AN ABSTRACT OF THE THESIS OF

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Title: SHARED FAMILY TIME: AN ANALYSIS IN TWO-PARENT,

TWO-CHILD OREGON HOUSEHOLDS

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In this study patterns of shared family time in 210 two-parent,

two-child Oregon households were described. The relationship be-

tween amounts of shared time and a number of family and environ-

mental characteristics was also researched.

The study used the Oregon data from a contributing project of

the Northeast Regional Research Project NE 113, an Interstate

Urban/Rural Comparison of Families' Time Use. A sample of 210

families divided into five groups by age of the youngest child was

drawn. Half the families were classified as urban and half as rural.

The mean age of the homemakers and their spouses was approxi-

mately 32 years. About 72 percent of the homemakers were not

employed outside the home. However, about 80 percent of the spouses

reported working 40 or more weekly hours.

Families recorded the time use of members over the age of six

for two charted 24-hour periods. The second recording day was used

to analyze the incidence of shared time.

The number of shared time episodes recorded by the families for one day ranged from zero to 15, with a mean of 3.5 daily episodes. The amounts of daily shared time ranged from zero to 1,140 minutes (19 hours). About 19 percent of the families reported no shared time.

The most common group of family members participating in shared activity was both parents. The whole family was reported as participants in 13 percent of the shared episodes. For shared time episodes not involving both parents, participation between the home-maker and children was more evident than that between the spouse and children.

Nonwork activities accounted for the greater proportion of shared family time episodes. One-third of the episodes were spent in eating together and over one-fourth in social and recreational pursuits. About 18 percent of shared episodes were reported as household work activities, with shopping the task area most commonly shared. Care of family members accounted for 15 percent of the shared episodes reported.

The home was the common site for shared activity with three-fourths of the shared time episodes occurring in that setting. About 22 percent of the episodes were shared away from the home, work or school environments.

More time was shared by family members on weekend days than

on weekdays. While the mean amount of shared time for weekend days rose nearly 80 minutes above a daily average of 180 minutes, the mean time shared on weekdays fell 25 minutes below the average.

In a regression model with twelve variables, day of the week and age of the homemaker showed significant positive relationships to amounts of shared time at the .05 level. Amounts of shared time tended to increase with the occurrence of weekend days. Shared time also tended to increase in this model as homemakers became older.

In a model specifying the .05 significance level for the inclusion of variables, day of the week had a positive effect on amounts of shared time. It appeared that the larger blocks of weekend time facilitated the scheduling of shared activities. In consideration of this finding, the scheduling of hours at work may have been one factor in the degree to which employment acted as a constraint to shared family time.

When using the significance level of .10, residence had a significant negative effect on shared time. Families living in rural environments tended to have reduced amounts of shared time compared to urban families. Given the findings regarding the day of week, it was suggested that demands on weekend time use which were absent in an urban setting could be operating in rural families.

The independent variables in the regression models accounted for between five and 13 percent of the variation in amounts of shared family time.

Shared Family Time: An Analysis in Two-Parent,
Two-Child Oregon Households

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

SHARED FAMILY TIME: AN ANALYSIS IN TWO-PARENT, TWO-CHILD OREGON HOUSEHOLDS

I. INTRODUCTION

The changing character of the American family creates concern and criticism in society today. With the rising incidence of dual career families, it is common to hear laments over the passage of the "good old days" when families spent a great deal more time together. But is this an accurate reflection?

An increasingly predominant family pattern is that of the wife employed outside the home. In Oregon, the labor force participation rates for married women have risen sharply between 1950 and the present. In 1950 only about one-fourth of married women were in the work force, but by 1976 the rate had reached nearly one-half (39). This phenomenon often seems to be identified as a major threat to family togetherness. A reduction of time and energy in caring for children is feared as one result. Bronfenbrenner, a child psychologist, sees the multiworker family as a prime contributor to the "progressive fragmentation and isolation of families in the child-rearing role" (10, p. 19).

Concern for women in meeting the demands of these dual career/homemaker roles is another result. Previous studies on household time use have established that women employed outside the home

remain responsible for the bulk of household work; husbands of these working wives contribute no additional time when compared to spouses of full-time homemakers (40, 45). This combining of employment and family work roles has led some researchers to question whether opportunities for meaningful interaction with family members still exist (24). As family economists studying the employment intensity of women, Metzen and Helmick have also expressed concern for the employed homemaker's capacity to fulfill non-market obligations, fearing hours spent in employment may substitute for the time necessary for family care and joint leisure (20). In any case, the "overcommitment" identified with career/homemaker roles is assumed to be robbing time from shared family activities, as well as child care. But what evidence actually exists to show that families with employed wives do spend less time together in comparison to those with full-time homemakers?

The concern about lesser amounts of time shared in the family setting seems to grow from the assumption made in the old adage that "the family that plays together stays together." Is there a basis in theory for such a proposition? Moreover, is the shared time in families actually spent "playing" or does it center around more work-related activities? The issues raised in this and preceding paragraphs are some of those addressed in this research. Investigating the incidence of shared family time and the activities involved should

provide insight into these questions.

Statement of the Purpose

This study proposes to analyze shared family time in selected Oregon households with two parents and two children. The aim is to assess both the incidence of such time and the types of activity common to it. The relationship between amounts of shared time and a variety of demographic characteristics will also be investigated.

Need for the Study

Societal concern over the functional changes taking place in the American family has been noted above. This rather pervasive concern includes consideration of the time available for families to spend together in the face of new spousal roles. Should society identify time for family interaction as an important priority, changes in public policy and education are likely to occur in an effort to create more opportunities for this shared time.

Although this need for family interaction time is seldom verbalized as such, the growing trend to provide for it is reflected at the policy level. For example, two bills were proposed in the United States Congress in 1978 with impact in this area: S.518, the Federal Employees Part-Time Career Employment Act and H. R. 7814, the Federal Employees Flexible and Compressed Work Schedules Act of

1978. Both would create experimentation with the types of innovative

work patterns that some businesses have been advocating and testing

since the 1960's. The alternative work patterns allow workers to

vary starting and quitting times around certain "core hours," or

compress work schedules into fewer days to give larger blocks of

discretionary time. Although 300, 000 to 1, 000, 000 private sector

employees are on flexible work weeks and up to 1.2 million work under

compressed time schedules, the number of federal workers in such

programs is estimated at a low 141, 000 (7). The proposed legislation

sought to lessen the magnitude of this difference.

The aims of such legislation were several, including fostering

positive effects on government efficiency, transportation and energy

consumption. However, the policies expressly mentioned the impact

on "individuals and families generally" (7, p. 6). More specifically,

the Senate bill's purpose was in part to sanction part-time employment

which would allow parents to "... balance family responsibilities with

the need for additional income" (7, p. 6).

The need for data on current shared time patterns in families

becomes evident when considering the future assessment of such

policies. It is impossible to measure the impact of an implemented

policy without preexisting facts to serve as a basis for comparison.

Research on nonconventional scheduling has been ongoing. However,

Maklan concluded his study of four-day workweeks by noting that

further prediction and planning require more empirical information

on relationships between the spheres of work, leisure and family life

(19). Without measures of current levels of shared time, the effec-

tiveness of any given policy which intends to enhance opportunities

for this time can only be superficially evaluated. So, by providing

data on existing shared time patterns, research will enable policy-

makers to determine the effect of their decisions based on empirical

evidence.

Education on either the individual or family level creates a

second demand for the type of information offered by research. The

ability to teach people to become more effective time managers in

relation to their personal goals requires a greater understanding of

the variables affecting the use of time in the family setting. Home

management researchers have surmised that "the fostering of satisfy-

ing types of interaction among family members is a goal probably held

by many families even though they may not be conscious of it" (9, p.

189). Bringing such a goal to a level of awareness and then provid-

ing information on managing time as a means of reaching the interac-

tion goal is a task which may become increasingly crucial for family

educators. The time constraints presented in multiworker families

may create new educational needs to promote a more satisfying quality

of life for families.

Not all families may have a goal of interaction; but, for those

who do, knowing the conditions which inhibit and/or facilitate shared family time is essential for effective management. The importance of communicating such information is apparent when realizing that "the quality of these [everyday] experiences [in the family] cannot be left to chance, they must be consciously decided and managed" (Paolucci, as cited in 4, p. 1).

Previous studies dealing with shared time utilize data from earlier decades and different parts of the country (4, 37, 41). Major societal changes have since occurred; the current research will allow comparison with past data to evaluate significant trends in shared family time. It will also be useful for an assessment specific to Oregon families. In addition, the study will provide details on conditions in the family and its environment which affect shared time. Such information could be utilized in future planning of policies and strategies for effective family management.

<div align="center">Objectives of the Study</div>

The specific questions this study seeks to consider follow. In two parent, two-child Oregon households:

1.   Who shares time with whom in the family?

2.   What activities are common in shared family time?

3.   How much time is shared by family members?

4.   Where is time shared most often by family members (home

vs. away from home)?

5. When is time shared most often by family members (weekdays vs. weekend days)?

6. Of selected family and environmental characteristics, which have an effect on amounts of shared family time?

Hypothesis

Because a multiple regression analysis will be used, the general hypothesis is that a linear relationship exists between the dependent variable, amounts of shared family time, and the following independent variables:

a. mean age of children

b. age of youngest child

c. age spacing of children

d. age of homemaker

e. age of spouse

f. education of spouse

g. education of homemaker

h. weekly hours of homemaker's employment

i. weekly hours of spouse's employment

j. income

k. area of residence (rural or urban)

l. day of week

The .05 significance level has been selected as a criterion for the identification of significant relationships.

Definition of Terms

Age spacing - the span of years between the births of the first and
the second child in the family, measured by the age of the
youngest child, in years and months, subtracted from the age
of the older child, in years and months.

Amount of shared time - the total number of minutes that some combi-
nation of family members spends in joint activity, calculated on
the basis of one day.

Family - a household unit consisting of two parents and two children.

Homemaker - the family member primarily responsible for manage-
ment of the household and/or a secondary wage earner; in this
study, defined as the wife in all cases.

Nonwork - any shared activity categorized by the homemaker as
organization participation, social and recreational activity,
or eating.

Shared family time - recorded durations of time in which two or more
family members ages six and over are involved jointly in a
specified primary activity.

Spouse - the family member acting as the primary wage earner; in
this study, defined as the husband in all cases.

Work - any shared activity categorized by the homemaker in a household task area, i.e., food preparation, dishwashing, shopping, housecleaning, maintenance, clothing care, clothing construction, management, care of household members; or shared activity categorized as labor outside the household realm, either paid or unpaid.

Assumptions of the Study

The following assumptions underlie this research:

1. The two-parent, two-child households utilized in the study are a representative sample of these families in Oregon.

2. Each homemaker sampled has accurately recalled and recorded time use for all family members. It is further assumed that the homemaker recognized and appropriately recorded both the nature of and time spent in all activities shared by two or more family members.

Limitations of the Study

The problems below are inherent to the study:

1. The measures used are strictly quantitative; therefore, the amounts of shared time within the family "can only be described, not evaluated" (13, p. 89). It is crucial to recognize that the measurable quantity of shared time expressed

in the records cannot directly indicate the actual quality of the time and its accompanying consequence for family well-being.

2. The fact that the sample group is restricted to two-parent, two-child families in one geographic area limits the applicability of the findings.

3. Family time use has only been recorded for members ages six and over. Therefore, it cannot be determined whether or not these younger members were partners in shared time.

II. REVIEW OF LITERATURE

The literature is reviewed under three headings: the theoretical framework establishing shared family time as a viable topic for study, the previous research in time use at both shared and more general levels, and the variables and descriptive patterns related to shared time in the family as found in previous research.

Theoretical Framework

Although this study makes no attempt to analyze the qualitative effects of shared time, it is important to clarify underlying theory which indicates that shared time does have some impact on the functioning of the family. Doing so will clarify the possible meanings shared time might hold for the family as a unit. Theories which have implications for shared time are drawn from a number of disciplines including family sociology/child development, home management and family economics.

Sociological studies analyze the role of shared time for three different groups: the individual, the married couple and the entire family unit. Rainwater discussed effects on the individual from the standpoint of available time for "validating activities." He theorized that people judge themselves "well-off" to the extent they are able to engage in those activities that confirm a sense of self as a recognized

member of society, and that meet inner needs. In following this line

of reasoning, he proposed that an individual's well-being is in part

a product of the proportion of a person's time during which he can

participate in validating activities. The larger this proportion, the

better his possibilities for achieving well-being. Rainwater contends

that most validating activities have their basis in the nuclear family,

and specifically involve family participation (28).

In terms of the marital relationship, Scanzoni has studied com-

panionship as an element in the affiliative dimension of interaction.

Operationally defining companionship as "behavioral leisure together-

ness," he found that "...shared leisure time and shared friends

seem to be the core substantive elements inherent in the notion of

husband-wife companionship" (34, p. 28). Because our culture's

ideology defines one's spouse as a partner in doing, companionate

satisfaction influences the larger goal of affiliativeness. Scanzoni

proposed that the more fully this goal is met, the more cohesive the

marital unit will be. If companionship plays a key role in fulfilling

the affiliativeness goal, then shared time as a component to compan-

ionship also influences resulting cohesion in the marital relationship.

Orthner's work also focused on marital interaction and shared

leisure time, concluding that "the primary relational function of

leisure for marriage is that of a facilitator of communication during

time s of potential stress and relational change" (25, p. 100).

Orthner examined the extent of shared participation in leisure activities as it impacted upon two family functions, communication and task-sharing. He found that the greater the frequency of leisure interaction, the greater the shared communication. However, no relationship was demonstrated between amounts of time spent in joint leisure and family task-sharing, suggesting that roles in the latter area are still more culturally defined and so less subject to change (26).

Diesing began at the level of two-person relationships and built upon his theory to encompass the family system. He defined a social or interpersonal relation as:

> a pattern of shared experience. It develops whenever
> two people interact in more than a momentary way. Each
> relation includes an action component, namely the things
> people do together, and a feeling component..., namely
> the feelings they express and share with each other (6,
> p. 65-66).

The establishment and maintenance of social relations lead to integration within the system; within a family, such integration is a result of the interaction and mutual support which grow out of the social relations between members. Integration is a crucial determinant of the efficient functioning of the family system as it impacts upon communication and decision-making. Since a well-integrated system more fully understands and considers group values and resources, its effectiveness in decision-making will be enhanced. Diesing stressed

the relationship between shared experience and integration:

> Social rationality is an order of interdependence or solidarity. It exists when people engage in joint action; when they share experiences. . . . People who constantly share action and experience are interdependent in the sense that a change in one produces an answering change in others (6, p. 236).

Considering the functions of the family provides another approach to evaluating the contributions of shared time. One of the chief tasks of the family has been identified as socialization of children (47); accomplishment of such a task requires interaction between family members through the sharing of time and space. "A knowledge of family member roles is absorbed as members see one another in action" (9, p. 378). Participants in The White House Conference on Children noted that the contemporary encouragement of parents and children to pursue separate activities may threaten this socialization process (47). With the current technology, much working together of family members in the home setting is no longer possible, with the exception of some farm families. As a result, synchronization of time for family group activity gains importance (9).

Scheuch also supported the premise that the family is undergoing a loss of functions with the growing involvement of government, educational institutions and industry in daily life. He felt the reduction in the number of functions served to strengthen those remaining, primarily companionship and provision for emotional needs.

Consequently, he pointed to joint leisure time as "a factor of mounting consequence for the demonstration of and assistance in family cohesion" (35, p. 38).

West and Merriam studied outdoor recreation as a shared activity, hypothesizing that it increases family cohesiveness by inducing social interaction among group members. Their results suggested that the activities (or time shared) result in cohesiveness rather than the case being that preexisting cohesiveness has led to the sharing of activities (46).

Shared time in families is also related to the development of family rituals, a ritual conceived "primarily as a social process, with definite forms of interaction and a specific cultural content" (3, p. 17). Rituals involve the repetition of experiences within the family system. These recurring schedules of activities, such as mealtime, provide "a certain predictability of family and individual behavior, thus easing the stress and strain of group living" (3, p. 187). Ritualistic activities are ultimately necessary for meaning and learning in the family system, and aid in family cohesion (13).

Home management researchers have analyzed shared time in the context of a systems approach. Paolucci described the family system as a resource exchange network where a group of persons "...exchange[s] information through interaction and communication and make[s] decisions about the use of resources" (27, p. 86).

She also looked at tasks of the family system, identifying self-
maintenance as essential.

> The family organization uses energy in maintaining family
> members in interlocking activities and in forming indi-
> vidual members into a corporate, interdependent group
> (27, p. 87).

Paolucci continued to emphasize the importance of family inter-
action in proposing it responsible for bonding in the family system.
The development of interlocking bonds is the source of stability in
the family as each person becomes indispensable to the other. The
interactions which create bonding "occur through communication in
the shared major task interdependencies and many minor collabora-
tions" (27, p. 157).

Communication is identified as a key to the effective operation
of the family system, particularly as it facilitates in the identification
of goals and the subsequent meeting of those goals in management.
Interaction in shared activities among family members increases
the potential for communication (5); hence, shared time has a role
in enhancing problem-solving within the system as the resulting com-
munication serves to clarify demands and goals, and to coordinate
family behavior for meeting them.

Because communication plays a vital part in helping families
achieve a desired quality of life, the importance of planning to create
opportunities for communication follows. In the context of a family

system, planning involves setting strategies for future standards and/or sequences of action (5). Gross, Crandall and Knoll illustrated such a strategy in suggesting that families:

> ...set aside time for regular communication of their members. Possibly this might be through planning for shared experiences [emphasis added].... Many families depend upon conversation at the evening meal to provide this opportunity. Some families deliberately plan to spend one evening each week with the family members together (9, p. 203).

Again, the home management discipline reinforces the need for consciously decided and managed experiences to insure quality in everyday family interaction.

Family economists have tended to look at parental time allocations to children as investments in the family's stock of human capital. Focusing research on the preschool child, theory suggests that varying levels of shared time between parents and children lead to differences in the socialization process and the resulting ability levels of children in later life (11, 16, 17).

Bivens discussed a related approach in the "grants economy" concept. The sharing of time among family members is one example of a grant, explained as "any transfer of resources from one person to another that does not have a contractual reciprocal arrangement" (2, p. 71). Positive grants encourage a more integrative family structure and also serve to transmit culture between generations of members.

So, theories from the three disciplines tend to overlap in their

agreement that shared time is necessary for interaction among family members. In turn, such interaction can contribute to a more well-integrated and efficiently managed family system. Davey noted that theories implicating family interaction tend to emphasize the positive outcomes of such interaction, though there is a paucity of research to substantiate such outcomes (4). It must be reiterated that for many of the theories discussed, this lack of supportive research remains a problem.

Previous Research on Time Use

The use of time by individuals and families has been of interest to researchers for decades, often as an indicator of social change. Because time is a limited resource and imposes a constraint, "the patterns of allocation can be taken to reflect the differentiation of individual tastes, values, and lifestyles" (31, p. 18). Collecting data on these patterns of allocation over time allows comparison of time use choices. Changes in patterns may therefore reflect larger social trends or shifts in value orientation.

Time is an objective resource, distributed equally over all places for all people. This characteristic operates as an advantage in the sense that it establishes a standard for comparison when studying allocation. However, this same characteristic also creates a problem in attaching meaning to the activities behind the time used.

DeGrazia clarified this limitation:

> By using a strictly quantitative, assembly-belt conception
> of time - time as a moving belt of equal units - one ignores
> the significance of most activity. A moment of awe in re-
> ligion or ectasy in love or orgasm in intercourse, a deci-
> sive blow to an enemy, relief in a sneeze, or death in a
> fall is treated as equal to a moment of riding on the bus,
> shovelling coal, or eating beans (as cited in 31, p. 66).

This lack of a qualitative measure is particularly problematic in

shared time research as it is impossible to determine the degree of

involvement between family members, or the motivation behind the

sharing of activities. Robinson and Converse expressed this in the

analysis of previous time use studies:

> It is unfortunate that the social contact data do not distin-
> guish between intensities of social interaction, so that we
> would know whether an evening spent by a man, wife, and
> children in the same living room is marked by a continuous
> series of three-way interactions, or whether the several
> parties are engaged in private pursuits and the presence
> of others is a consequence, perhaps annoying, of the lack
> of anywhere else to be (31, p. 60).

In other words, it is impossible to determine, by allocation patterns

alone, when the sharing of time is a function of necessity or one of

volition.

Nevertheless, Maklan emphasizes that the sensitivity of time

use as a mechanism for assessing changes in patterns of behavior

cannot be denied (19). Changes in allocation to one activity accom-

plished at the expense of time previously given elsewhere will still

allow speculation on value shifts by individuals or families. Further-

more, documentation of changing amounts of time spent with the family

is made possible by studies of a quantity nature.

A number of time use studies preceding World War II focused on leisure or lack of it. Nonleisure activities were therefore treated superficially, limiting meaningful interpretation in these areas (40). More recently, time use studies have enlarged their scope to investigate more activities in detail. The studies fall into two categories of distinction: those that analyze time allocation on the level of the individual person, and those that look at time use on a household level. Major studies of both types will be briefly reviewed.

One extensive time budget survey was the Multi-National Comparative Research Project. Data were collected internationally from twelve countries in 1965-1966, the basic design being that:

> the daily doings of the respondents were recorded individually [in diary form], taking account of what (and what else simultaneously) they did during the day reported, for how long, how often, at what time, in what order, where and with whom (40, p. 12).

The latter factor provided social contact data, allowing some estimates of time spent in the family setting by an individual member, i.e., married employed man, married employed woman, "housewife."

Collection of data for the United States' participation in the multi-national project was undertaken by the Survey Research Center at the University of Michigan. The study was limited to individuals between 18 and 65 living in 44 cities across the nation with populations

over 50,000. One smaller city, Jackson, Michigan, was also

sampled (31). Social contact data from the records allowed for

cross-cultural comparison. General findings were that Americans

spent the largest amounts of time alone, some of the smallest

amounts of time with their children, and more time with friends

and relatives outside the household (31). Again, these data were geared

to analysis of the individual's time use.

Robinson used this U.S. Survey Research Center data for a

more in depth analysis of family activity by estimating child-contact

time. Estimates were calculated:

> from the total time during which respondents reported
> children as social partners in the activity, that is, when
> one or more children were mentioned in response to the
> question "With whom were you doing this activity"?"
> (30, p. 70).

Contact time data was utilized to study differences in amounts of

shared time in the presence of various family/environmental charac-

teristics.

Another study conducted on the level of the individual but geared

to a more specific target population was Maklan's investigation of the

time use of male blue collar workers on four-day workweeks. The

purpose of the study was to evaluate the effectiveness of compacted

weekly schedules and check worker satisfaction. Interviews and

time-budget diaries were utilized to collect both quantitative and

qualitative data from 168 four-day workers in Michigan and Minnesota

and from 49 five-day workers who served as the control group.

Diaries included the recording of time spent in the home setting.

One area examined in the analysis of data was worker satisfac-

tion with family life. It surmised that:

> ... given the high value placed on family life in American
> society. ... the greater the discretion an individual has over
> his use of time, the more time he will spend in the family
> setting, and, consequently, the greater will be his chances
> for meeting the demands of his family roles. ... In return,
> the worker will receive more family-sent gratifications,
> causing him to feel more satisfied with his conjugal and
> parental role relationships (19, p. 167).

Based on his data, Maklan did conclude that:

> the compacted [four-day] schedule increases the indi-
> vidual's satisfaction with his role performance and with
> his marriage by making it easier for him to meet his
> family obligations and to participate in companionate
> relationships with his wife and children (19, p. 125).

The larger blocks of discretionary time available for shared activi-

ties were the major factor facilitating greater amounts of time spent

by individual workers in the family setting.

Geared to the individual, the studies above provide no data on

the time use of children or of families within discrete households. A

1967-1968 time use study which surveyed 1,296 New York state fami-

lies focused on the household unit. In this quantitative analysis, two-

parent families with varying numbers of children were sampled to

determine which environmental and family characteristics were re-

lated to variations in household work time by family members over

age six in a diary approach, so estimates of shared time were made available. However, because of the interest in household work, no separate categorization of nonwork activity was specified. Time spent outside paid, volunteer, or household work was grouped into a broad "other activities" category. This lack of specification limited detailing shared family leisure patterns.

Some of the projects with broad interests in time use provided data for the secondary analysis of shared time. Varga utilized the cross-cultural data from the multi-national project to study marital disorganization in terms of the variables reflected in the data. Using the country's divorce rate as an indicator of disorganization or instability, she found the data to support that "time spent at home is an extraordinarily strong factor toward marital cohesion" (44, p. 358). The correlation between leisure time at home and the divorce rate for married employed men with children was -.78, indicating a strong relationship between marital dissolution and leisure time that husbands spent at home with the family.

Davey conducted an extensive study of family interaction using a sub-sample from the 1967-1968 New York time use survey. Data were recoded relative to the shared time of family members. Defining family interaction as "episodes of shared activity which involve two or more persons" (4, p. 8), Davey developed a standardized score by multiplying the number of people in each interaction episode by the

number of minutes used for each activity. Adding the products and

dividing by the total number in the family produced a numerical

score. Total family interaction scores were then statistically an-

alyzed in relation to selected characteristics of the family and its

environment. The study provided a new means for quantitatively

assessing family interaction in a way that could standardize compari-

son over families of varying sizes.

Two additional studies on shared family time by Snow and

Thorpe generated original data for analysis. Snow's purpose was

to develop a technique for determining the amount of time and types

of activities which family members shared in order to assess "to

what extent family members are together in face to face contacts

which formerly afforded much opportunity for the passing on of

social processes" (37, p. 2). She selected a small sample of 39

families in an agricultural Extension club program to record shared

time incidents for one week. Other time use was not recorded. Re-

sults were analyzed in terms of average number of shared episodes

and average time shared per day. Categories of activities in which

shared time occurred were also described, as well as the times of

day and week involved.

In 1948-1952, Thorpe examined family interaction patterns in

Michigan farm and town homes. She gathered information from 100

middle income families divided evenly between farm and town

residents on total time spent together and the uses of time when together. The records were confined to activities carried on within the home, and excluded members under the age of 7 (41).

Descriptive Patterns and Variables Related to Shared Family Time

This section reviews the findings of research relevant to the descriptors of shared family time: frequency, times and places of occurrence, and types of activity involved. Demographic variables found to have an impact on shared time are also discussed.

Descriptors

Frequency. Social contact data were collected as part of the Multi-National Research Project, serving as a basis for estimates of time spent "in the company of family members." Based on the individual, the findings showed that on workdays employed married men with children spent about 3.7 hours a day while housewives with children spent 8.5 hours a day in the family's company. The corresponding figure for the employed married woman was 4.4 hours. Non-work day figures for the three groups were 8.2, 10.4, and 8.9 hours, respectively (40). These figures did not necessarily indicate shared activity, but they gave an estimate of the time spent in the family setting, which may or may not have involved interaction between

members.

Robinson and Converse analyzed social contact data from the Survey Research Center's United States sample. Their estimate of total daily time with the nuclear family was 4.3 hours. Of those 4.3 hours, 1.7 hours were spent with the spouse but not children, 1.1 hours with children but not spouse, and 1.5 with both spouse and children (31).

Robinson also analyzed parent-child contact time, or a "with whom" estimate in the approach of his research. For parents of children under 18 years of age the total contact time estimate was approximately 30 hours a week, or about 4.3 hours a day. The figures were considerably higher for mothers (36.4 hours/week) than for fathers (21.0 hours) (30).

Seeking to update the figues in the 1973 Omnibus Study, Robinson asked mothers with children under 18 years of age "...Roughly, how many hours did you spend in direct contact with any of your children?" (30, p. 78) during the 16 or so hours they were awake the previous day. The weekly average compiled from this data was 45.8 hours, or 6.5 hours a day. Although this figure was about 25 percent higher than that of the "with whom" diary entries from 1965-1966, Robinson felt that respondent estimates tended to exaggerate time spent in various activities in comparison to diary figures.

Fox utilized the same 1965-1966 Survey Research Center data as Robinson in discussing social indicators suggested by the use of time. One facet of his analysis focused on time "at home" for women. Of the 20.6 hours a day the nonemployed woman was at home, 6.7 hours were spent with family members. The employed woman, at home an average of 15.9 hours/day, spent 4.0 hours with family members (8). Once again this estimate indicated time spent in the family setting, not necessarily time shared in an interactive sense.

The studies based on a household analysis yield lower estimates of shared time. Thorpe reported that families spent 30-40 minutes together on weekdays, and about one hour on Sundays (41).

Snow and Davey analyzed shared time partially in terms of the number of episodes, or periods when time was shared, per day. For families with two children, Davey found a range of 6-38 episodes with a mean of 21 (4). Shared time was not recorded in any special way by respondents in this study. Instead, the researcher inferred the joint activity by the appearance of shared time blocks in the diaries. In contrast to Davey, Snow found the average number of episodes to be 2.3 per day. In addition, she estimated the average hours shared per day at 1.78 (37).

Times of Occurrence. Findings regarding the days of week have consistently shown weekends to be the prevalent period for joint

family activities.   Snow reported that the total amounts and total

number of episodes of time spent together by whole family groups

peaked on Sunday, with the second highest point on Saturday (37).

Thorpe estimated that 20-30 more minutes a day were shared by

family members on Sundays as opposed to weekdays (41).

Places of Occurrence.   In a few studies (4, 32, 35) the place

where shared time occurred was considered.   The prevalent pattern

identified was families spending time together in the home.   Analyzing

shared leisure time in relation to family cohesion in the mid-1950's,

Scheuch found that German families tended to spend joint leisure hours

staying inside the home (35).   In a 1965 study of Mormon husband-

fathers, Rollins estimated that 58 percent of their total time was

spent in the home (32).   Davey included place of interaction in her

analysis, and found that over 85 percent of the interaction episodes

took place in the home setting which included yard and dwelling (4).

Type of Activity.   A final means of describing shared family

time is by type of activity.   Studies typically reported that shared

time was concentrated in the nonwork activities.   The notable excep-

tion was time shared during child care.   When men worked a four-day

week, Maklan found they experienced the largest increase in this

shared time.   When comparing the amounts of time devoted to child

care activities, the four-day workers spent five times the number

of minutes that workers on traditional schedules spent.   However,

Maklan found only minimal differences in shared time inputs to any other category of household work (19).

Davey estimated that about 13 percent of interaction episodes were spent in physical and nonphysical care of family members. Other household work accounted for a smaller ten percent of the total shared episodes. In contrast, over 60 percent of shared activity was in the social category. Eating as a family activity constituted 15 percent of total shared episodes (4).

Thorpe also found that major uses of time spent together in the family were in eating and leisure pursuits (41). In her research, Snow found the primary shared activity to be eating together, with 44 percent of total shared time devoted to this category. "Having fun or playing together" accounted for 29 percent of total shared time, with an additional six percent in "doing outdoor activities together" and approximately seven percent for "going to community affairs together." For work-related activities, "going on errands together" constituted about six percent of total shared time. Another two and a half percent of shared time was found in a management category, "making plans and discussing problems." Only two and a half percent of total shared time was spent in Snow's "household work" category (37). So, the basic division between shared time in nonwork and work categories in Snow's research was 89 percent and 11 percent, respectively.

Variables Related to Shared Time

Robinson proposed a schematic model of factors affecting individual time use (Figure 2.1); such a model is also appropriate as a framework for studying variables which affect amounts of shared time on the family level. He identified broad categories of environmental, personal and role, and resource factors which interact and combine to influence total time use.

Environmental Factors. Studies including day of week as a consideration indicate that shared activity is more likely to occur on weekend days rather than weekdays. Davey found the weekend/weekday comparison to be a highly significant factor in testing a number of variables to determine relationships to family interaction (4). In Robinson's study of child-contact time, day of week proved the most significant of all environmental factors, Sunday being the primary day when parents and children spent time together (30).

The location of residence in terms of urban/suburban/rural has been a variable of interest in relation to social contact studies. Reiss used time-budget data to test for differences in types of personal contacts among urban, rural non-farm and rural farm male residents. One category of contacts was classified as "primary" and included intimate kinship (family), close intimate friends and/or close business associates or clients. Results indicated a few

Figure 2.1   Schematic Model of Factors Affecting
                             Time Use
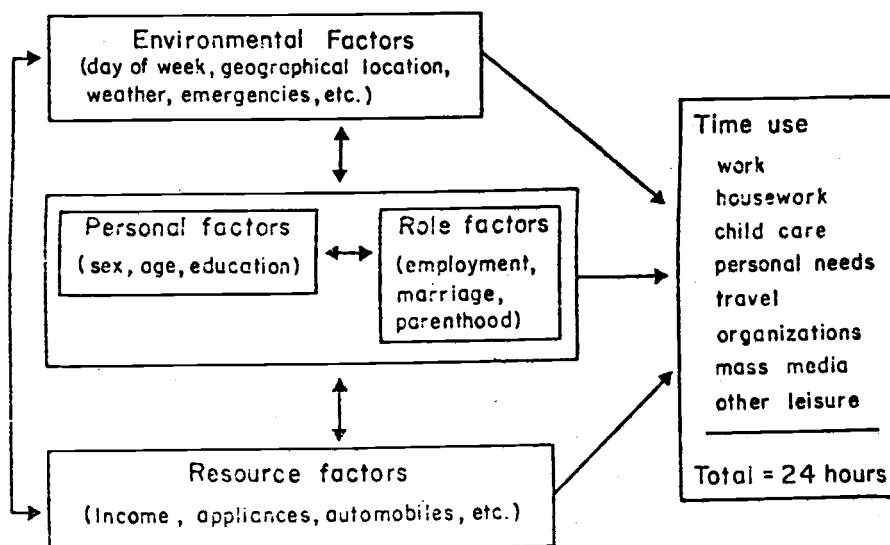
Source: Robinson, John. How Americans Use Time: A Social-
        Psychological Analysis of Everyday Behavior.
        New York: Praeger Publishers, 1977, p. 28.

differences but no significant variation between the contact time of rural and urban men. Urban males had a greater average amount of time spent with primary contacts, resulting from more interpersonal work relationships rather than an increased time spent with nuclear or extended family members (29).

Thorpe did detect differences in amounts of shared time between her classifications of "farm" and "town" homes in Michigan. She concluded that town families were together less than those living on farms, averaging ten minutes less per weekday to "slightly less" on Sundays (41).

Both Robinson and Davey utilized data from primarily urban/ suburban areas but still included the residence factor in their analyses. Robinson concluded that "ecological factors, such as size of city or urban vs. suburban setting, had little demonstrable effect" (30, p. 77). He did go on to note, however, that "the few parents in the outlying, more rural areas of this urban sample did report more time with children, indicating a possibly important rural-urban difference" (30, p. 77).

Davey hypothesized there was a relationship between family interaction and "type of community" (city vs. suburb) in which the family lived. Results of the analysis of variance did not support the hypothesis; hence, no environmental differences were detected in amounts of shared time within this basically urban sample (4).

Personal and Role Factors. Sex can be analyzed from two

perspectives: the influence of the parental sex role on shared time

and the impact of the sex of the children on shared time. Thorpe

concluded that mothers spent more leisure time with children than

fathers. Davey also found that "mother and all children" was the

most common group of family members interacting. In addition,

Davey determined through analysis of variance that mothers did share

significantly more time with their children than did fathers (4).

Davey's analysis regarding sex of children was less conclusive.

Hypothesizing that more time would be shared by mothers and daugh-

ters than by mothers and sons, results indicated that sex of the child

had no effect on the interaction measure (4). The relationship be-

tween sex of child and father's interaction was not studied.

Studying age of family members as a characteristic affecting

shared time has yielded varying conclusions. In general, age of the

parents was a less influential factor than a number of children's age

factors. Robinson found a slight increase over average child-contact

time for women ages 30 to 39, but no differences for men (30). Hill

and Stafford included age of wife as a regression variable in a study

of time allocations to children, only considering time spent in house-

hold and market work by mothers. Their conclusion was that

> while the AGE WIFE variables do serve as useful controls
> in several of our regressions, it appears that...differences

among our three groups [by status level] are captured
in large part by the CHILDREN variables (11, p. 337).

Bigner found evidence that as fathers grew older, they spent
greater amounts of time with their children. He suggested that this
finding may reflect lessening occupational pressures with increasing
age and job experience, leaving more time for interaction with chil-
dren in the home (1).

Davey included age of mother and age of father as factors in
her analysis. She found indications that with increasing parental age,
less time was spent in interaction with children. However, the find-
ings did not prove to be statistically significant (4).

Age of children has often been analyzed as an influential factor
on shared time, particularly in regard to the presence of young chil-
dren in the home. Most studies conclude that shared time decreases
as the age of children increases. Walker and Woods noted that
mothers spent more shared time in child care when children were
younger than when older, regardless of other demands such as
employment (45). Bigner also found that the interaction time of
fathers decreased as age of children increased. He pointed to re-
duced demands for physical care-giving as a major reason (1).
Robinson's analysis showed that the number of children had less
effect on total parental contact time than age of children did. Younger
children were again documented as taking more time than older ones
(30).

One differing view has been offered by Schneider in her study utilizing multi-national data. Her findings contradicted the assumption that the presence of young children increases the average time expenditures for family interaction. East Germany, Bulgaria and the United States had the highest proportion of children under four but were the least family-oriented, according to the social contact data collected. Schneider speculated that the presence of young children may not impose a constraint on households to increase time spent with family if there are other societal institutions which take care of them such as day-nurseries, kindergartens and the like (36).

Age spacing of children is a related factor which has been included primarily in economic analyses of parental time allocations to children. Hill and Stafford proposed that

> children widely spaced in age can require different activities and, hence, the parents spend more time....to bring up children if the children do not amuse each other (11, p. 329).

Results of their research reinforced this view, with children widely spaced in age (five years and over) serving to increase time spent in the household from between 200 and 400 hours per year in high and middle status groups (11).

Studies of employment as a factor influencing shared family time generally focus on the working wife. At the level of marital interaction, Orthner's research findings indicated that the wife's employment

may reduce interaction time as a lack of exclusive attention to the spouse results (26). Scanzoni also reported that employment of the wife showed slight tendencies toward a negative impact on marital companionship. The degree to which it threatened affiliativeness depended in part upon status (34).

> Schneider's conclusion from the multi-national data was that:
>
> for married persons, the factor employment discriminates stronger than sex; in other words, the time expenditure of employed women for familial interactions is more similar to the interaction patterns of employed men than to those of housewives (36, p. 323).

Across countries, employment of the wife appeared to diminish family interactions during work days.

Robinson also noted an effect of mother's employment on child-contact time. Women who worked reported about two-thirds as much contact time as women who did not work (30). A separate analysis of this data showed that it was perhaps interactional care which was most affected by employment. The Walker and Woods time use survey (45) reinforced this finding. They reported that the group of activities in which time was reduced most in employed-wife households was care of family members, receiving about one hour a day less when wives worked.

In her analysis of the Walker and Woods data, Davey proposed that the mother's hours of employment would affect the interaction measure of time with children. No significant correlation

resulted from analysis. However, only seven percent of the home-makers in Davey's sample were employed full-time (4).

In Davey's research, 93 percent of the husbands were employed full-time, and 40 percent worked more than 50 hours a week. In judging the effects of father's employment on time with family members, there was evidence that increasing hours on the job reduced interaction with the family. This negative effect of the father's employment was shown to be stronger than the maternal employment effect Davey studied; however, it still did not prove significant.

Parental education is a final personal factor for consideration. Family economists often utilize wife's education as a proxy for potential market wage in predicting labor force participation. The assumption is that more highly educated women will shift time from home production to market production due to the increased value of time in the latter sphere. However, research on time spent in child care has not borne out this pattern. Leibowitz concluded that more educated women have smaller time inputs to household production but greater time inputs to child care. She suggested that the productivity effect of schooling and greater income elasticity in the families of more educated wives may explain this finding (17).

Robinson's analysis provided only marginal support for the hypothesis that better-educated parents devote more time to children.

> College graduate women and men in the sample did report
> ten percent more contact time with children. . . . But while
> these differences above the average verged on statistical
> significance, the estimates for men and women with some
> college experience [dropouts] dipped below the sample
> mean by almost the same margins (30, p. 75).

So, contact time did not increase in direct proportion to increasing

levels of parental education.

In Robinson's 1973 Omnibus Study for which homemakers roughly

estimated time spent with children, a negative correlation between

education of mother and contact time was found. Mothers who were

college graduates estimated spending about one third less time with

children than did grade-school educated mothers (30).

Resource Factors. Income, as a factor for analysis in relation

to shared time, has been studied by means of a proxy measure. One

exception was Robinson's study of the 1965-1966 Survey Research

Center data which included annual income as a consideration. No

significant relationship was noted, although contact time between

parents and children rose slightly above average for women at lower

income levels and fell slightly below average for women at higher

income levels (30).

A typical proxy for income has been socioeconomic status (SES).

In some studies, SES was defined by the occupation of the husband,

with his education, age and labor market experience weighted as

indicators (11). Another common index used husband's occupation

and education to establish SES levels (12). Research by family
economists has presented evidence for a relationship similar to that
between wife's education and child care time; that is, higher status
women spending more time in child care in comparison to lower status
women.

In estimating time allocations to preschool children across
socioeconomic status groups, Hill and Stafford calculated that time
inputs of high status mothers to child care were two to nearly four
times greater than those of low status mothers. This occurred
despite the high potential wage rate factor. In addition, more de-
tailed analysis revealed that lower SES mothers spent less time per
child but had more children than higher SES mothers. The data led
to a conclusion that:

> ...higher income families, relative to low income families,
> do not simply substitute market inputs for time intensive
> activities in child rearing. Indeed, ...they spend more
> money and more time in socializing their children (11,
> p. 332).

Although Scheuch focused on leisure time and limited analysis to
married couples, his research also concluded that higher status family
members spent more time together. In studying German families,
his data indicated that:

> both lower classes display relatively low proportions
> of common activity for husband and wife, while the three
> middle strata show high averages for this type of leisure
> (35, p. 58).

For the nuclear family, Olsen researched the influence of
socioeconomic status on the distribution of family responsibilities
for physical and managerial household tasks. In many tasks com-
monly considered joint responsibilities, e.g., discipline of children,
budgeting, supervising schoolwork, and vacation planning, analysis
showed a direct relationship between status and husband involvement.
Low status fathers particularly avoided participation in such tasks
(23).

However, not all studies support the pattern discussed above.
Reiss' study of interpersonal contacts from the late 1950's examined
status differences in addition to the rural/urban dimension. Among
the males sampled, no significant variation on any factor appeared on
the basis of socioeconomic status differentials (29). Davey also
utilized socioeconomic status as a characteristic in her analysis of
family interaction, but found no significant relationship on this basis.
This finding led her to speculate that perhaps "socioeconomic class
is becoming less valuable in determining differences in family life
styles" (4, p. 70).

Other than income as reflected in socioeconomic status indexes,
little evidence exists on the influence of other family resources
with potential impact for shared time. Davey investigated a number
of housing variables in relation to family interaction. These included
number of stories and number of rooms in the dwelling unit, size of

the lot on which the dwelling was located, and presence of a washer,

dryer, and dishwasher in the home. None of these variables proved

to be significant factors in terms of family interaction scores (4).

III. METHODOLOGY

The chapter includes three sections: selection of sample; data collection; and analysis of data.

Selection of Sample

The data used for this study were obtained from a contributing project of the Northeast Regional Research Project NE 113, an Interstate Urban/Rural Comparison of Families' Time Use. This 11 state project was coordinated through Cornell University, New York. The overall research objectives were to establish a data bank for families on their uses of time and to compare time use among rural and urban families in different geographic areas of the United States. As a state participating in the project, research in Oregon was conducted by the Department of Family Resource Management at Oregon State University with support from the State Agricultural Experiment Station.

The variables size of family and age of youngest child had major impact on time use in the Walker and Woods study (45). To control for family size in the interstate project, samples were limited to two-parent, two-child households. The samples were stratified according to the age of the youngest child. Five groups were identified for sampling: families with the youngest child 1) under one year

of age; 2) one year old; 3) two to five years of age; 4) six to eleven years of age; and 5) twelve to seventeen years of age. This was the sole variable controlled in choosing the sample of four-member rural and urban families; hence, others such as socioeconomic status and employment of homemaker were random variables.

In keeping with the project interest in a rural/urban comparison, the two areas selected for investigation in the Oregon study were the Portland Standard Metropolitan Statistical areas and rural Linn county. For Linn county, a list of all two adult families with one or two children was prepared, using the 1976 Albany City Directory to locate those living outside the city limits of Albany but in Linn county. Families with both parents and either one or two children were then listed according to the five strata outlined. To obtain information on additional births to these families, the city records of vital statistics were consulted. A random sample was then drawn by selecting every nth family from each strata. In order to include families with new births, the procedure was repeated midway through the interview schedule using the 1977 Albany City Directory.

The urban sample was selected by a professional marketing research group which had records of families with two children obtained from a previously conducted state-wide study. Drawing from the Portland Metropolitan area only, lists prepared according to the youngest child age strata were made available to interviewers for

contacts. This method provided families for nearly three-fourths of the urban sample. The remaining portion of the sample was gathered by two procedures: 1) having interviewers ask families participating in ongoing cross-section studies for information regarding number and ages of any children in the home; and 2) screening for appropriate families by telephone from the research office, utilizing a table of random numbers to select names for contacts.

Once a group of potential respondents fitting the sample criteria was established, a letter inviting participation in the study was sent from the Department of Family Resource Management (Appendix A). Interviewers then contacted families within a week to confirm willingness to participate, and to set up appointments for interviews. For the rural sample, a total of 331 families was contacted; of these, 110 did not fit the strata criteria at the time and 11 could not be located. A total of 123 interviews were completed; however, 15 percent were eliminated as the families lived within the Albany city limits. The resulting completion rate was 59 percent, with a 26 percent refusal rate. For the urban sample, approximately 179 families were contacted in the first method. With the completion of 78 interviews, the resulting rate was 44 percent with a 56 percent refusal rate. Twenty-two families were added to the sample in the telephone screening steps. Completion rates were not available for the latter procedures.

The final sample consisted of a base of 210 Oregon two-parent, two-child families. Equally divided by area of residence, each sample distributed families over the five strata specifying age of the youngest child.

Collection of Data

Designs of data collection instruments were based on those from the 1967-1968 Walker and Woods study. Minor refinements were made by Walker and research associates at Cornell University before use in the interstate project.

Two instruments were used: a questionnaire and a time chart. The questionnaire provided supplemental information, including demographic characteristics. Time charts (Appendix B) were furnished for the recording of time spent in each of 18 categories. The categories defined activities within household work, paid/unpaid work, and nonwork groupings (Appendix C). Each time chart accounted for 24 hours, broken down to ten-minute blocks. Blocks could be divided in half, allowing estimations of time spent to the nearest five minutes. Each family sampled completed charts for two 24-hour periods.

Data were collected from January to December 1977. Scheduling of interviews was controlled to allow for equal distribution over days of the week and seasons of the year.

Interviewers hired and instructed for data collection in the field were monitored by project associates at the University and by the cooperating marketing research firm. The basic procedure followed was for the interviewer to call upon the homemaker and assist her in recalling and recording the previous day's activities for all family members six and over. Explaining the time charts and their use to the homemaker in person (with instructions as detailed in Appendix D), the interviewer then left a second chart for records of the following day. Having arranged a second meeting time at the initial interview, the return visit allowed review of the charts to rectify any errors and to collect questionnaire data. The remuneration of ten dollars given at the second interview encouraged the conscientious completion of the two time charts to be collected at that visit.

Following collection, completed records were edited, coded, and placed on computer tape. The variables drawn from these project tabulations for the shared time study were:

1. age of youngest child, coded to the nearest year

2. age of homemaker, coded to the nearest year

3. age of spouse, coded to the nearest year

4. education of the homemaker, coded in ten categories

5. education of the spouse, coded in ten categories

6. weekly hours of homemaker's employment, coded to the

nearest hour

7. weekly hours of spouse's employment, coded to the nearest

hour

8. total income, coded in fourteen categories

(Appendix E presents details on the categorization of education and

income.)

For the present study, the investigator selected and coded

additional information from the instruments that related to shared

family time. Variables and observations coded at this stage were:

1. mean age of children, to the nearest year

2. age spacing, to the nearest year

3. day of week on which time was recorded

4. each episode of shared time, detailing a) family members

participating; b) activity category; c) where episode occurred

5. total episodes for the day

6. total amount of shared time for the day, in minutes

The time chart from the second recording day for each family

was used. In recording instructions, homemakers had been asked to

box the symbols of family members when "show[ing] that the same

activity was done by more than one person at the same time and in the

same place" (Appendix D, p. 102). The time blocks boxed during waking

hours by the homemaker were considered shared family time by the

investigator. Also included as shared time were instances when

homemakers gave a written description accompanying an activity categorization which indicated sharing. Examples of such descriptions were "helping with homework" or "reading to children." Each recorded incident of shared activity was considered one episode.

For each shared episode, the family members participating were recorded. A member was considered a participant when present during 50 percent or more of the time shared in an activity.

Coding for an activity was consistent with the categorization made by the homemaker in the records. Original instructions for recording travel time suggested the family "include transportation time with the activity for which the trip is made" (Appendix D, p. 101). The investigator followed this pattern, considering joint travel to an activity as part of a total episode.

Determining whether a shared activity occurred home or away from home became possible by noting travel patterns indicated in the records. "Home" included the dwelling unit, yard and/or garden.

In coding amounts of shared time, a total number of episodes for the day examined was first entered. The second step involved calculating the duration of each episode and adding the minutes to obtain a total amount of shared time for the day.

Analysis of Data

The analysis of the data included a descriptive treatment and use of a statistical model.

Descriptive Treatment

Four descriptors of shared family time patterns were identified in this study: the family members participating, the type of activity, the places of activity, and the time of the week. Patterns were described by reporting: 1) among which members episodes of activity were shared; 2) in which activity categories episodes were shared; 3) where shared episodes occurred; and 4) during what part of the week shared time occurred. Each factor was described by a number of categories, listed in Figure 3.1. In addition, the frequency patterns of shared family time were described by presenting means and ranges for both number of daily episodes and total daily amounts of shared time in minutes.

Statistical Model

The second major portion of the data analysis presents a statistical model describing the family and environmental characteristics which significantly affect shared family time. Multiple regression was the statistical technique employed to determine which of twelve

FIGURE 3.1   Descriptors of shared family time patterns.

Descriptors	Categories
Family Members Participating in the Activity	Both parents (without children) Parents and both children (whole family) Parents and one child Homemaker and both children Homemaker and one child Spouse and both children Spouse and one child Both children

Type of Activity	Household Work
	    Food preparation
	    Dishwashing
	    Shopping
	    Housecleaning
	    Maintenance
	    Clothing care
	    Clothing construction
	    Management
	Care of Household Members
	    Physical
	    Nonphysical
	Work
	    School
	    Paid
	    Unpaid
	Nonwork
	    Organization participation
	    Social/recreational
	Eating

Place of Activity	At home At work, travel to At school, travel to Not at home, work, school
Time of Activity (as part of week)	Weekend day (Saturday, Sunday) Weekday (Monday through Friday)

independent variables accounted for the most variation in the dependent variable, total daily amounts of shared family time. The twelve independent variables included in the analysis were:

    a.   mean age of children

    b.   age spacing of children

    c.   age of youngest child

    d.   age of homemaker

    e.   age of spouse

    f.   education of homemaker

    g.   education of spouse

    h.   weekly hours of homemaker's employment

    i.   weekly hours of spouse's employment

    j.   income

    k.   area of residence

    l.   day of week

Types of variables. The first ten variables are continuous: that is, able to take on a range of quantitative values. However, the latter two environmental characteristics are "dummy" variables, or qualitative by nature. Therefore, to be considered in regression, each must be classified in two mutually exclusive categories that are not ranked (14).

Area of residence was dichotomized as 1 rural, 0 urban; day

of week as 1 weekend day, 0 weekday. Although such categorical

independent variables are often studied through an analysis of vari-

ance, the investigator wished to assess their effects relative to the

other family characteristics of interest; hence, multiple regression

was the appropriate means for simultaneous study of both the continu-

ous and categorical independent variables.

The Regression Equation. The equation basic to multiple

regression is:

$$Y^1 = a + b_1 X_1 + b_2 X_2 + \ldots b_k X_k$$

where Y^1 is the value of the dependent variable, $b_1 b_2 \ldots, b_k$ are

regression coefficients associated with the independent variables

$X_1, X_2 \ldots, X_k$, and a is the known intercept constant. Also defined

as the point where the regression line intercepts the Y axis, a is

calculated by the equation $a = \overline{Y} - b_1 \overline{X}_1 - \ldots - b_k \overline{X}_k$ (14). The sub-

script k symbolizes the total number of independent variables in a

particular regression equation.

The values and signs of b_1, $b_2 \ldots$, b_k in a resulting regression

model are instructive in that these weights indicate the relative im-

portance of the different independent variables $(X_1, X_2 \ldots, X_k)$ in

making predictions to or describing variance in Y, the dependent

variable. The sign of b reveals the direction of the variable's

influence; that is, whether the value of Y varies positively or nega-

tively in relation to a particular X. The coefficient b is also defined

as the slope of the regression line, representing the change in the

dependent variable expected with a one-unit change in the independent

variable when the value of all other independent variables is held

constant.

Hypothesis-Testing . Although the primary purpose of the

multiple regression model in this study was to describe the relation-

ship of a number of independent variables to one dependent variable,

a general research hypothesis stating that a linear relationship

existed between the dependent and the independent variables was in

effect. In addition, each regression coefficient was tested on the

premise that it was not significantly different from 0, at the .05

level. The significance of the coefficients was measured by the test

statistic F where:

$$F = \frac{ss_{reg}/df_1}{ss_{res}/df_2}$$

with degrees of freedom$_1$ = k and degrees of freedom$_2$ = N - k - 1.

ss_{reg} is the sum of squares of the dependent variable due to regres-

sion, ss_{res} is the sum of squares of deviations from regression

(residuals), and N is the sample size (14). If the F statistic proved

significant for any particular regression coefficient b at the .05 level,

it was concluded that the relation between the corresponding

independent variable and the dependent variable could probably not have occurred by chance.

Meaning of R^2. The R^2 statistic in a regression model indicates the magnitude of the relation between Y and X_1, X_2 ..., X_k. It expresses the proportion of variance in the dependent variable accounted for by the set of independent variables chosen (14). The R^2 ranges in value from 0 to 1.00.

Regression Procedure. A stepwise multiple regression procedure was chosen for presentation of a model in this analysis. Such a procedure results in selection of a set of independent variables which will provide the best prediction possible with the fewest number of independent variables (22). The investigator chose a .05 significance level for coefficients as criteria for inclusion and/or removal of variables in the regression model.

In formulating a model by the stepwise procedure, the variable that makes the greatest increment to R^2 is entered at each step, provided the F ratio associated with it exceeds the .05 level specified for entrance. Upon entering a variable, the contribution of each of the preceding variables in the equation is then re-examined. This involves treating each variable, in turn, as entering the regression equation last and calculating corresponding F ratios. If any variable then has an F ratio inconsistent with the .05 significance criteria, it is removed from the equation. The process continues until no

variable excluded from the equation has an F ratio meeting the .05

level required for entrance, and no variable in the equation has an

F ratio less significant than the .05 level, that situation requiring

removal (14).

In terms of use with the present study, the stepwise regression

procedure considered all the family and environmental characteristics

proposed as independent variables. It then chose the fewest number

of variables which best explained variation in amounts of shared

family time, the dependent variable. The resulting model illustrated

which particular characteristics were most influential in determining

the amounts of time which family members spent together.

IV. FINDINGS

The findings of the study are presented in three sections: a description of the sample, a description of shared family time patterns, and results of the multiple regression analysis.

Description of the Sample

The study used data from part of a regional research project, an Interstate Urban/Rural Comparison of Families' Time Use. In Oregon, data were collected from 210 two-parent, two-child families, stratified into five groups according to the age of the youngest child. Half the families lived in the urban/suburban Portland area; the remaining half lived on a farm or non-farm residence in rural Linn County.

Ages of the Homemakes and the Spouses

The homemakers in the sample ranged in age from 18 to 55 years. The mean age was 32.8 years. Ages of the spouses ranged from 21 to 51 years, with a mean age of 31.9 years. Table 4.1 presents a summary of the ages reported by the homemakers and spouses.

TABLE 4.1 Ages of the Homemakers and the Spouses

Age in Years	Homemaker		Spouse	
	Number	Percent	Number	Percent
Under 25	19	9.0	41	19.5
25-39	159	75.7	115	54.8
40-54	31	14.8	54	25.7
55 and over	1	.5	0	--
TOTAL	210	100.0	210	100.0

Ages of the Children

Age of the children was examined in three ways: by age of the youngest child, mean age of the two children, and age spacing.

A summary of the ages of the youngest child in the families sampled is presented in Table 4.2. Given the stratification groups specified in the sampling scheme, 38 percent of the families had children one year of age or younger.

TABLE 4.2 Distribution of 210 Families by Age of the Youngest Child

Age in Years	Number	Percent
1 and under	80	38.1
2-6	51	24.2
7-11	36	17.2
12-17	43	20.5
TOTAL	210	100.0

A mean age for the two children in each family was calculated by averaging the two ages to the nearest year. Table 4.3 presents a distribution of the 210 families according to the mean age group of their two children. After averaging the ages of the children in each family, the resulting overall mean was 7.1 years.

TABLE 4.3   Distribution of 210 Families by Mean Age Groups of the Children

Age Group, in Years	Number	Percent
6 and under	117	55.7
7-11	42	20.0
12-17	51	24.3
TOTAL	210	100.0

Age spacing indicated the span of years between the ages of the children. The range in spacing was zero (twins) to 15 years, with a mean of three years. Only nine percent of the families had children spaced over five years apart.

Education of the Homemakers and the Spouses

A summary of educational levels of the homemakers and spouses is presented in Table 4.4. The largest percentage of homemakers

was found at the high school graduate level. About one-half of the

women had attended college, but only one-fourth had received a

bachelor's degree. These percentages reflected levels of educa-

tional attainment higher than national figures from the Bureau of

Labor Statistics (BLS). For women in the labor force in 1976, the

BLS figures indicated about 16 percent had attended college and 14

percent had earned a bachelor's degree (42).

The spouses had attained generally higher levels of education

than the homemakers, although there were more men than women who

did not complete high school. Over one-fourth of the men had re-

ceived bachelor's degrees and about 11 percent completed advanced

degrees of various types. These statistics were higher than national

figures for men in the labor force which showed that 16 percent had

a bachelor's degree and an identical percentage had partial college

educations (42).

Comparing the sample group's educational levels to Oregon

figures from the 1970 Census also indicated these respondents were

more highly educated than average residents of the state. While the

state data showed that 22 percent of adults in Oregon have not com-

pleted high school (38), only five percent of the women and six per-

cent of the men sampled in this study had less than 12 years of edu-

cation.

TABLE 4.4   Education Levels of the Homemakers and the Spouses

Highest Level Completed	Homemaker		Spouse	
	Number	Percent	Number	Percent
Grade school (1-8)	2	1.0	0	--
Partial high school (9-11)	9	4.3	13	6.2
High school diploma	88	41.9	55	26.2
Vocational/technical training	4	1.9	11	5.2
Partial college	54	25.6	47	22.3
A. A. degree	2	1.0	5	2.4
Bachelor's degree	43	20.5	55	26.2
Master's degree	7	3.3	13	6.2
Doctorate degree	1	.5	1	.5
Professional degree	0	--	10	4.8
TOTAL	210	100.0	210	100.0

TABLE 4.5   Total 1976 Income Before Taxes for 210 Families

Annual Income	Number	Percent
$ 6,000-$ 7,499	2	1.0
$ 7,500-$ 9,999	9	4.3
$10,000-$11,999	11	5.2
$12,000-$14,999	39	18.6
$15,000-$19,999	53	25.2
$20,000-$24,999	43	20.5
$25,000-$49,999	45	21.4
$50,000 and over	8	3.8
TOTAL	210	100.0

Incomes of the Families

Table 4.5 details the distribution of total 1976 income before
taxes for the families in the sample. No families reported incomes
less than $6,000. About one-fourth of the families reported incomes
in the $15,000 to $19,999 grouping.

In comparing the reported incomes to other Oregon figures, the
sample group appeared more concentrated in the middle income group
than was the overall state population. According to 1975 state income
tax returns data, nearly 30 percent of Oregon residents had annual
incomes under $12,000 (38). Ten percent of the sample group re-
ported incomes under $12,000 for 1976.

The midpoint in the mean and median income category for the
sample was $17,499. The Oregon state median income in 1976 was
reported as $13,750; more specifically, the median incomes for
Multnomah and Linn Counties were $14,689 and $12,789, respec-
tively (38).

Employment of the Homemakers and the Spouses

Both the homemaker and spouse were asked to record the num-
ber of hours worked for pay in the week preceding the sampling period.
For the homemaker, the resulting mean was 7.1 hours a week, with a
range of zero to 60 hours. The largest proportion of the women,

approximately 72 percent, were not employed outside the home during

that week (Table 4.6). Of the 59 who did report hours of paid employ-

ment, three-fourths of them worked part-time, or less than 40 hours

a week. The low degree of involvement in paid employment may in

part be explained by the concentration of families with preschool chil-

dren in this sample, suggesting extended obligations in the home for

the women. Both national labor statistics and previous time use data

have indicated that lower proportions of women with children under

six are employed in comparison to women with school-aged children

(42, 45). The mean hours of employment for all homemakers accord-

ing to the age groups of the children are given in Table 4.7. (Age

groups of the children are based on those in Table 4.3.) Considering

both employed and nonemployed women in the analysis, the mean of

the reported weekly hours of employment increased as the children

became older.

National figures from the Bureau of Labor Statistics in 1977

showed a labor force participation rate of 39 percent for married

women with husband present and children under the age of six (43).

This was higher than the 28 percent employment rate for _all_ women

in the present sample; however, the latter percentage reflected the

women's employment rate for the week preceding sampling only. It

also did not include unemployed persons looking for work as the

BLS figure did (42).

TABLE 4.6   Hours of Employment for the Homemakers and the
             Spouses

Weekly Hours	Homemaker		Spouse	
	Number	Percent	Number	Percent
Zero	151	71.9	14	6.7
1-14	13	6.2	3	1.4
15-29	20	9.5	8	3.8
30-39	11	5.2	19	9.0
40-49	12	5.7	107	51.0
50-59	2	1.0	34	16.2
60-69	1	.5	20	9.5
70 and over	0	--	5	2.4
TOTAL	210	100.0	210	100.0

TABLE 4.7   Mean Hours of Employment for 210 Homemakers by
             Age Groups of the Children

Age Group, in Years	Number of Homemakers	Mean Hours/Week
6 and under	117	4.4
7-11	42	7.4
12-17	51	13.0
TOTAL	210	

By contrast, 79 percent of the spouses reported 40 or more
hours of employment for the week preceding sampling (Table 4.6).

The range of weekly time in employment for spouses was zero to 75 hours, and the mean was 41.3 hours.

Description of Shared Family Time Patterns

The descriptors used in this study were: 1) family members participating in the shared time episodes; 2) the types of activities in which shared time was spent; 3) place where the shared time occurred; and 4) time during the week when the shared time occurred. Ranges and means were also used to describe the frequency of shared time episodes and amounts.

Frequency of Shared Family Time

Shared time for each family was measured both by number of daily episodes and by total daily amounts in minutes. The number of episodes occurring on the one day recorded ranged from zero to 15, with a mean of 3.5 daily episodes. About three-fourths of the families reported five or fewer episodes of shared time.

Total daily amounts of shared family time ranged from zero to 1,140 minutes (19 hours). On the basis of 16 waking hours in one day, the maximum amount of shared time which families could have recorded was 1,920 minutes (32 hours). A distribution describing the amounts of total daily shared time for all families according to the age groups of the children is presented in Table 4.8. (Age groups

TABLE 4.8 Amounts of Total Daily Shared Time for 210 Families by Age Groups of the Children

Age Group, in Years	Number of Families	Range, in Minutes	Mean Time, in Minutes
6 and under	117	0 to 770	173 (2.9 hr.)
7-11	42	0 to 890	262 (4.4 hr.)
12-17	51	0 to 1,140	136 (2.3 hr.)
TOTAL	210		

TABLE 4.9 Family Members Participating in Episodes of Shared Time

Group Configuration	Of Total Shared Episodes	
	Number	Percent
Both parents (without children)	300	40.9
Parents and both children (whole family)	93	12.7
Parents and one child	73	9.9
Homemaker and both children	35	4.8
Homemaker and one child	118	16.1
Spouse and both children	17	2.3
Spouse and one child	34	4.6
Both children	64	8.7
TOTAL	734	100.0

are based on Table 4. 3). The fact that records for children under six years of age were not available influenced the resulting figure for the six and under age group. Taking this into account, amounts of shared time appeared to increase for families with children in the middle age group, and to decrease for those with older children.

Thirty-nine families, or about 19 percent of the total, reported no shared time during the sampling day.

Family Members Participating

Table 4. 9 gives the family group configurations based on the number of shared episodes in the sample. The "both parents" group was the most common configuration, accounting for 40 percent of the total episodes. By contrast, the "whole family" group was found as participants in about 13 percent of the episodes. Participation of the homemaker alone with one or both children was more evident than sharing between the spouse and children.

The absence of records for children under six was a factor in the resulting configurations. Episodes in which young children may have been present would appear as a "both parents" configuration, or in one of the "one-child" configurations. Comparisons to Davey's data showed percentages in the "parents" group to be lower at 12 percent, and to be higher for "whole family" (18 percent) and "both children" groupings (4). Because she limited her sample to families

with children between six and 11, the exclusion of young children was
not reflected in her results.

TABLE 4.10   Types of Activity in Episodes of Shared Time

| Activity | Of Total Shared Episodes | |
	Number	Percent
Household Work	133	17.7
Food preparation	28	3.8
Dishwashing	19	2.6
Shopping	39	5.3
Housecleaning	5	0.7
Maintenance	18	2.5
Clothing care	4	0.1
Clothing construction	0	--
Management	20	2.7
Care of Family Members	114	15.5
Physical	48	6.5
Nonphysical	66	9.0
Work	19	2.7
School	7	1.0
Paid	7	1.0
Unpaid	5	0.7
Nonwork	221	30.1
Organization participation	18	2.5
Social/recreational	203	27.6
Eating	247	34.0
TOTAL	734	100.0

Type of Activity

Table 4.10 shows the types of activity in which family members shared time. Major activity categories and their breakdowns are included. The division between work and nonwork shared activity was calculated as 36 percent and 64 percent, respectively. As nonwork classifications, over one-fourth of all shared episodes were recorded as social/recreational activities and about one-third were allocated to the eating category. Further analysis indicated that of the 171 families reporting shared time, 13 percent recorded episodes in the eating category only.

Episodes involving household work and care of family members consumed the bulk of work activity. Within the household work category, shopping was the most commonly shared task area with food preparation following. Episodes shared in nonphysical care of family members were more numerous than those of a physical nature. The exclusion of children under six who demand more physical care-giving may have been a factor in this finding. Activities categorized as "work" outside the household accounted for the lowest category percentage; those recorded were primarily incidents of shared travel time to school or work.

TABLE 4.11   Places Where Episodes of Shared Time Occurred

Location	Of Total Shared Episodes	
	Number	Percent
At home	551	75.1
At work, travel to	10	1.4
At school, travel to	12	1.6
Not at home, work, or school	161	21.9
TOTAL	734	100.0

Place of Activity

Findings indicated the home as the most common setting for shared activities. Three-fourths of all episodes occurred at this location (Table 4.11). A low proportion of sharing took place at work or school locales, leaving around 22 percent occurring in settings away from home or work environments. This figure represents a ten percent increase over Davey's finding that about 12 percent of shared episodes took place outside the home a decade ago (4).

TABLE 4.12   Amounts of Total Daily Shared Time According to the Part of the Week

Part of Week	Number	Mean Time, in Minutes
Weekdays	161	158.6 (2.6 hr.)
Weekend days	49	262.5 (4.4 hr.)
TOTAL	210	

Time of Activity

The time of activity descriptor was considered as the part of the week when family members were together in shared activities. Table 4.12 presents the mean amounts of total daily shared time for weekdays (Monday through Friday) and weekend days (Saturday and Sunday). When comparing the figures to a population mean of 183 minutes, results indicated that families shared above average amounts of time on weekend days and below average amounts on weekdays.

Results of the Multiple Regression Analysis

The regression analysis used the total daily amounts of shared time for the 210 families as the dependent variable. The twelve independent variables included in the analysis were mean age of the children, age spacing of the children, age of the youngest child, age of the homemaker, age of the spouse, education of the homemaker, education of the spouse, weekly hours of the homemaker's employment, weekly hours of the spouse's employment, income, place of residence, and day of week.

Two basic regression models were constructed. For the full model, all twelve independent variables were forced into the regression equation. The resulting statistical model indicated the effects of individual independent variables on the dependent variable, amounts

of shared time, given the particular set of variables chosen and the order in which they were entered.

For the best model, a stepwise regression procedure (22) was followed to select the independent variables which best explained the variation in amounts of shared family time. The criterion for selecting and including an independent variable in the best model was its significance at the .05 level. A best model with a .10 inclusion level was also constructed.

Regression Results, Full Model

The results of the full model regression analysis are presented in Table 4.13. The R^2 statistic for the model was .13; therefore, the specified set of independent variables explained 13 percent of the variation in amounts of shared family time. A two-sided F test was used to test the significance of individual regression coefficients. The overall F statistic (.008) indicated the significance of the entire model.

Day of week and age of the homemaker were the two independent variables in the full model which were significant at the .05 level, given the particular set of variables chosen and their order of entrance into the regression equation. Day of the week was a variable considering the effect of weekend days versus weekdays. The direction of the relationship between day of week and amounts of shared

TABLE 4.13   Regression Results, Amounts of Shared Time for 210 Oregon Families: Full Model

Variable	b	Standard Error	F Value (Significance Level)
Day of week	+ 89.02	32.48	7.51 (.007)
Residence (Rural/Urban)	- 40.43	28.70	1.98 (.16)
Income	- 12.91	10.83	1.41 (.24)
Age of homemaker	+ 11.34	4.32	6.90 (.009)
Mean age of children	- 14.41	12.50	1.33 (.25)
Education of spouse	- 9.11	8.60	1.12 (.29)
Weekly hours of spouse's employment	+ 1.17	.89	1.73 (.19)
Education of homemaker	- 9.11	9.51	.92 (.34)
Age spacing of children	+ 5.82	9.01	.42 (.52)
Age of spouse	- 1.62	3.37	.23 (.63)
Age of youngest child	+ 4.02	11.81	.11 (.73)
Weekly hours of homemaker's employment	+ .24	1.06	.05 (.82)
(Constant)	+107.19		

R^2 = .13   Overall F   2.36 (.008)

time was positive, indicating that shared time tended to increase with the occurrence of weekend days. This was an expected result, based on the study's descriptive finding that above average amounts of time were shared on Saturdays and Sundays. It was also consistent with findings of past research from previous decades (4, 30, 37, 41).

Of all parental and child age variables, age of the homemaker alone proved significant in this model. Its effect on the dependent variable was also positive; that is, as the homemaker's age increased the amounts of shared time in the family also increased significantly. This result was not expected as past research has generally found child age variables of greater significance than those related to parental age (1, 11, 30). The other independent variables chosen and their order in the model may partially explain the significance of this age variable over others.

Though not significant, the mean age of children variable had a negative effect on shared family time. The older children became, the less time tended to be shared in the families. This trend appeared between the seven to 11 and 12 to 17 age groupings in this study's descriptive findings. The aging of children has often been assumed to eliminate time necessary for physical care-giving, thus decreasing some shared time (1, 45).

Education and income variables were not significant; however, the directional signs of their coefficients were negative. For this

model, amounts of shared time tended to reduce as levels of parental education and income increased in the families sampled.

The spouse's hours of employment as an independent variable had a stronger effect in the model than did the maternal employment variable, though neither was significant. The positive effect of the former indicated that as hours of the spouse's employment increased, amounts of shared time in the family also increased. This was not an expected outcome and was difficult to interpret. One possibility might have been that the scheduling or timing of employment hours was more important than the actual number worked. Since day of week was a more significant variable, the net result of increased hours of employment may not have been negative if the men in this sample worked extended hours on weekdays rather than on weekends. If so, large blocks of discretionary time for shared family activity would still have remained on weekends. Maklan's research indicated that male workers did spend more time with the family when such blocks of time were created by a compressed week schedule (19).

The residence factor in the full model considered the effects of a rural versus an urban living environment. The negative sign indicated that when families lived in rural areas, the amounts of shared time tended to be lower. Although this negative effect was not expected and contrary to previous research (30, 41), a further analysis of descriptive data confirmed the finding. The mean amount of total

daily shared time for rural families was about 158 minutes (2.6 hours), while the mean for urban families was 206 minutes (3.4 hours). Mean ages of the children in the two samples were comparable, and no significant difference between the hours of employment for rural homemakers in comparison to urban homemakers was found. Hence, these two variables did not explain the negative effect of rural residence on amounts of shared time. Day of week as a significant influence on shared time might again have been a related variable. For instance, rural families in the sample could have had weekend responsibilities such as unpaid farm work which reduced time available for shared family activity.

The final five independent variables in the full model were education of the homemaker, age spacing of the children, age of the spouse, age of the youngest child, and weekly hours of the homemaker's employment. The F values of these variables were relatively low, indicating they were not meaningful predictors of shared family time in combination with the model's other independent variables. These five variables also detracted from the significance of the model as a whole, evidenced by the fact that the value of the overall F dropped from 3.88 (.001) to 2.36 (.008) with their addition to the regression equation.

TABLE 4.14   Regression Results, Amounts of Shared Time for 210
Oregon Families: Best Model (.05 Inclusion Level)

Variable	b	Standard Error	F Value (Significance Level)
Day of week	+103.83	32.11	10.46 (.001)
(Constant)	+158.62		
R^2 = .05		Overall F	10.46 (.001)

Regression Results, Best Models

The best model of the determinants for shared family time in

210 Oregon families is presented in Table 4.14.   This model speci-

fied that all independent variables be significant at the .05 level for

inclusion.   Only one of the twelve independent variables, day of week,

met this criterion.   With an R^2 equal to .05, this single variable

explained about five percent of the variation in amounts of shared

family time.   As in the full model, the amounts of shared time tended

to be higher with the occurrence of weekend days as opposed to week-

days.   However, the positive effect was found to be more significant

(.001) in the best model than it had been in the full model (.007).

TABLE 4.15   Regression Results, Amounts of Shared Time for 210
             Oregon Families: Best Model (.10 Inclusion Level)

Variable	b	Standard Error	F Value (Significance Level)
Day of week	+103.51	31.97	10.49 (.001)
Residence (Rural/Urban)	- 45.86	27.13	2.86 (.092)
(Constant)	+181.40		

R^2 = .06   Overall F 6.70 (.002)

A best model for determinants for shared family time was also proposed with the criterion for inclusion of independent variables being the .10 level of significance (Table 4.15). In this model, two independent variables met the criterion: day of week and residence. The R^2 statistic was .06, meaning these two variables explained nearly half the variation accounted for by the twelve variables in the full model. Signs of the regression coefficients were consistent with those in the full model. Weekend days had a positive effect and rural residence a negative effect on shared family time.

The stepwise regression procedure allowed the significance of the residence variable to be more clearly shown. Since day of week was the only other variable in the model, the possibility of differing weekend time use between rural and urban families might again be proposed as one explanation for the tendency for rural families

to have reduced amounts of shared time. Other variables not included in the study could have had influence in this finding also. Although housing and surrounding outdoor space characteristics did not prove significant in a past study (4), this was one difference between the rural and urban living environments which might have also influenced the family sharing of activities in time and space.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this study shared family time in two-parent, two-child Oregon households was analyzed. Patterns in shared time including the family members participating, types of activity, places of activity, and times in the week when it occurred were examined. The relationship between amounts of shared family time and twelve demographic variables was also investigated through a regression model.

Summary

Data collected from 210 two-parent, two-child Oregon families for a regional research project on time use were used for the shared time research. Half the families lived in the urban/suburban Portland area and half lived in rural Linn County. Parental age ranged from 18 to 55 years and the mean age was approximately 32 years. Levels of education attained by the homemakers and their spouses were higher than national averages. About 72 percent of the homemakers were not employed outside the home, while nearly 80 percent of the spouses worked 40 or more hours in the week preceding record days.

The number of shared time episodes recorded by the families for one day ranged from zero to 15, with a mean of 3.5 daily episodes. The amounts of daily shared time ranged from zero to 1,140 minutes (19 hours). About 19 percent of the families reported no shared time.

The most common group of family members participating in shared activity was both parents. The whole family was reported as participants in 13 percent of the shared episodes. For shared time episodes not involving both parents, participation between the home-maker and children was more evident than that between the spouse and children.

Nonwork activities accounted for the greater proportion of shared family time episodes as one-third were spent in eating together and over one-fourth in social and recreational pursuits. About 18 percent of the shared episodes were reported as household work activities, with shopping the task area most commonly shared. Care of family members accounted for 15 percent of the shared episodes reported.

The home was the common site for shared activity with three-fourths of the shared time episodes occurring in that setting. About 22 percent of the episodes were shared away from the home, work or school environments.

More time was shared by family members on weekend days than on weekdays. While the mean amount of shared time for weekend days rose nearly 80 minutes above a daily average of 180 minutes, the mean time shared on weekdays fell 25 minutes below the average.

In a regression model with twelve variables, day of the week and age of the homemaker showed significant positive relationships to amounts of shared family time, given the set of variables specified

and the order in which they entered the regression equation. Amounts

of shared time tended to increase with the occurrence of weekend

days. Shared time also tended to increase in this model as home-

makers became older.

In a model specifying the .05 significance level for the inclusion

of variables, day of the week again had a positive effect on amounts

of shared time. When raising the significance level to .10, residence

had a significant negative effect on shared time. Families living in

rural environments tended to have reduced amounts of shared time

compared to urban families.

The two independent variables in the latter best model accounted

for six percent of the variation in amounts of shared family time,

while the twelve variable model explained 13 percent of the variation.

Conclusions

The descriptive patterns in shared family time were compared

with results of past research in order to tentatively identify trends

over time. The lack of consistency between studies in their measure-

ments of shared time caused difficulties in comparing frequency

figures over time. Although her sample was small and measurement

less detailed, Snow's data provided the most comparable figures.

She found a mean of 2.3 daily episodes and 1.8 hours a day as a

mean amount of shared time (37). The present study's 3.5 mean

episode and three hour mean amount figures reflect increases. However, nearly one-fifth of the families in the present study reported no time shared, a figure for which comparison data is not readily available.

In comparisons for the family members participating in shared activities, it appeared that involvement of parents without the children is more common at present than in the previous decade. While Davey found only 12 percent of episodes shared by parents alone (4), the present study indicated 40 percent in this category. The fact that time records for young children were not included in the present study influenced this finding. Nevertheless, the magnitude of the difference leads to speculation regarding time spent by parents away from their children. It suggests that the separation of activities for parents and for children may have become more pronounced over time.

The types of activities shared over time have consistently concentrated in nonwork areas, with mealtime the most common period that family members spend together. However, the incidence of sharing time in household work appeared to rise over the past thirty years. While Snow reported 11 percent of shared time in household work (37) and Davey reported about ten percent in that category (4), the present study found 18 percent of episodes shared in household work activities. This may be an indication that the household division

of labor is beginning to reflect the changing roles of family members.

A ten percent increase in shared time spent away from the home over the past decade was noted. With the current uncertainty over future availability and costs of fuel, it is questionable if this trend requiring travel can continue. If not, it seems that families may either learn to substitute activities which can be shared at home or experience reduced levels of shared time.

The variables found to be significantly related to shared family time also allowed identification of tentative relationships. Contrary to past research, families living in a rural environment tended to share less time. It was suggested that demands on weekend time which were absent in an urban setting could be operating in rural families. Given the high degree of shared participation in social or recreational activities, a difference in the community resources available to rural families might also affect amounts of shared time.

The time of week was the most significant factor related to shared time. It appeared that the larger blocks of weekend time facilitated the scheduling of shared activities. In consideration of this finding, the scheduling of hours at work may have been one factor in the degree to which employment acted as a constraint to shared family time.

The particular combination of variables tested in the regression model influenced the results. Different sets of variables, and

different measures of similar variables should be investigated to substantiate these initial findings. Other family and environmental characteristics not studied by this research should also be incorporated in attempts to explain greater proportions of the variation in amounts of shared time.

Recommendations

The conclusions reached by this study suggest directions for future policies, educational programs and research efforts.

The present research supported Maklan's finding that blocks of discretionary time on nonworking days encouraged shared family participation (19). Business policy creating nonconventional work schedules and government policy proposals to legislate such scheduling are therefore an effective means for increasing the opportunities for shared family time. In designing nonconventional schedules, policy planners should particularly consider compressed week schedules which allow greater spans of time away from employment demands.

Policy planning for schools is a related concern. The present nine-month system allows large blocks of time for summer family vacations. Changes to a 12-month calendar may affect the amounts of time families have available to share. Any proposals for change should retain vacation periods flexible enough to insure possibilities

for family interaction.

Such policy changes would create new educational needs as well. Given alone, innovations in work scheduling will not necessarily improve the quality of family life. Maklan recognized the need for individuals to effectively manage the time created by new schedules.

> The four-day week at once contains the seeds for not only increased marital satisfaction but also increased marital discord. The larger blocks of discretionary time may serve to improve the male worker's chances for effectively fulfilling his family role functions and for enhancing the quality of his family relationships and, thereby, result in better marital adjustment. On the other hand, an inappropriate or nonproductive use of the extra discretionary time... could result in a breakdown of familial relationships and a reduction in the individual's satisfaction with his family life (19:101).

So, educational programs stressing effective planning and decision-making skills in managing time may be essential for families and individuals faced with new options in time use.

More specifically directed to shared time, educators may need to help families recognize opportunities for shared participation in activities. This would be particularly constructive in the household task areas where joint involvement appears to be considered less often. Adapting patterns of shared time in the face of changing resources should be another emphasis. The activities a family typically shares may need to be modified due to societal pressures such as inflation and the energy shortage.

Research efforts in the area of shared time could serve to

clarify present findings and extend knowledge into new areas.

It is suggested that the factors in the rural environment which might influence amounts of shared time be more thoroughly investigated. A more in depth comparison of weekend time use between rural/urban families may be appropriate.

Given the levels of shared family time found in social and recreational activities, it is suggested an analysis detailing types of shared leisure be undertaken. A measure of their impact on family well-being is also needed, particularly in the case of shared television viewing (33).

It is suggested that housing and design factors be included in future analyses of shared time. The effect of household space allocation on family sharing of task and recreational activities deserves further attention.

It is suggested that designs of shared time research be planned to produce data comparable to earlier studies. This would allow a more accurate assessment of trends over time.

It is suggested that the shared time patterns of various family types from a variety of geographic areas be investigated. Research might also be extended to include the study of time shared with persons outside the family unit such as friends, relatives and/or work associates.

Research which integrates qualitative measures with the study

of shared time patterns is particularly needed. Empirical evidence clarifying the relationship between shared time and family well-being would be valuable in designing future policy and educational programs aimed to enhance the quality of life.

BIBLIOGRAPHY

1. Bigner, Jerry J. "Attitudes Toward Fathering and Father-Child Activity." Home Economics Research Journal 6 (December 1977):98-106.

2. Bivens, Gordon E. "The Grants Economy and Study of the American Family: A Possible Framework for Trans-Disciplinary Approaches." Home Economics Research Journal 5 (December 1976):70-78.

3. Bossard, James H. W. and Boll, Eleanor S. Ritual in Family Living. Philadelphia: University of Pennsylvania Press, 1950.

4. Davey, Alice Jeanette. "Relationship of Family Interaction to Family Environment." Unpublished Ph.D. dissertation, Michigan State University, 1971.

5. Deacon, Ruth E. and Firebaugh, Francille M. Home Management: Context and Concepts. Boston: Houghton Mifflin Company, 1975.

6. Diesing, Paul. Reason in Society. Urbana: University of Illinois Press, 1962.

7. "Flexi-Time: The Not So Sacred Cow." The Washington COFO Memo 1, (Fall 1978):5-6.

8. Fox, Karl A. Social Indicators and Social Theory: Elements of an Operational System. New York: Wiley and Sons, 1974.

9. Gross, Irma; Crandall, Elizabeth; and Knoll, Marjorie. Management for Modern Families. New York: Appleton-Century-Croft, 1973.

10. Hayghe, Howard. "Families and the Rise of Working Wives - An Overview." Monthly Labor Review 99 (May 1976):12-16.

11. Hill, C. Russell and Stafford, Frank P. "Allocation of Time to Preschool Children and Educational Opportunity." Journal of Human Resources 9 (Summer 1974):323-341.

12. Hollingshead, August B. "Two Factor Index of Social Position." Unpublished paper, Yale University, 1965 (mimeographed).

13. Kantor, David and Lehr, William. Inside the Family: Toward a Theory of Family Process. New York: Harper and Row, 1975.

14. Kerlinger, Fred N. and Pedhazur, Elazar J. Multiple Regression in Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.

15. Ketchum, Frances Nettie. "A Study of Homemaker's Values as Reflected in Time Used for Family and Personal Activities." Unpublished Master's thesis, Michigan State University, 1961.

16. Leibowitz, Arleen. "Home Investments in Children." Journal of Political Economy 82 (March 1974):111-135.

17. _____. "Women's Work in the Home" from Sex, Discrimination and Division of Labor, ed. by Cynthia Lloyd. New York: Columbia University Press, 1975.

18. Maklan, David M. "How Blue-Collar Workers on Four-Day Workweeks Use Their Time." Monthly Labor Review 100 (August 1977):18-26.

19. _____. The Four-Day Workweek: Blue-Collar Adjustment to a Nonconventional Arrangement of Work and Leisure Time. New York: Praeger Publishers, 1978.

20. Metzen, Edward J. and Helmick, Sandra A. "Employment Efforts of Family Members - Who Works and How Much." Home Economics Research Journal 2 (June 1974):222-240.

21. Morgan, James N. et al. Productive Americans. Ann Arbor, MI: University of Michigan, 1966.

22. Nie, Norman H.; Bent, Dale H.; and Hull, C. Hadlai. Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company, 1970.

23. Olsen, Marvin E. "Distribution of Family Responsibilities and Social Stratification." Journal of Marriage and the Family 22 (February 1960):60-65.

24. Olson, Geraldine and Plonk, Martha. "An Interstate Urban/ Rural Comparison of Families' Time Use." Unpublished research proposal, Oregon State University, 1976.

25. Orthner, Dennis K. "Leisure Activity Patterns and Marital Satisfaction Over the Marital Career." Journal of Marriage and the Family 37 (February 1975):91-101.

26. _____. "Patterns of Leisure and Marital Interaction." Journal of Leisure Research 8 (1976):98-111.

27. Paolucci, Beatrice; Hall, Olive A.; and Axinn, Nancy. Family Decision Making: An Ecosystem Approach. New York: John Wiley and Sons, Inc., 1977.

28. Rainwater, Lee. "Work, Well-Being, and Family Life," from Work and the Quality of Life, ed. by James O'Toole. Cambridge: Massachusetts Institute of Technology Press, 1974.

29. Reiss, Albert J., Jr. "Rural-Urban and Status Differences in Interpersonal Contacts." American Journal of Sociology 65 (September 1959):182-195.

30. Robinson, John P. How Americans Use Time: A Social-Psychological Analysis of Everyday Behavior. New York: Praeger Publishers, 1977.

31. Robinson, John P. and Converse, Philip E. "Social Change Reflected in the Use of Time" from The Human Meaning of Social Change, ed. by John P. Robinson and Philip E. Converse. New York: Russell Sage Foundation, 1972.

32. Rollins, Boyd C. "The Latter Day Saint Husband-Father's Use of Time." Family Perspective 2 (Spring 1967): 17-21.

33. Rosenblatt, Paul C. and Cunningham, Michael R. "Television Watching and Family Tensions." Journal of Marriage and the Family 38: (February 1976):105-111.

34. Scanzoni, John H. Opportunity and the Family. New York: The Free Press, 1970.

35. Scheuch, Erwin K. "Family Cohesion in Leisure Time." The Sociological Review 8 (July 1960): 37-61.

36. Schneider, Annerose. "Patterns of Social Interaction" from The Use of Time, ed. by Alexander Szalai. The Hague: Mouton and Company, 1972.

37. Snow, Carolyn Baldwin. "A Study in the Development of a Technique for Determining the Amount of Time and Types of Activities Which Family Members Share." Unpublished Master's thesis, University of Georgia, 1950.

38. State of Oregon, Department of Human Resources. Social Accounting for Oregon 1977: Socio-Economic Indicators. Salem: State Community Services Program, 1978.

39. State of Oregon Employment Division, Department of Human Resources. Oregon Women at Work. Salem: Labor Market Publication, Fall 1977.

40. Szalai, Alexander. "Introduction: Concepts and Practices of Time-Budget Research." from The Use of Time, ed. by Alexander Szalai. The Hague: Mouton and Company, 1972.

41. Thorpe, Alice C. Patterns of Family Interaction in Farm and Town Homes. Michigan Agricultural Experiment Station Technical Bulletin 260. East Lansing: Michigan State University, 1957.

42. United States Department of Labor, Bureau of Labor Statistics. Handbook of Labor Statistics 1977, Bulletin 1966. Washington, D.C.: United States Government Printing Office, 1977.

43. United States Department of Labor and United States Department of Health, Education and Welfare. Employment and Training Report of the President. Washington, D.C.: United States Government Printing Office, 1978.

44. Varga, Karoly. "Marital Cohesion as Reflected in Time-Budgets" from The Use of Time, ed. by Alexander Szalai. The Hague: Mouton and Company, 1972.

45. Walker, Kathryn E. and Woods, Margaret E. Time Use: A Measure of Household Production of Family Goods and Services. Washington, D.C.: The American Home Economics Association, 1976.

46. West, Patrick and Merriam, L. C., Jr. "Outdoor Recreation and Family Cohesiveness: A Research Approach." Journal of Leisure Research 2 (1970):251-259.

47. White House Conference on Children. Washington, D.C.: Government Printing Office, 1971.

APPENDICES

APPENDIX A

Letter to Participants

School of
Home Economics

Oregon State University

Corvallis, Oregon 97331   (503) 754-8551

January 17, 1977

Dear Mr. and Mrs.

A time-use research project is being conducted by the Family Resource Management Department within the School of Home Economics at Oregon State University. The Oregon study is part of a nationwide research project coordinated by Cornell University in New York State. The focus of the research is on family members and how they use their time, both in work and nonwork activities. We are interested in understanding more about the time-use problems of families today as well as comparing families today with Oregon families' time use in the late 1920's. This is possible because of an early research study done by Maud Wilson, a pioneer researcher from Oregon State University who was recognized nationally for her work.

Your help is very much needed for the completion of this project. Your name has been drawn by chance to represent the size and age composition of families we need to study. The information we are requesting is not personal in nature. The information you give us will be used for no purpose other than the research and your family will not be identified in any way. In addition to providing valuable data to us, we hope that your participation will be beneficial to you as we work with you to determine where your valuable time goes.

A member of the research team will contact you within the week to arrange a convenient time to talk with you. Please ask any questions you may have about your participation in this research. There will be two interviews, but only the homemaker needs to be present. The first interview will take one to two hours and a second interview will take approximately half an hour. Time for keeping the record will require another half-hour. We plan to thank our participants by offering $10.00 for their personal use. We know that this does not measure the value of your contribution, but we want you to know that we recognize and appreciate the time and effort we are requesting of you.

I encourage your participation in the time-use study. Without the cooperation of Oregon residents, Oregon State University would be unable to conduct much of its research for the benefit of all.

Sincerely,

Geraldine Olson
Principal Investigator and Head
Department of Family Resource Management

1b

APPENDIX B

Portion of a Time Chart

		12 midnight	1 am	11 pm			
FOOD	Food Preparation				Food Preparation	**FOOD**
	Dishwashing				Dishwashing	
SHOPPING	Shopping				Shopping	**SHOPPING**
HOUSE	Housecleaning				Housecleaning	**HOUSE**
	Maintenance of Home, Yard, Car, and Pets				Maintenance of Home, Yard, Car, and Pets	
CLOTHING AND HOUSEHOLD LINENS	Care				Care	**CLOTHING AND HOUSEHOLD LINENS**
	Construction				Construction	
HOUSEHOLD MEMBERS	Physical Care				Physical Care	**HOUSEHOLD MEMBERS**
	Nonphysical Care				Nonphysical Care	
MANAGEMENT	Management				Management	**MANAGEMENT**
WORK (other than household)	School				School	**WORK (other than household)**
	Paid				Paid	
	Unpaid				Unpaid	
NONWORK	Organization Participation				Organization Participation	**NONWORK**
	Social and Recreational Activities				Social and Recreational Activities	
PERSONAL MAINTENANCE	Personal Care (of self)				Personal Care (of self)	**PERSONAL MAINTENANCE**
	Eating				Eating	
OTHER	Other				Other	**OTHER**

Definitions of Activity Categories
NEW YORK STATE COLLEGE OF HUMAN ECOLOGY
A Statutory College of the State University
Cornell University, Ithaca, New York

Department of Consumer Economics and Public Policy

Use-of-time Research Project
Definition of Activities of Household Members

FOOD

1. Food Preparation

All tasks relating to the preparation of food for meals,
snacks, and future use.

Include time spent setting the table and serving
the food.

2. Dishwashing

In addition to washing and drying dishes, loading and unload-
ing dishwasher or dish drainer.
Include after-meal cleanup of table, leftovers, kitchen
equipment and refuse.

SHOPPING

3. Shopping

All activities related to shopping for food, supplies,
equipment, furnishings, clothing, durables, and services,
whether or not a purchase was made (by telephone, by mail,
at home, or at the store). Also include:

Comparison shopping
Putting purchases away
Getting or sending of mail and packages
Hiring of services (cleaning, repair, maintenance, other)

HOUSE

4. Housecleaning

Any regular or periodic cleaning of house and appliances,
including such tasks as:

Mopping, vacuuming, sweeping, dusting, waxing
Washing windows or walls
Cleaning the oven; defrosting and cleaning the
refrigerator or freezer
Making beds and putting rooms in order

5. <u>Maintenance of Home, Yard, Car and Pets</u>

Any repair and upkeep of home, appliances, and furnishings
such as:

> Painting, papering, redecorating, carpentry
> Repairing equipment, plumbing, furniture
> Putting up storm windows or screens
> Taking out garbage and trash
> Care of houseplants, flower arranging

Daily and periodic care of outside areas such as:

> Yard, garden
> Sidewalks, driveways, patios, outside porches
> Garage, tool shed, other outside areas
> Swimming pool

Maintenance and care of family motor vehicles (car, truck,
van, motorcycle, snowmobile, boat)

> Washing, waxing
> Changing oil, rotating tires and other maintenance
>   and repair work
> Taking motor vehicle to service station, garage, or
>   car wash

Feeding and care of house pets, Also include trips to kennel
or veterinarian.

CLOTHING AND HOUSEHOLD LINENS

6. <u>Care</u>

Washing by machine at home or away from home, including:

> Collecting and preparing soiled items for washing
> Loading and unloading washer or dryer
> Hanging up items and removing from the line
> Folding

Hand washing
Ironing and pressing. Also include:

> Getting out equipment, sprinkling

Putting away cleaned items and equipment
Polishing shoes
Preparing items for commercial laundry or dry cleaning
Seasonal storage of clothing and textiles

7. Construction

Making alterations or mending
Making clothing and household accessories (draperies,
   slipcovers, napkins, etc.) include such activities as:

> Sewing
> Embroidering
> Knitting, crocheting, macrame
>
> > If these activities are to make product for self,
> >   immediate family members or to give as gift,
> >   include under (7).
> > If activity is primarily to produce product for
> >   sale, include time under paid work (12).
> > If activity is primarily as recreational rather than
> >   goal motivated, include time under "recreation"
> >   (15).

HOUSEHOLD MEMBERS

8. Physical Care

All activities related to physical care of household members
other than self such as:

> Bathing, feeding, dressing and other personal care
> First aid or bedside care
> Taking household members to doctor, dentist, barber

9. Nonphysical Care

All activities related to the social and educational develop-
ment of household members such as:

> Playing with children
> Teaching, talking, helping children with homework
> Reading aloud
> Chauffeuring and/or accompanying children to social and
>   educational activities
> Attending functions involving your child

MANAGEMENT

10. Management

Making decisions and planning such as:

> Thinking about, discussing, and investigating alternatives
> Looking for ideas and seeking information
> Assessing resources available (space, time, money, etc.)
> Planning--family activities, vacations, menus, shopping
>   lists, purchases and investments

10. <u>Management (Continued)</u>

    Supervising and coordinating activities
    Checking plans as they are carried out
    Thinking back to see how plans worked
    Financial activities such as:

        Making bank deposits and checking bank statements
        Paying bills and recording receipts and expenses
        Figuring income taxes

WORK (OTHER THAN HOUSEHOLD)

11. <u>School</u>

    School
    Classes related to present or future employment

        Include time spent in preparation for each of the above. For example, work or reading done at home or at the library relating to job or classes.

12. <u>Paid</u>

    Paid employment and work-related activities, such as work brought home, professional, business and union meetings, conventions, etc.
    Paid work for family farm or business, babysitting, paper route.

13. <u>Unpaid</u>

    Work or service done either as a volunteer or as an unpaid worker for relatives, friends, family business or farm, social, civic, or community organizations.

NONWORK

14. <u>Organization Participation</u>

    Attending and participating in:

        Religious activities and services
        Civic and political organizations
        Other clubs and organizations

15. <u>Social and Recreational Activities</u>

    Reading (other than required for school or work)
    Watching TV
    Listening to radio, stereo, etc.
    "Going out" to movies, car shows, museums, sporting events, concerts, etc.
    Participating in any sport, hobby or craft
    Taking a class or lesson for personal interest

15. Social and Recreational Activities (Continued)

Walking, cycling, boating, "taking a ride", training animals
Talking with friends or relatives, either in person or by
  telephone
Entertaining at home or being entertained away from home
Writing letters, or cards to friends, relatives
Playing games, musical instruments, etc. (If adult is
  playing with child include such activities under
  nonphysical care.)

PERSONAL MAINTENANCE

16. Personal Care (of Self)

Sleeping
Bathing, getting dressed, other grooming and personal care
Making appointments and going to doctor, dentist, beautician
  and other personal services
Relaxing, loafing, resting
Meditation

17. Eating

Eating any meal or snack, alone, with family or friends at
  home or away from home.

OTHER

18. Other

Any activity not classified in categories 1 to 17
Any time block for which you cannot recall, do not know,
  or do not wish to report

APPENDIX D

Instructions for Recording Time Use

AN INTERSTATE URBAN/RURAL COMPARISON OF FAMILIES' TIME USE

Instructions for Homemaker for Keeping Time Record

We need a record of how each member of your family, 6 years of age and older, used his/her time for two days. To show you how to keep the record, we will record yesterday's use of time while I am here. We would like you then to record each family member's use of time for the second day.

On the left and on the right side of the time record, household work and other activities are listed; across the top of the record, the 24 hours of the day are listed. Each hour is divided into six ten-minute periods to simplify recalling and recording time. However, time may be recorded in units of 5 minutes.

Recording Time of Family Members

A combination of colors and letters or numbers is used to record each household member's time. (See key on page 4.) All females are represented by the color red and all males are represented by the color blue. The homemaker, symbol "H", is the adult with the major responsibility for operating the household. The homemaker's time use is represented by a red H if female or a blue H if male. The spouse (S) of the homemaker is also either blue or red. Children are shown on the time chart by their age written in either red for girls or blue for boys.

Activities will be coded by the definitions listed on the salmon colored sheet entitled "Definitions of Activities of Household Members." If you are unable to determine the category for recording time for an activity, then code it under "Other" and label the activity and ask the interviewer when she returns for correct category.

Primary Time

Primary time is time when you are actively doing something that requires your main or "primary" attention: that is, time involved in getting ready for the job, working at the job, and cleaning up after the job, but it does not include the time required for a machine to function or food to cook without full attention.
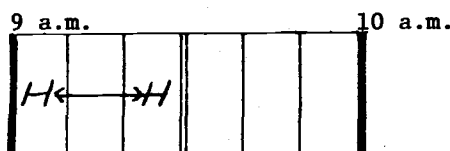
For example, if the female homemaker prepared breakfast from 8:00 to 8:10 a.m., write a red H in the first 10-minute block after 8 a.m.
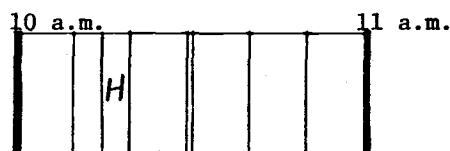
Example A.
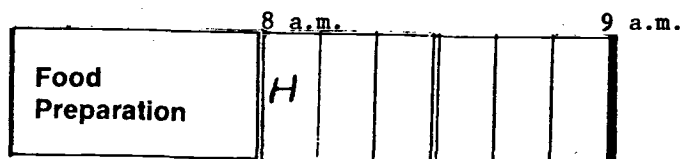
For longer, continuous activities, an arrow and line may be drawn from the time of starting the activity to the time of completing it, placing the person's symbol at each end (H←——→H). For example, half-hour activity by homemaker.

Example B.

For intervals of approximately 5 minutes, draw a line to divide the 10-minute time block in half and write the person's symbol in the block. For example, five minute activity (from 10:15 a.m. to 10:20 a.m.) by homemaker.

Example C.

If the activity took over 1/2 hour or if what was done is not self-evident from the heading, then write in the specific activity above the line. For example, if the spouse cleaned the garage, according to definitions this is recorded as "Maintenance of Home". If it took from 10:10 a.m. to 11:40 a.m., place an S in the second block after 10 a.m. with an arrowed line to block at 11:40 a.m. and write "cleaned garage" over the line.

Example D.
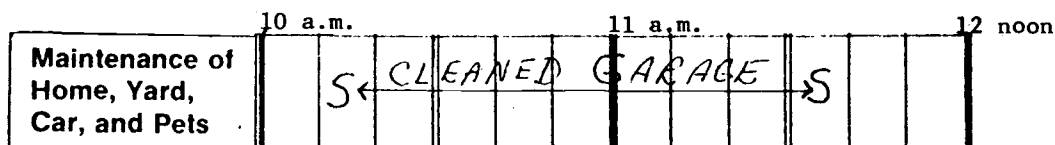
Time recorded is active time use: that is time involved in getting ready for the job, working at the job, and cleaning up after the job; but it does not include the time required for a machine to function or food to cook without your full attention.

Secondary Time

A person may be engaged in more than one activity at the same time (one activity involving primary attention and the other activity requiring less attention). Secondary time is recorded in the same manner as the primary time (pp. 1-2) with the addition of a circle around the individual's symbol to indicate the activity as secondary. For example, if a person was ironing and thinking about what to prepare for dinner, ironing would be the primary activity (Care of Clothing and Household Linens) and thinking about the dinner menu would be the secondary activity (Management).
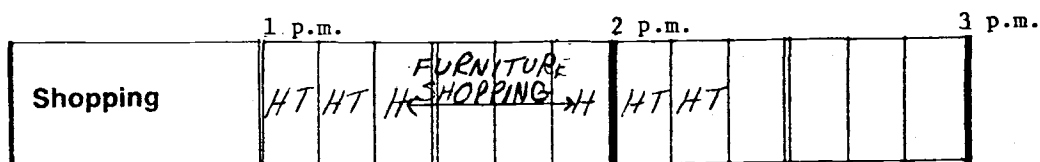
Example E.
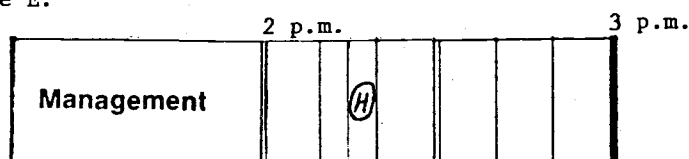
Travel Time

Time spent in traveling to and from an activity should also be recorded. Include transportation time with the activity for which the trip is made with a T after the individual's symbol to indicate the approximate time used to travel. For example, the homemaker traveled for 20 minutes (from 1:00 p.m. to 1:20 p.m.) to the store, shopped for 40 minutes (from 1:20 p.m. to 2:00 p.m.), and then traveled home (from 2:00 p.m. to 2:20 p.m.).

Example F.

If more than one thing was done on a trip, include the time enroute to the activity of the first stop and assign the time for return trip to the last activity. In the above example, if the worker did not return home directly from shopping, but went next door to the bank to make a deposit before returning home the additional time and travel time would be recorded under management as noted below.
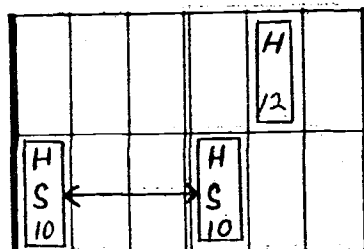
Example G.
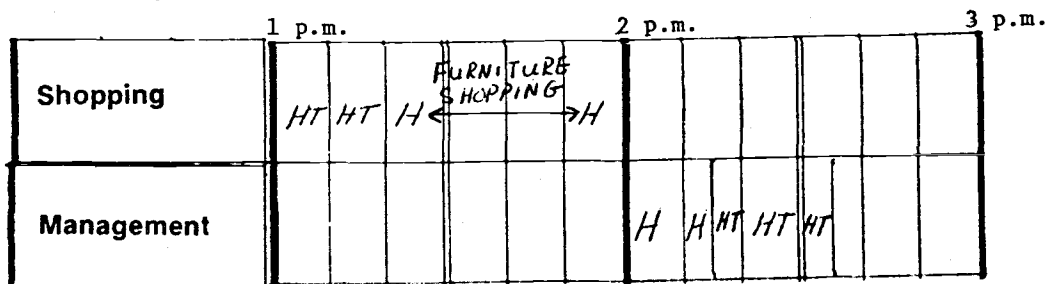
Two or More Household Members Doing the Same Activity Together

To show that the same activity was done by more than one person at the same time and in the same place: place a penciled box around the symbols for any combination of individuals.

Example H.

Homemaker and 12 year old did same activity.

Homemaker, spouse and 1 of the 2 children did the same activity.

Nonhousehold or Outside Help

Household work time of workers not living in your household should be recorded in the appropriate category. This worker is identified as either a paid worker (P) or an unpaid worker (U).

For example, if you hire someone to clean the house, cut the grass, or "babysit" children, the worker is a paid worker (P). If a relative (who does not live in the household) washed the dinner dishes, he/she is an unpaid worker (U).

Key to Symbols

Sex of the individual will determine the color of the symbol used:

Red if female
Blue if male

Homemaker   H

Spouse   S

Children   Age

Paid worker   P

Unpaid worker   U

Travel time   T

Secondary time   ◯   circle around individual's symbol

Individuals doing same activity box ⬜ (in either color)

APPENDIX E

Categorization in Coding of Education and Income Variables

Education   - Record the highest grade in school completed by the (homemaker, spouse):

    01 grade school (1-8)
    02 partial high school (9-11)
    03 high school diploma
    04 vocational or technical training
    05 partial college, no degree
    06 Associate's degree
    07 Bachelor's degree (BA, BS)
    08 Master's degree (MA, MS, MAT, ME, MBA, MPA, etc.)
    09 Doctorate (Ph.d., doctor of education)
    10 Professional degree (MD, DDS, DVM, law, etc.)

Income - Total before taxes last year

    01 under $ 1,000
    02        $ 1,000-$ 1,999
    03        $ 2,000-$ 2,999
    04        $ 3,000-$ 3,999
    05        $ 4,000-$ 4,999
    06        $ 5,000-$ 5,999
    07        $ 6,000-$ 7,499
    08        $ 7,500-$ 9,999
    09        $10,000-$11,999
    10        $12,000-$14,999
    11        $15,000-$19,999
    12        $20,000-$24,999
    13        $25,000-$49,999
    14        $50,000 and over
    99 Don't know, not given