothers of preschool-aged children. Journal of Marriage and the Family, 51, 593-603.

- McAninch, J. 1987. Mothers' perceptions of children's age of maturity: An exploratory study. Unpublished doctoral dissertation, University of North Carolina at Greensboro, Greensboro, NC.
- Medrich, E. 1982. Children's time study. Berkeley: University of California Press.
- Medrich, E., Roizen, J., Rubin, V., and Buckley, S. 1982. The serious business of growing up: A study of children's lives outside of school. Los Angeles: University of California Press.
- Messer, S., Wuensch, K. and Diamond, J. 1989. Former latchkey children: Personality and academic correlates. Journal of Genetic Psychology, 150, 301-309.
- New Jersey Child Care Advisory Plan. 1989. Special Series: Reports to the Governor. Trenton, N.J.
- Nichols, A., and Schilit, R. 1988. Telephone support for latchkey children. Child Development, 67, 49-59.
- Padilla, M. and Landreth, G. 1989. Latchkey children: A review of the literature. Child Welfare, 68, 445-454.
- Palm Beach Post Outlook. January 27, 1990. West Palm Beach, Fla., 27-29.
- Peterson, L. and Magrab, P. 1989. Introduction to the special section: Children on their own. Journal of Clinical Child Psychology, 18, 2-7.

- Postman, N. 1982. The disappearance of childhood.
New York: Delacorte Press.
- Powell, D. 1987. Research in review: After-school
child care. Young Children, 42, 62-67.
- Powell, D., and Widdows, R. 1987. Social and
economic factors associated with parents' decisions
about after-school child care: An exploratory study
in a medium-sized community. Child and Youth Care
Quarterly, 16, 272-282.
- Press-Dawson, A. 1987. Unlocking the latchkey problem.
Thrust for Educational Leadership, 16, 40-41.
- Presser, H. 1982. Working women and child care.
In Berman, P.W., and Ramey, E.R. (Eds.),
Women: A developmental perspective. NIH Publication
No. 82-2298. Washington,
D.C.: U.S. Department of Health and Human Services.
- Risman, B., and Park, K. 1988. Just the two of us:
Parent-child relationships in single-parent homes.
Journal of Marriage and the Family, 50, 1049-1062.
- Robinson, B., Coleman, M., and Rowland, B. 1986. The
afterschool ecologies of latchkey children. Children's
Environments Quarterly, 3, 4-8.
- Robinson, B., Rowland, B., and Coleman, M. 1986. Latchkey
kids: Unlocking doors for children and their families.
Lexington, Massachusetts: Lexington Books.

- Rodman, H. 1980. How children take care of themselves.
Working Mother, July, 61-63.
- Rodman, H., and Cole, C. 1987. Latchkey children: A review of policy and resources. Family Relations, 36, 101-105.
- Rodman, H., and Pratto, D. 1987. Child's age and mother's employment in relation to greater use of self-care arrangements for children. Journal of Marriage and the Family, 49, 573-78.
- Rodman, H., Pratto, D., and Nelson, R. 1985. Child care arrangements and the child's functioning: A comparison of self-care and adult-care children.
Developmental Psychology, 21, 413-418.
- Rodman, H., Pratto, D., and Nelson, R.S. 1988. Toward a definition of self-care children: A commentary on Steinberg (1986). Developmental Psychology, 24, 292-294.
- Samuelson, R. 1986. Uncle Sam in the family way.
Newsweek, August 11, 40.
- Scarr, S. 1984. Mother care/other care.
New York: Basic Books.
- School-Age Child Care Project: Programs in Oregon.
1987. Department of Education: Salem, Oregon.
- Schramm, W., Lyle, J., and Parker, E. B. 1961.
Television in the lives of our children.
Stanford, Ca.: Stanford University Press.

- Seligson, M. 1990. Perspectives on the national and international status of school-age child care. Address to the Fourth Annual Florida School-Age Child Care Symposium, Tampa, Florida.
- Seligson, M. and Fink, D. 1986. Latchkey children and school-age children. ERIC Digest: PS 3-1988.
- Seligson, M., Genser, A., Gannell, E., and Gray, W. 1983. School-age child care: A policy report. Wellesley, Mass.: School-Age Child Care Project, Wellesley College Center for Research on Women.
- Smetana, J. 1988. Adolescents' and parents' conceptions of parental authority. Child Development, 59, 321-335.
- Steinberg, L. 1986. Latchkey children and susceptibility to peer pressure: An ecological analysis. Developmental Psychology, 22, 433-439.
- Steinberg, L. 1988. Simple solutions to a complex problem: A response to Rodman, Pratto, and Nelson (1988). Developmental Psychology, 24, 295-296.
- Steinberg, L. and Silverberg, S. 1986. The vicissitudes of autonomy in early adolescents. Child Development, 57, 841-851.
- Stewart, M. 1981. Children in self-care: An exploratory study. ERIC Document Reproduction Service No. ED 224.

- Strother, D. 1986. Latchkey children: The fastest-growing special interest group in the schools. Journal of School Health, 56, 13-16.
- Thompson, B. 1990. Opening doors for school-age children: Keys to a comprehensive child care curriculum. Largo, Fla.: Latchkey Services for Children, Inc.
- U.S. Bureau of the Census. 1985. Statistical abstract of the United States: 1986 (106th edition). Washington, D.C.
- U.S. Bureau of the Census, Current Population Reports. 1987. Series P-23, No. 149, After-school care of school-age children: December 1984. U.S. Government Printing Office, Washington, D.C.
- U.S. Department of Labor. Women's Bureau. 1982. Employers and child care: Establishing services through the workplace. Pamphlet No. 23. Washington, D.C.: U.S. Government Printing Office.
- Vandell, D., and Corasaniti, M. 1988. The relation between third graders' after-school care and social, academic, and emotional functioning. Child Development, 59, 868-875.
- Waite, L., Suter, L, and Shortlidge, R. 1977. Changes in child care arrangements of working women from 1965 to 1971. Social Science Quarterly, 58, 302-311.

- Williams, P. A., Haertel, E. H., Haertel, G. D., and Walberg, H. J. 1982. Impact of television on school learning. American Educational Research Journal, 7-11.
- Woods, M. 1972. The unsupervised child of the working mother. Developmental Psychology, 6, 14-25.
- Zill, N., Grevaeus, G., and Woyshner, L. 1977. Kids, parents and interviews: Three points of view on a national sample. New York: Foundation for Child Development.

APPENDIX A

Cover Letter

University of North Carolina at Greensboro
Adolescent Research Project
Greensboro, NC

Family Name
Family Address

Schools, communities as well as parents are concerned about the care arrangements of school children when the school day ends. Some communities and school agencies are considering programs that will meet the needs of children who are in self-care.

Your family is one of a small number that have been selected to give their opinion on this concern. As a family that contains at least one middle school child, you have been randomly drawn from the population of the entire County/City middle schools. In order that the results be truly representative, it is important that each questionnaire be completed and returned. We would like to get as complete a picture as possible of the various care arrangements that parents use for their early adolescent after the school day ends. Please sit down with your 10- to 13-year-old child and use his or her information to help in filling out this questionnaire.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. If there is a question that does not pertain to your family, or one that you would prefer not to answer, omit that question and go on to the next one.

The results of this research will be made available to school and community groups. You may receive a summary of results by writing "copy requested" on the back of the return envelope. I would be most happy to answer any questions you might have. Please write or call. The telephone number is 294-5961 or 841-6083.

Thank you for your assistance.

Kathleen Bey
Adolescent Research Project Director

Please Detatch and Return With Completed Questionnaire

I understand that the information in this questionnaire is confidential and I agree that this information may be used for research purposes only.

Parent Signature:

Date:

APPENDIX B

Confidential Family Questionnaire
Group __ ID __ __ __

We would like to know how your 10- to 13-year-old child spends his or her time after the school day ends, from 3 p.m. to 7 p.m. In order to get the most complete picture of these after-school activities, we would like the parents together with the child to contribute information. Please sit down with your child and answer the following questions.

In the event that you have more than one child in the 10- to 13-year range, please ask the child closest to 11 years to help fill out this questionnaire:

1. On an average school day, does your child watch T.V. from 3 p.m. to 7 p.m.?

YES
 NO

If YES, approximately how much time does he or she watch T.V.?

_____ Minutes or _____ hours

2. On an average school day, does your child do homework from 3 p.m. to 7 p.m.?

YES
 NO

If YES, approximately how much time does your child spend on homework?

_____ Minutes or _____ hours

3. On an average school day, does your child go to any organized activity such as sports, clubs, Scouts, or YMCA from 3 p.m. to 7 p.m.?

YES
 NO

If YES, approximately how much time is your child at an organized activity?

_____ Minutes or _____ hours

4. How much time on an average school day, from 3 p.m. to 7 p.m. weekdays, is your child: (Please circle one)

HOME WITH AN ADULT 14 YEARS OR OLDER:

1. Zero to 15 minutes
2. 15 minutes to 30 minutes
3. 30 minutes to 1 hour
4. 1-2 hours
5. 2-3 hours
6. 3-4 hours

HOME WITH SOMEONE UNDER 14 YEARS:

1. Zero to 15 minutes
2. 15 minutes to 30 minutes
3. 30 minutes to 1 hour
4. 1-2 hours
5. 2-3 hours
6. 3-4 hours

NOT AT HOME:

1. Zero to 15 minutes
2. 15 minutes to 30 minutes
3. 30 minutes to 1 hour
4. 1-2 hours
5. 2-3 hours
6. 3-4 hours

HOME ALONE:

1. Zero to 15 minutes
2. 15 minutes to 30 minutes
3. 30 minutes to 1 hour
4. 1-2 hours
5. 2-3 hours
6. 3-4 hours

5a. If your child is not at home for any period of time between 3 p.m. and 7 p.m. weekdays, where does he or she go?

5b. Is there an adult (over the age of 14 years) who supervises activities at the place where your child goes?

YES
 NO

6. For each of the following activities, please respond with THE AGE AT WHICH YOU CONSIDERED YOUR CHILD TO BE COMPETENT TO DO THE FOLLOWING. (If you don't think your child is competent yet to perform that activity, AT WHAT AGE do you think your child will be considered competent to do that:)

- _____ use the stove
- _____ keep his/her room tidy
- _____ occasionally stay at home for an hour or two
- _____ run a lawnmower
- _____ work as a babysitter
- _____ occasionally care for a younger brother or sister after school for an hour or two
- _____ prepare a meal
- _____ go to the store or mall for a few hours with friends
- _____ have a friend over when parents are not home

(PLEASE CHECK TO BE SURE THAT YOU HAVE LISTED AN AGE FOR EACH ACTIVITY)

7. Is your child responsible for caring for younger children from 3 p.m. to 7 p.m. weekdays?

1. NO
2. LESS THAN 1 HOUR
3. 1-2 HOURS
4. 2-3 HOURS
5. 3-4 HOURS

8. How many days in an average week does your child care for younger children after school?

1. NONE
2. 1-2 DAYS
3. 3-4 DAYS
4. 5 DAYS

9. In your family, who spends more time taking care of the children?

1. MOTHER
2. STEPMOTHER
3. FATHER
4. STEPFATHER
5. SOMEONE ELSE

10a. Who in your family has changed their schedule in the last 5 years because of child care arrangements?

1. MOTHER
2. STEPMOTHER
3. FATHER
4. STEPFATHER
5. OTHER PERSON
6. BOTH PARENTS
7. NO ONE

10b. If a person made schedule changes because of child care arrangements, what changes were made?

1. QUIT WORK
2. COME IN EARLIER AND LEAVE EARLIER
3. WORK LESS HOURS
4. WORK WEEKENDS AND TAKE OFF DURING THE WEEK
5. WORK SPLIT SHIFTS
6. CHANGE SHIFTS
7. CHANGE JOBS
8. OTHER:

11. Do other relatives help you with child care?

- YES
 NO

12. If YES, what is the distance to the nearest relative who helps you with child care?

_____ MILES

13. How often does this relative assume care for your child from 3 p.m. to 7 p.m. weekdays?

1. DAILY
2. AT LEAST ONCE PER WEEK
3. AT LEAST ONCE PER MONTH
4. ONLY A FEW TIMES PER YEAR
5. NONE

14. Do any other relatives help you with child care from 3 p.m. to 7 p.m. on weekdays?

- YES
 NO

15. If you could have any type of child care that you would like, would you:

1. KEEP YOUR CURRENT ARRANGEMENT
2. MAKE CHANGES IN YOUR CURRENT ARRANGEMENT

16. If you would make changes, what would you do?

17. Please indicate how satisfied you are with your after-school care arrangements for your child. Circle the number that you feel is closest to how you feel.

1. VERY DISSATISFIED
2. DISSATISFIED
3. MODERATELY DISSATISFIED
4. MODERATELY SATISFIED
5. SATISFIED
6. VERY SATISFIED

18. Approximately how many hours in an average week is the mother employed outside the home?

_____ HOURS

19. Please indicate the mother's marital status:

- ___ (1) MARRIED
___ (2) SEPARATED/DIVORCED
___ (3) SINGLE

20. How much education does the father of the 10- to 13-year-old child have?

- ___ NOT APPLICABLE or NOT IN THE HOME
___ SOME HIGH SCHOOL OR LESS
___ HIGH SCHOOL DIPLOMA or G.E.D.
___ SOME COLLEGE or VOCATIONAL SCHOOL
___ COLLEGE DEGREE
___ SOME GRADUATE OR PROFESSION SCHOOL
___ GRADUATE OR PROFESSIONAL DEGREE

21. How much education does the mother of the 10- to 13-year-old child have?

- ___ SOME HIGH SCHOOL OR LESS
___ HIGH SCHOOL DIPLOMA OR G.E.D.
___ SOME COLLEGE OR VOCATIONAL SCHOOL
___ COLLEGE DEGREE
___ SOME GRADUATE OR PROFESSIONAL SCHOOL
___ GRADUATE OR PROFESSIONAL DEGREE

22. Who provides the main financial support for this family?

1. MOTHER
2. STEPMOTHER
3. FATHER
4. STEPFATHER
5. BOTH PARENTS
6. SOMEONE ELSE

23. Please list all the people who live in your household:
First Name Relationship (father, mother, son, etc.) Age

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

24. Please indicate your family's race:

- BLACK
 WHITE
 OTHER

25. Please indicate your approximate annual family income before taxes by checking the appropriate range:

1. Under \$10,000
 2. \$10,000 to \$14,999
 3. \$15,000 to \$19,999
 4. \$20,000 to \$24,999
 5. \$25,000 to \$34,999
 6. Over \$35,000

26. If after-school care was offered at your child's school, or at a site close to your home, would your child participate in this program?

1. YES
2. NO
3. UNDECIDED

27. Please use this space to explain your decision in the above question:

28. Do you have any additional comments that you wish to add about your child's care arrangements?

Thank you for your participation.