DOCUMENT RESUME

ED 173 025 RC 011 511

TITLE Inequity of Human Services: The Rural Tennessee Dilemma.

INSTITUTION Tennessee State Univ., Nashville.

SPONS AGENCY Department of Agriculture, Washington, D.C.

PUB DATE Jun 79

NOTE 268p.; Publication contributes to Cooperative Agricultural Research Program 516-15-29, Publication No. 49

EDRS PRICE MF01/PC11 Plus Postage.

DESCRIPTORS Agency Role; Community Services; Cultural Factors; Decentralization; *Delivery Systems; Demography; Health Needs; *Health Services; *Human Services; Medical Services; *Needs Assessment; *Rural Areas; Rural Development; Social Agencies; *Social Services; Transportation

IDENTIFIERS *Tennessee

ABSTRACT

Davidson, Williamson, Rutherford, and Cheatham counties of Tennessee were the setting for a study that sought to determine the types of health and social services provided to residents of rural areas and to assess the present status of the service delivery system. Interviews with both agency representatives and randomly selected household repondents examined the health and social services delivery systems in such areas as agricultural extension, alcohol and drug abuse, day care, counseling, family planning, employment services, and medical services. The study addressed specific problem areas, their possible causes, services gaps, types of services needed, and inadequately served geographic areas. The greatest needs identified were for medical services, public transportation, improved housing, day care, improved roads, and social and employment services. The single most important barrier to overcome in increasing utilization of existent services was one of cultural obstacles: the feeling that it is somehow wrong to accept free or reduced rates for services even when the need is great. Better service delivery could also be provided by (1) the development of services based in rural areas or branch offices, (2) the decentralization of service delivery, and (3) the development of special transportation programs. Existing community buildings also stand under utilized and could be used to house service facilities. (DS)

Inequity of Human Services: The Rural Tennessee Dilemma

JOYLEAN P. SAMPSON

Human Service Research Unit
Department of Social Welfare

Cooperative Agricultural Research Program
516-15-29
Publication Number 49

TENNESSEE STATE UNIVERSITY
Nashville, Tennessee

JUNE, 1979

PREFACE

This publication reports the results of a research study conducted on human service needs and delivery of services to isolated rural areas of Tennessee. Many opportunities were encountered to provide solutions to the maladies that were researched. It is recognized that proffered solutions to weighty problems of social and health delivery of services will be only temporarily gratifying for a few. While it is important to seek solutions, it is equally important to have a clear understanding of the problems. This report provides a firm and sure direction of the present social and health services ills of people residing in isolated rural communities in Tennessee. Moreover, most discussion regarding improving the delivery of social and health services generally comes from program administrators in agencies, practitioners, educators, and government officials who report the need to improve delivery of services to rural areas. What is worthy of note in this document is that the authors have not neglected the perceptions, experiences, and reactions of the people who ought to be served.

This publication was written over a period of two years (1976-1978) for the benefit of agency administrators government officials, educators, students, and consumers. It is hoped that the information will aid the 108 agency administrators in the development of health and social models for rural areas of Tennessee.

This research is one of the research activities conducted by the Human Service Research Unit of the Cooperative Agricultural Research Program at Tennessee State University and supported and funded by the United States Department of Agriculture.

ACKNOWLEDGMENTS

The author of this publication bears sole responsibility for the content of this monograph; however, the production entity of this research effort was conducted by many individuals, organizations, and units of Tennessee State University. In the preparation and writing of the research proposal, special gratitude is extended to Robert Meadows for his invaluable time and effort in seeking funding and performing administrative duties during the early stages of the project.

Deep appreciation is extended to the following people and organizations who made this monograph possible:

Contributing Authors:

Robert Meadows, Gerri Simpkins, George Peabody College; Nel Benton, Council of Community Services; Harold Kendrick, Council of Community Services; Dave Alexander, Council of Community Services.

Research Staff:

Faye Walker, Gloria Jenkins, Robert Jones, and Deitra Wade.

Human Service Needs Advisory Council:

Dr. James Reeves, Chairman, Mrs. Lettie Galloway, Mrs. Lucille Dean, Mr. Cornelius Woods, Dr. Donald Watson, Dr. Keith Fiscus, Mr. Robert Pasley, Dr. Joan Corry, Mr. Felix Knight, Dr. Leslie Falk, Mrs. Alma Pillow and Dr. Paul Taylor.

Department of Social Welfare, Tennessee State University.

Consultant Services: Gerri Simpkins and Rex Butler.

Contractual Services: The Council of Community Services.

Enumerators:

Hattie Hagans, Karen E. Wooding, Virginia Whidby, Patricia Redman, Glenda Clark, Celia Brown, Don A. Woods, Kay Stelling, James T. Beard, Delores Kelly, and Jennifer Todd.

Artist: Ted Jones.

Manuscript Reviewer: Timothy Quain.

Secretarial Services: Deitra Wade, Mary E. Strickland, and Shirley Fowler.

Sincere appreciation goes to Frances Hempstead, a colleague and friend, who provided assistance, shared information and material, and offered encouragement and moral support throughout this project. Above all is the indebtedness to the 108 social and health service agencies and the 321 community respondents who participated in the study.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1

Introduction to Study

Rural America is thoroughly convinced that health and social services are inaccessible and inadequate to meet its needs. In spite of the gains reported the past decade, rural consumers sense that few models for delivery of social and health services to rural areas have been successful. Bible reports that solving the two most basic health care problems, medical manpower and organization of services, would enable more effective service delivery. (American Medical Association 1976).

Gilbert's critical analysis of the delivery of social services emphasized program fragmentation, inaccessibility, and discontinuity. (Gilbert, 1972). This writer reports no immediate solutions to the maladies cited; however, it is the purpose of this research to present and describe the results of an intensive descriptive study of the needs and the provision of human services (health and social services) to rural consumers of isolated communities of Tennessee.

The specific study objectives call for: (1) a description of the social and health needs and characteristics of people

living in selected isolated rural areas; (2) a description of the resources and services available and utilized by rural consumers; (3) an assessment of the adequacy and effectiveness of the resources and services in meeting needs; (4) an identification of specific gaps and shortcomings in resources and services; and (5) a recommendation for developing a model for human service delivery. Overall, the purpose was to provide data and practical information which could be used by planners, social and health administrators and workers, government officials, educators, and others to plan and design rural social and health models for maximum service delivery effectiveness.

One of the central themes of this study is that many aspects of rural life are changing. Immediately, one has concerns relative to such questions as: What is it that has changed? What were the conditions before and after the change? What caused the change?

The theoretical significance of this study is linked to the modern theory of social change with emphasis on need achievement. This theory is described in terms of modern and traditional social systems. "The concepts modern and traditional came into use in rural sociology when it was found that those farmers who adopted agricultural innovations usually proved to have changed in many other ways too. They made more use of media of communication, participated more often in community affairs, had more democratic family

relationships, and had houses with more new appliances and indoor facilities." (Copp, 1964)

The traditional social system is characterized by "(1) less developed or complex technology, (2) low level of literacy and education, (3) localized social relationships limited mainly to local community, (4) primary social relationships, (5) lack of economic rationality, and (6) lack of empathy or open mindedness toward new roles." In contrast, the modern social system is typified by (1) developed technology, (2) high level of education, (3) cosmopolitan social relationships with an accompanying breakdown of kinship relations and localities, (4) secondary social relationships, (5) an emphasis upon economic rationality, and (6) empathy." (Copp. 1964). In summary, the synonyms used to describe the modern type are innovative, progressive, and developed.

Review of Literature

The literary contributions pertaining to rural health and social services offer a concise view of the conditions, occurrences, events, and results during the 1950-1976 time frame. The review is a comprehensive but not an altogether exhaustive one; however, the studies will reflect informative data relative to background information on legislation and programs, consumer satisfaction and attitudinal studies, socio-demographic and economic studies, and studies on health

care delivery systems versus medical care demand. It should be kept in mind that a few of the studies reviewed here were, for the most part, conducted on urban populations and that their relevant findings have been included in the discussion.

Background Information on Legislation and Programs. In previous years, attention was focused on coping with poverty in America. During President Johnson's administration the country developed several programs to cope with poverty. This was the beginning of the "War on Poverty" and the establishment of the Office of Economic Opportunity under the Economic Opportunity Act of 1964. However, even though in 1967, 40 percent of the poor lived in rural areas, only 30 percent of the funds of OEO's Community Action Program were allocated to rural areas. (Levitan, 1969). Furthermore, in 1970, only 25 percent of the OEO funds (which were not specifically designated for rural or urban use) were allocated to rural areas. (Baumheier, 1973). Donovan reports that the portion of the act aimed at alleviating rural poverty met the greatest congressional resistance; consequently, the act never did have a strong program addressed to the needs of the rural poor. (Donovan, 1967). Baumheier explained that:

> The rural-urban comparison of quality of life can be made an almost Ad infinitum. The magnitude of rural human problems is especially alarming when viewing in comparison with the level and range of prevention and ameliorative services available to urban residents. While rural people have proportionately greater service needs than urban, they usually receive a smaller share of programs outlays or special compensatory efforts. The programs they do participate in are usually designed, at least implicity for urban areas and are often not effectively modified to fit rural conditions. A frequent result is a further widening of rural-urban disparties. (Baumheier, Sage, 1973).

The report also indicates that urban social services have community-based support and urban clients receive assistance through referral and purchase of services, such as day care, vocational rehabilitation, work training, and homemaker services. Additionally, there is a low level of private agency activity in rural areas, and most services are provided by county public welfare departments. Other problems include lower levels of staffing in rural areas, fewer rural service workers with college and graduate professional education, and rural antipoverty policies formed in response to obvious urban problems and within the context of urban resources and institutions (Baumheier, 1973). Another report states that rural families do not benefit as much from public assistance programs (transfer payment programs) as do urban families. (U.S. Government Printing, 1967).

The local government structure within which decisions about social welfare programs are made could become an

increasingly important factor in light of recent trends toward "revenue sharing." Nashville-Davidson County has a unique form of government and has received a great deal of national attention and publicity. In 1951, Davidson County and the city of Nashville, supported by city and county funds, established a commission to survey the needs of Metropolitan Nashville and Davidson County and to suggest ways of meeting these needs. The report of the commission focused its attention on the suburban areas outside the city limits of Nashville and recommended an immediate annexation program. Other recommendations were made, but this report appears to be the beginning of the reform efforts to implement consolidated government in Nashville-Davidson County. In February, 1957, both houses of the Tennessee Legislature passed legislation paving the way for consolidated government in a populated area of 2,000 or more. However, on June 17, 1958, the voters of Nashville and Davidson County rejected the proposed form of consolidated government. The residents outside the city voted substantially against the proposed charter. But in 1962, the charter was adopted and Nashville-Davidson County rejected the proposed form of consolidated government. The residents outside the city voted substantially against the proposed charter. But in 1962, the charter was adopted and Nashville-Davidson County is now a consolidated form of government.

Over the past two decades, much attention has been focused on urban problems and the appropriate government

arrangements to cope with these problems. The Committee for Economic Develop (CED) made several recommendations concerning fragmented governmental jurisdictions and uncoordinated local, state, and federal program activities. In 1966, the CED recommended that the number of local governments (approximately 80,000) should be reduced by 80 percent. However, the 1970 CED report did recognize some advantages of decentralization and proposed a "two level government system" to gain the advantages of both centralization and decentralization. Furthermore, the CED suggested a "sharing of power with local communities." It was further recommended that the places where metropolitan areas spread over several counties, a new consolidation or federation of counties should be considered. (Committee for Economic Development, 1970). Soon after the formation of Nashville-Davidson County consolidated government, there was a significant shift in attitudes towards large urban administrative units. Lipsky points out that one of the problems in urban areas is the decentralization and allocation of authority for public programs. In general, the advocates of decentralization want government to respond to life styles that vary from neighborhood to neighborhood, and want public officials and services located close enough to neighborhoods to respond to problems. (Lipsky, 1968). These concepts received a great deal of attention as Nashville implemented the OEO and Model Cities Programs. These two programs generated a great deal of social and political conflict.

The conflict over the allocation of authority and decentralization of programs was focused on the problems of poverty and other socio-economic conditions associated with the urban area. (Buell, 1972). Although since that time there has been some decentralization, the services are still primarily located in the inner-city.

The literature dealing with isolated rural areas within the jurisdiction of Metropolitan government is not very abundant; however, there is some literature dealing with the decentralization of services. A comparative study of two communities in Metro-Nashville was conducted. One of these communities, Berry Hill, voted not to consolidate its government with Metro-Nashville. The other community, Woodbine, is located within the jurisdiction of Metro-Nashville. The study focused on attitudes and perceptions of the residents toward the provision of public service in their local communities. Residents of Berry Hill, the independent community, consistently expressed higher degrees of satisfaction with the level of public service and the concern of local officials for the welfare of the community than did the residents of Woodbine, served by a large governmental unit. The author of the study states that this may be due to the "sense of community" which exists in Berry Hill and that more participation in local governmental units is not supported by the data. Furthermore, these findings are said to be consistent with other studies. (Rodgers and Lipsey, 1974). One study using a comparative

research design focused on police functions on a small scale in specific local communities. The findings suggest that a small police force under local community control is more effective than a large city-wide police department. Furthermore, a series of related studies in three other metropolitan areas has been initiated, and findings thus far seem consistent with the above conclusion. (Ostrom and Whitaker, 1973).

There is a need for more knowledge from various administrative levels about all programs operating in rural areas. For example, the USDA is authorized to administer the food stamp program on the federal level through its Food and Nutrition Service Division. The Tennessee Department of Human Services, however, is charged with the administration and supervision of the program on the local level. In 1971, Congress mandated that each state establish an outreach program to inform low-income households of food stamps. USDA regulations state that under no circumstances could the state agency avoid this responsibility. The participation rate in the food stamp program in Tennessee is only 28 percent of those eligible (312,600 participating out of an estimated number of 1,100,000 eligible persons). A class action law suit is now pending in the United States District Court for the Middle Tennessee District, Nashville Division. The plaintiffs complained that the Human Services Public Welfare Department has not followed the mandate of Congress and the USDA regulations in establishing adequate

outreach centers. (Stout, 1973) The outreach centers are all relatively close to the inner city, with the exception of one which, it is reported, provides services only part of one day each week. Whatever the particular issues of the case may be, this is an apparent example of neglect for rural areas in social welfare programs administered by large centralized governments.

Consumer Satisfaction and Attitudes Regarding Services.

Although the past years have seen many attempts to provide methods and programs to deal with poverty, there is little systematic knowledge available regarding the effectiveness of these programs. For the most part evaluative studies have dealt with cost-benefit analysis, secondary analysis of data, and other similar techniques. Generally, public concerns and the views of recipients of services are neglected when assessing the effectiveness and the quality of the delivery of services by public agencies. The brief review of literature to follow focuses on (1) consumer satisfaction and attitudes regarding services and (2) socio-demographic and economic studies.

Davies was perhaps the first to develop a multi-item index to rate the degree of satisfaction felt by residents of a village trade center toward their community. He concludes that community satisfaction is unrelated to sex and age, moderately related to intelligence, but strongly related to the size of the village. (Davies, 1945). In a 1975 study

Rojek, Clements and Summers focused on community satisfaction with services in predominately rural communities. Their emphasis was on medical commercial, public, and educational services. They find significant differences of means in the medical and commercial dimension of satisfaction by residential strata. public services and educational service prove to be non-significant. (Rojek, Clements, Summers, 1975).

Socio-Demographic and Economic Studies. Education has been found to be a significant variable in terms of citizen's perspectives toward both service delivery and the manner in which government responds to citizen contact. Researchers report that the higher the education level, the greater the likelihood of contact with government agencies and, moreover, the greater the education level, the greater the proclivity for receiving a positive response. When race was controlled, similar patterns resulted. (Schuman, 1972; Walton, 1970).

Many studies have demonstrated variations of the use of socio-demographic data (age, sex, education, race). McKinley states that such studies are usually based on secondary analysis of routinely collected data. (McKinley, 1972). Bice and associates present data from the U.S. National Health Survey which indicates that when health status is taken into account, differeneces in utilization of physician services among different income groups persist only among children and adults who experience the most severe levels of disability; race and educational level continue to be strongly associated

with utilization of services. (Bice, Eichlorn, and Fox, 1972).

Review of socio-economic studies, on the other hand, reveal that factual information regarding income, education, and employment indicate that the standard of living in rural America is far below the national average. These findings show that, inspite of improvement in non-metro income in the 1960's, the generally lower level of income in non-metro areas has produced a disproportionate extent of poverty among the percentage of farm families below the poverty level. (Economic Development, Research Service, 1971). Hogg, in a discussion of a study on socio-economic development in rural areas, states that development of economic projects brings only short-term growth and development. The economic level of the rural community later declines and reverts to the level prior to the appearances of the economic projects. (Hogg, 1971).

Medical/Health Care Delivery Systems/Medical Care Demands.

In recent years there has been a significant change in the focus and practice of health care. One of the changes is characterized by a movement away from institutional care (e.g. hospitals) and toward regional or community health, indicating a focus on comprehensive health planning. Baum, Bergwell, and Reeves imply that there is a need to organize the present disjointed complex of health services and families into a rational entity, indicating a systems approach. These authors contend that much of the health care service is fragmented

and duplicated. They further indicate that what is needed is a method that is capable of coping with such issues as the integration of multi-levels and sources of care, the trade-off between economies of scale from centralization and decentralization to accommodate the consumer, and a consideration of the lack of decisions on all parts of the health system (the institution, the institution's clientele, and the community). Again, the authors contend that the systems approach can satisfy these requirements. (Baum, Bergwell)

Reid, Eherle and associates developed an experimental rural medical care delivery system to accommodate over 900 families residing in Torrance County, New Mexico. Some of their findings reveal that an average of over 200 patients per month were managed; the average visit cost was $23.00, with average time per patient; and that approximately 1 hour and 20 minutes per person using the clinic were comprised of women of childbearing age and the elderly. This program represented a cooperative effort between a rural community and a university. The implementation of this program provided the opportunity to operationalize the family nurse practitioner concept in a system of medical care delivery. The feasibility of providing high quality medical care in a rural community by extending medical resources concentrated in an urban area was demonstrated. (Reid and Eherle, 1975).

Penn proposes that the health-related needs of a healthy population might assume the shape of a cone if distributed according to the complexity of problems found in individuals.

He further proposes to match this cone of needs, based on the assumption that the ultimate goal of all helping services is to promote the achievement of human potential through the conservation of strength and the amelioration of needs. He compares the resulting idealized model with a family based rural health care delivery project, which incorporates many of the concepts used in constructing the model. While major changes in public resources beyond the capacity of this project appear needed to effect overall pattern of need it appears that some change can be predicted as a result of the health care delivered. (Penn, 1973).

Medical Care Demand. Three studies constitute a cross sectional analysis of the demand for medical care; they are: (1) Grossman's "The Demand for Health," (2) Anderson and Benham's, "Factors Affecting the Relationship Between Family Income and Medical Care Consumption," and (3) Acton's "The Demand for Health Care Among the Urban Poor." All three authors specify the consumption of medical services as a function of income. Grossman, who considers the demand for medical care as derived from the demand for good health, concludes that a 10 percent increase in income level raises expenditures for medical services by about 7 percent. (Grossman, 1972). Anderson and Benham conclude that a 10 percent increase in income raises physician use (in quantity units) only by one percent, and this finding is not statiscally significant. (Anderson, Benham, 1970).

Acton shows that among the urban poor, the important constraints on the use of medical services are the monetary cost of care and the time cost involved in attending to medical matters. (Acton, 1973). Anderson and Benham use the same data source as Grossman but with a different emphasis. They concentrate their efforts on analyzing the demand for good health. The authors use two measures to represent medical services: (1) dollar values of outlays for physician and dental care and (2) the physician visits and in-hospital surgical procedures weighted by fee charges in California. (Anderson and Benham, 1970).

Feldstein's study examines the utilization of hospital care for a single diagnostic category normal delivery, applies multiple regression analysis on a set of binary variables, and examines the effect of medical and social factors, hospital availability and doctor-hospital combinations. The medical factors are represented by age, parity (number of previous children), and past obstetric history (normal, miscarriage, stillbirth). Social factors are represented by martial status and social class. Hospital availability is represented by hospital proximity, nature of locality (urban-rural), the type of doctor (general practitioner or specialist) on the hospital staff, and the type of hospital.

Acton's study and the studies by Rosett and Huang, (1973), Scitousky and Snyder (1972), Phelps and Newhouse (1972), and Peel Scharff (1973), all show the effect of

insurance or government programs on the consumption of medical services; lowering the financial barriers stimulates utilization of medical facilities in general and the consumption of such health-care services by the poor in particular.

Summary. In reviewing the studies as a composite, there are several implications. It is increasingly apparent that for the most part social services and health services to some degree tend to be fragmented and inaccessible. Discontinuity in care and accountability is questionable. In order to make these programs more accountable, other methods of solving these kinds of problems need to be brought into focus (i.e., coordination, citizen participation, development of new agencies without severe duplication of service), and an attempt to develop a comprehensive system of both social services and health services is needed. It is also apparent that there is a need to continue to conduct research regarding governmental private programs that deal with rural delivery of services. Continued assessment of resources and services is necessary in order to have effective delivery systems.

In summation, both the discussion on the theory of modernization and social change and the discussion of the related research support the framework of this investigation. There is much empirical evidence that rural life is undergoing tremendous change from a traditonal setting to a more

modern setting. This change is noted through customs and life styles and employment transition from farm to non-farm, to name a few. The theoretical position may be explored thru the questions:

1. Are the rural communities more developed?
2. Have life styles and customs changed?
3. Are needs readily identifiable, and if so, do they relate more to basic needs rather than to need achievement?
4. What kinds of services are being delivered to rural areas?
5. Are rural residents making use of services if available?

Obviously, from this study not all of the questions can be be answered in-depth, but inferences can be drawn from the findings and will be discussed in later chapters.

Conceptual Model

Since this study has a focus on human service needs, it is necessary to determine what constitutes a human need. Maslow defines need on a hierarchical scale and asserts that basic needs must be met before upper levels of need can be satisfied. (Maslow, 1970)

The hierarchy consists of:

1. Basic or physiological - hunger, thirst, rest, shelter
2. Safety - protection against danger, or threat of deprivation.

3. Social/Belongingness - group ties, family association with others, friendship, love.

4. Ego - self confidence, recognition, appreciation, respect, status.

5. Self actualization - realization of one's potential self development, creativity.

A good working defintion of needs, particularly for purposes of this research, relates to a social planning framework which is defined as "what must be provided formally or informally by a community in order to satisfy the actual or perceived economic, social, psychological and physiological requirements of an individual or group." (Alameda County, Human Services Council, 1977). This definition according to Alameda Human Services, is based on the assumption that "individuals and groups within a community are functioning at substantially different levels. Thus, varying degrees of community intervention or prevention methods are necessary to meet the requirements resulting from individual/group dysfunction. Alameda Human Services also contends that intervention is sometimes needed to maintain levels and degrees of functioning. If one accepts this definition of need, a definition can be established for human services. It was established very early that human services would be operationalized in terms of social services and health services. A very broad definition of social services emphasizes any service or activity designed to promote the

social welfare of the individual, group, or community. Human service may refer to the service being provided (i.e. employment, health, etc.) to a target population (handicapped children, women, low income persons, etc.) or to supportive services (information and referral, etc.)

Hence, the concern was to adequately fulfill the objectives of this study and at the same time to attempt to answer the following questions:

1. What is the relationship between socio-demographic characteristics and utilization of health and social services?
2. What is the relationship between socio-demographic characteristics and community and family needs?
3. What is the relationship between socio-demographic characteristics and satisfaction with health and social services?

The framework devised was a means of systematizing the many variables with which the study was concerned and of hypothesizing the relationships that could be expected to exist. It consisted of three classes of variables (Figure 1) which must be examined together for a full understanding of their relationships.

The independent variables are demographic factors which, when manipulated, impact or influence the other classes of variables. The intervening variables are those conditions or processes through which independent variables exert their influences upon utilization, satisfaction, and needs assessment.

Figure 1

Framework of Variables

Community Study

Independent Variable	Intervening Variable	Dependent Variable
I. Socio-Demographic Characteristics Age Sex Race Education	I. Citizen Participation	I. Utilization
	II. Lack of Knowledge	II. Community and Family Needs
	III. Cultural Obstacles	III. Satisfaction
II. Socio-Economic Characteristics Income Type of employment Occupation	IV. Distance and Isolation	
	V. Transportation	

Agency Study

Independent Variable	Intervening Variable	Dependent Variables
I. Funds Allocated	I. Cost to Consumer	I. Agency and/or Organizational Context
II. Location	II. Eligibility	Type of service Available resources Organizational size Duplication of service
III. Number of Staff	III. Staff/training	
IV. Determination of Demand	IV. Capacity	
V. Specific Programs for Rural Population	V. Transportation Provided	
	VI. Time Lapse to Receive Services	

They are social, environmental, and organizational processes and constraints that are focused on perception, knowledge isolation, and agency eligibility standards.

Dependent variables on the other hand are those factors considered as outputs or effects of the system -- needs assessment, organizational content, utilization, and satisfaction.

Predicted Relationships

The major hypothesized relationship between the variable components are summarized as follows:

It was expected to be found that few rural residents make use of human service programs when residing in isolated rural areas. It was further suggested that there were several conditions present when rural residents failed to make use of services when available;

It was expected to be found that transportation to the services is unavailable or non-existent;

It was expected to be found that services are inappropriate to the needs of rural residents;

It was expected to be found that services are insufficient in that they do not meet current demands;

It was expected to be found that cultural personal obstacles prevent the use of services when available.

There is at least one assumption implied in the major hypothesis: first, the major hypothesis is linked to the assumption that there is a relationship between government's role and the delivery of rural services. If urban areas are experiencing difficulty in providing services to meet the needs of their residents, then one may assume that rural areas are experiencing similar and possibly greater difficulties. It is expected that each of the above factors contributes to the rural resident's non-use of services when they are available, but to what extent is not known. Several of the conditions are service implications ranging from informing the public via education and information and referral service, to planning and programming alternatives for transportation. The sixth condition, while not having any service implications, adds pertinent information and depth to this study.

In conclusion, some of the questions that this study will attempt to answer are:

--What are the problems?

--What is the possible cause of the problems?

--What are the service gaps?

--What type of services are needed?

--What geographic areas are inadequately served?

Overview of the Research Design

The paradigm which is presented by Riley, has been adopted in this section and provides a workable scheme for outlining the research design. This section provides a discussion of the following components: (1) the nature and/or selection of the study areas, (2) the number of cases, (3) the socio-temporal context, (4) the primary basis for selecting cases, (5) the time factor, (6) the basic sources of data, (7) the method of gathering data, and (8) the method of handling variables. (Riley, 1963).

Selection of Study Areas. Several geographical areas were observed in the Mid-Cumberland Region of Central Tennessee. The screening process entailed site visits (guided by local residents or service providers) for a more in-depth assessment of potential study areas. Information was gathered from the U.S. Post Office, Metropolitan Police Department, Davidson County Agricultural Extension Service, Soil Conservation Service, Metropolitan Planning Commission, and other organizations in the counties. The Metropolitan Planning Commission also provided planning units and 1970 census block information, which was limited to population structures and housing characteristics. Socio-economic data was available in census tracts. Information about the selected study areas outside of Davidson County was gathered informally from people familiar with the community.

The research proposal specified that scientific random sampling be utilized to collect data from approximately 500 households in six different communities. This number was established as an upper limit for the number of interviews and was more than adequate to represent the areas in the study. Moreover, specific counties had not been identified (when the proposal was written) nor was there knowledge of the total population to establish mathematical procedures for sampling isolated areas. Of first concern then, was to select areas isolated from resources: i.e., health services, social services, and transportation. The criteria for selection called for a small population (up to 7,000) with areas of large undeveloped acreage of 1,000 or more, mixed racial characteristics, a combination of moderate and poor housing conditions, limited employment opportunities, and a continuation of severe economic and social deprivation over several years.

Other criteria included common culture and common patterns of social and economic relations. Careful analysis of census and historical documents were reviewed so that areas could be selected. The results of the utilization of these criteria yielded the following selection:

(1) Davidson County: (a) Four Corners Community, (b) Scottsboro/New Hope Communities, (c) Pasquo Community, (2) Williamson County: Fairview/Kingsfield Communities, (3) Rutherford County: Christiana Community and (4) Cheatham County: Bell Town/Pegram Communities.

Since this study was concerned with the delivery of services, it was necessary to focus on the rural social and health services as a unit of analysis in this study. The formulation of criteria for agency selection was based on the review of the following publications: Annual Title XX Services Plan 1975-1976, Report on Study of Priorities--1973, Council of Community Services, and United Way of America Services Identification Systems (UWASIS). These three documents provided a comprehensive and all inclusive listing of all agencies in the counties selected for study. In addition to the review of these documents, other criteria were utilized in selecting the social and health agencies.

1. Include services available to the general population and services targeted for certain groups.
2. Include services from different auspices-private, church-sponsor if staffed by social workers or counselors, and public at local, state, and federal levels.
3. Include both direct services and the indirect aspects of the social services.
4. Include services that function under the five national goals established in the Title XX Plan for Social Services Programs for Individuals and Families. They include:
   a. "Achieving or maintaining economic self support to prevent, reduce, or eliminate dependency.

b. Achieving or maintianing self-sufficiency, including reduction or prevention of dependency.

c. Preventing or remedying neglect, abuse, or exploitation of children and adults unable to protect their own interests or preserving, rehabilitating, and reuniting families.

d. Preventing or reducing inappropriate institutional care by providing for community-based care, home-based care, or other forms of less intensive care.

e. Securing referral or admission for institutional care when other forms of care are not appropriate for providing services to individuals in institutions." (Title XX, 1975).

The social and health service categories selected were:

1. Financial Aid Services
2. Food and Nutrition Services
3. Social Security
4. Family and Individual Counseling
5. Employment Services
6. Information and Referral Services
7. Transportation Services
8. Public Health Services
9. Family Planning Services
10. Outpatient Medical Services
11. Day Care Service
12. Protective Services for Children and Adults
13. Legal Aid Services
14. Outpatient/Emergency Psychiatric Services
15. Mental Retardation Services
16. Alcohol and Drug Abuse Services
17. Agricultural Extension Services

Service providers of the selected services were identified through the Council of Community Services Directory (a specialized service directory) and telephone directories.

Number of Cases. This study attempted to isolate those properties that were common to the general population.

In order to determine the specific sample size, a simple random sampling technique was used for the study population. Highway maps were used to locate roads and households for each isolated geographical area in each county. Each of the isolated areas was marked as a segment. The total number of elements in the study population was 854. Every other household was selected for interviewing (427), or a sampling proportion of 50 percent. There were 321 subjects that accepted interviews from the four counties that constituted the study population.

A similar technique was used to determine the number of agencies to be studied. The service categories aided in identifying the total list of agency providers. The total number of service agencies was not divided equally over the 17 service categories because of the scarcity of certain types of agencies, e.g., legal aid services. In all cases, however, an inclusive selection of agency services was selected whenever possible. The exception of this rule was applied to day care services in Davidson County, thus requiring a sampling of day care agencies. After close observation of agencies in the day care category, it was recognized that over 200 day care facilities operated in Davidson County at the time of this study. In determining the sampling proportion of day care facilities in Davidson County, criteria for elimination was developed. The strategy employed may be described as follows: Since the annual Title XX service plan is a blueprint for organizing and

delivering a comprehensive program of social services for the people of Tennessee, and since many citizens across the state (both urban and rural), including consumers of Title XX services, contributed substantially to the development of the service plan, and since the plan describes the service needs of individuals in Tennessee by region, thus allocating scarce resources in such a manner to assist all citizens of the state, it was thought that the Title XX day care agencies of the Social Security Act would be justification for the basis of selection of agencies in this category. Therefore, only those Title XX agencies identified during the initial period of selection were studied. The reader should keep in mind that the list of Title XX day care programs was not static during the interview period. Consequently, it would have been too costly and time consuming to gather information from all day care providers and all new Title XX day care services. As a result of these criteria, 108 service agencies were interviewed.

The basis for sampling was both analytical and representative because it was necessary to obtain responses from enough rural residents and agencies to allow for sufficient representation in each category of the independent variable.

The Time Factor. This study was cross-sectional, that is, the study was based on observations representing a single point in time. The study was limited to a definite period, for data collection: July, 1975 to July, 1976, and focused on gathering data from community residents and agency representatives.

Basic Sources of Data. This study was a novel endeavor, since the variables employed were uniquely operationalized, new data was gathered. All the variables employed in the study were operationalized via tables, frequency distrubtions, and percentages. The census data, historical documents, and completed studies that related to this project were also utilized.

Methods of Gathering Data. Basically, there are two procedures by which data can be gathered: direct observation and indirect observation. Indirect observation was utilized in this study. Among the many methods available which would facilitate indirect observation, the interviewer-administered questionnaire seemed most suitable for the purpose of this study.

There were two (2) different instruments administered--one to agencies or providers of services and a community survey to rural residents to assess need.

The methods utilized by the interviewers took the following form:

Agency Survey: A list of agencies (social services and health services) was obtained. From this list key administrators and/or supervisors were contacted for participation in the study. If the respondent accepted, a questionnaire was administered by the interviewer. The questionnaire was completed by the interviewer in the presence of the respondent. There were instances, however,

when it was necessary to follow-up the agency questionnaire by telephone, to complete some of the missing data, or to clarify data. The reader should note that flexibility was used in the agency survey for the method of gathering data because the researchers were interested in 100 percent representation of agencies studied. The information sought was: (1) barriers or potential barriers to service delivery, (2) an assessment of the availability and accessibility of health and social services, (3) eligibility criteria (4) location and service hours, and (5) the number of rural clients served.

Community Survey: The same procedures were applied in the community survey as in the agency survey, that is, the questionnaire was administered and completed by an interviewer in the presence of the respondent. Information sought in the community survey may be categorized under the following headings:

Socio-demographic Data
Socio-economic Data
Transportation Data
Environmental Conditions Information
Social and Health Service Data
Consumer Evaluation of Service (satisfaction and dissatisfaction)
Utilization of Services Data
Community and Family Needs.

Secondary data, i.e. census data, housing data, employment data, etc., were gathered from agencies and other resources for purposes of this study.

The Method of Handling Single Variables. Concerning the method of handling single variables, there were three alternatives available to the researcher: (1) single variable or property, (2) a few properties or variables, (3) many of the same. The use of a few variables in the data analysis process can be more precise. Clearly, the more variables utilized, the greater the proclivity for a thorough and conclusive analysis of the system. The difficulty is that the data produced from the use of many variables may be cumbersome, and the researcher may, of necessity, have to deal with them in a purely descriptive fashion. For purposes of this study, thirty variables were chosen. The selection of these variables does not suggest that they were exhaustive; they were identified in an initial attempt to determine some of the existing interrelationships involved in the health and social systems.

Methods of Handling Relationships Among Variables. This procedure for handling relationships among variables required the use of some basic statistical measures. The data pertaining to the independent and dependent variables were collected and dichotomously arranged in multi-tables. The levels of measurement in this study were nominal and ordinal; and a relative chi square statistical test was used to determine whether significant relationships existed between them. The statistic, chi square, was also used to determine whether the intervening variables were related to any degree. A conservative level of significance was chosen (.05).

Elaborations and percentages were employed to assess first order relationships, and no level of significance was chosen. That is, where it was necessary to tease out subgroup relationships, percents were employed with modal differences being indications of the patterns of relationships. One of the essential features of elaboration is that it allows no single hypothesis to be viewed independently to capitalize on patterns of percentage differences.

Summary. The foregoing eight sets of decisions allowed the data to be gathered completely in 12 months. The second and third years allowed for the data to be analyzed, published, and distributed for possible follow-up and implementation. This study also required the implementation of the following tasks: (1) finalize study plans via additional literature review, (2) refine the definitions of the sample, (3) design and finalize instruments, (4) pretest the instrument, (5) arrange for data collection, (6) recruit and train interviewers, (7) establish interview schedules, (8) conduct interviews, (9) follow-up interviews for validity checks, (10) devise questionnaire code book, (11) code and key punch the data, (12) process data through computer, (13) analyze data, (14) write and submit publications, and (15) make recommendations to social and health planners.

Study Limitations. It is recognized that most research studies that pertain to demographic, social, and economic

information are subject to limitations. The first limitation in this study was the number of cases represented. Even though the sampling process was statistically significant, a larger geographical region in Tennessee would have aided in a state-wide perspective of health and social services to rural areas.

Another area of concern is that of the imperfection in collecting data and information. To one degree or another most data surveys are subject to this limitation. When secondary data is utilized, especially sources such as census information, reliability and validity are questionable because of the enumeration process used. Further, it should be made clear that the census information comprised in this study was dated 1970. There have been some significant changes in the demography of some of the rural areas since that time.

By design, the data collected for the agency survey was conducted without the knowledge of the services rural residents considered to be important or most desired. Agency information on the number of residents served from the selected areas was limited because agencies did not maintain sufficient information by areas or because it was difficult to apply certain census data because the census data included total census tracts and omitted data regarding census blocks.

Chapter 2

Demographic Characteristics of the Selected Study Areas

In a publication dealing with a descriptive analysis of rural health and social service needs, it should not be surprising that one of the main themes to be elaborated is a description of the study area and a profile of the sample. This chapter is concerned with describing and/or characterizing the study population by focusing on the demographic findings, i.e., employment, age, race, sex, education, income, and occupation. Further elaboration of this subject area will include information regarding family background and environmental conditions of the selected areas of Davidson, Rutherford, Williamson, and Cheatham counties.

Community Profiles

In the period before the Civil War, Tennessee, like the rest of the South, had an almost completely agricultural economy. In 1960, the ratio of population employed in manufacturing to that employed in agriculture was 1 to 82.

(Tennessee Industry, 1972). However, today it is evident that many of the residents no longer farm but commute to the central city to work. There are some families who have not been able to keep up with some of the changes taking place around them. The older families generally live on fixed incomes and do not have enough money to repair their homes or pay for medical services. For those persons it has been difficult to accept the inevitable, community development. Others welcome the idea of so-called subdivisions and grocery stores being built around them because they sense that other goods and services will be forthcoming. Still others express that with the increase of goods and services, so will there be an increase in taxes and other subsidies (i.e. property taxes, garbage and sewerage fees, water tap fees), all of which they feel they cannot afford. Consequently, the underlying theme of all the areas studied is that the communities have remained relative stable during the past ten years; however, there is evidence of change. An example of the change is the realization of rapid population growth due to recent migration patterns, i.e. Cheatam County.

Housing conditions in communities under investigation may be described as relatively old, small wooden frame homes, interpersed with trailors and a few new small brick homes. Some of the communities are rather hidden from central habitation, and in most of the communities, water, sewerage, garbage, fire protection services, and ambulance

services are lacking. Despite the need for these types of services, the residents of the communities appear to be comfortable and content with their environment.

Description of the Sample

The study population may be described in the following manner: Twenty-three percent or 75 are male, and 76 percent or 244 are female.[1] Most of the respondents received more than 8 years of schooling. The majority of the sample are Protestant. Sixty-eight (68) percent of the respondents prefer the Democratic party, while 17 percent have no preference of a political party, and the remaining 15 percent are Republicans. Almost one third (31 percent) of the study population are household workers (housewives are included in this percentage) and 22 percent are farmers. Seventeen percent earn a gross income of $10,000 to $11,999 per year. The remaining are distributed in small percentages throughout other income ranges. (Figures 2 through 4 provide an in-depth profile of demographic features of the sample).

Since this study focused on isolated rural areas of Tennessee, specifically Davidson and surrounding counties, a larger proportion of persons within Davidson County was sampled.

---

[1]The percentage of females to males in this study is inflated because interviews were conducted with heads of households (male and females). There were usually more female heads of households persent at the time interviews were conducted.

Table I

Number of Respondents by Counties

Counties	Number of Respondents	Percent
Davidson	150	47
Wiliamson	97	30
Rutherford	38	12
Cheatham	36	11
N=	321	

The proportion of the population in Cheatham County who are Black is slightly greater than the proportion of Blacks residing in Davidson or Rutherford Counties. There are no Black respondents in the Williamson County sample.

Table 2

Race by County

Race	Davidson	Williamson	Rutherford	Cheatam
White	76%	100%	68%	61%
Black	24%	--	32%	39%
Total	150	97	38	36

Figure 2
Sex, Race, Marital Status, Age and Education

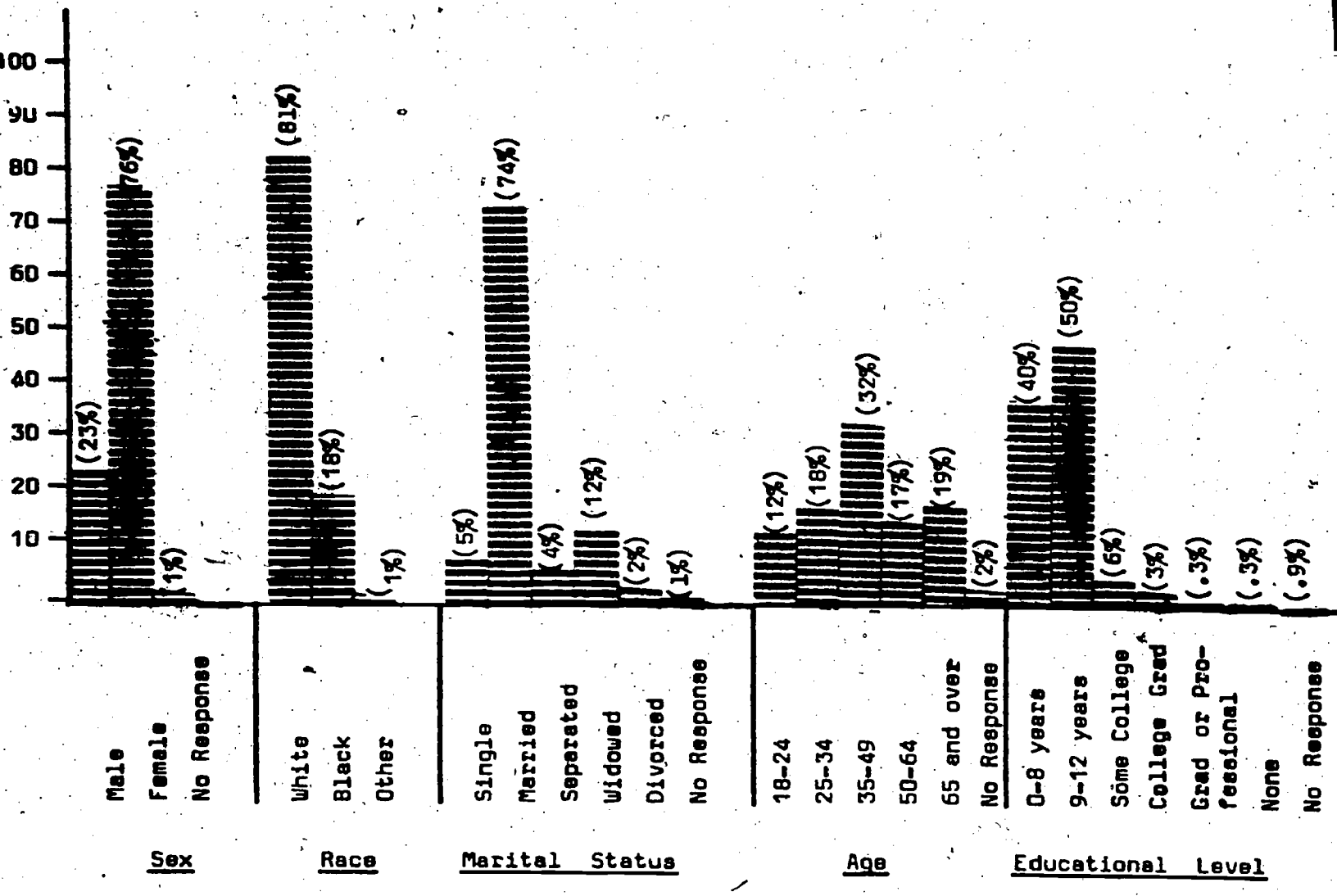


Figure 3

Religion, Political Preference, Occupation

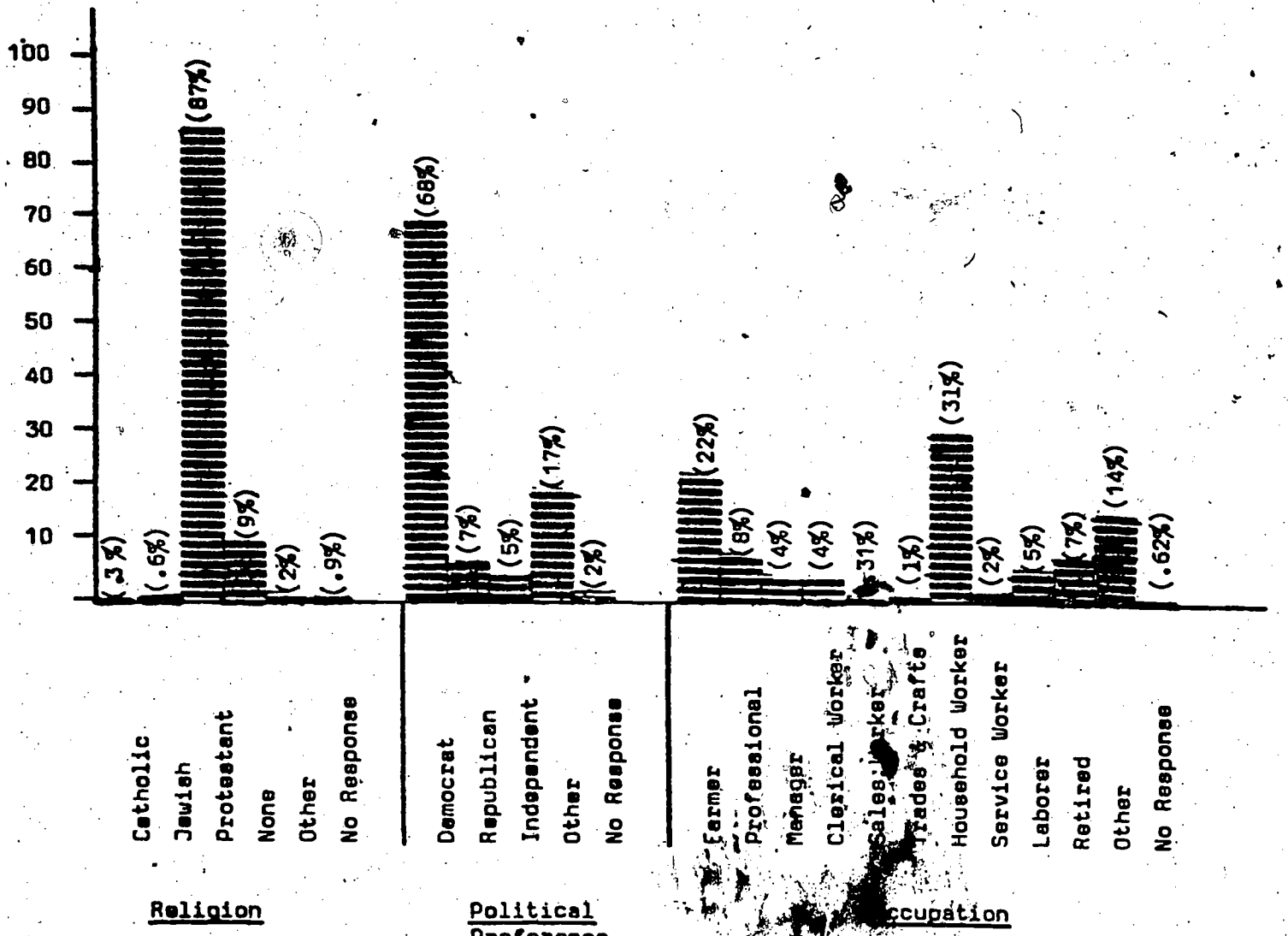
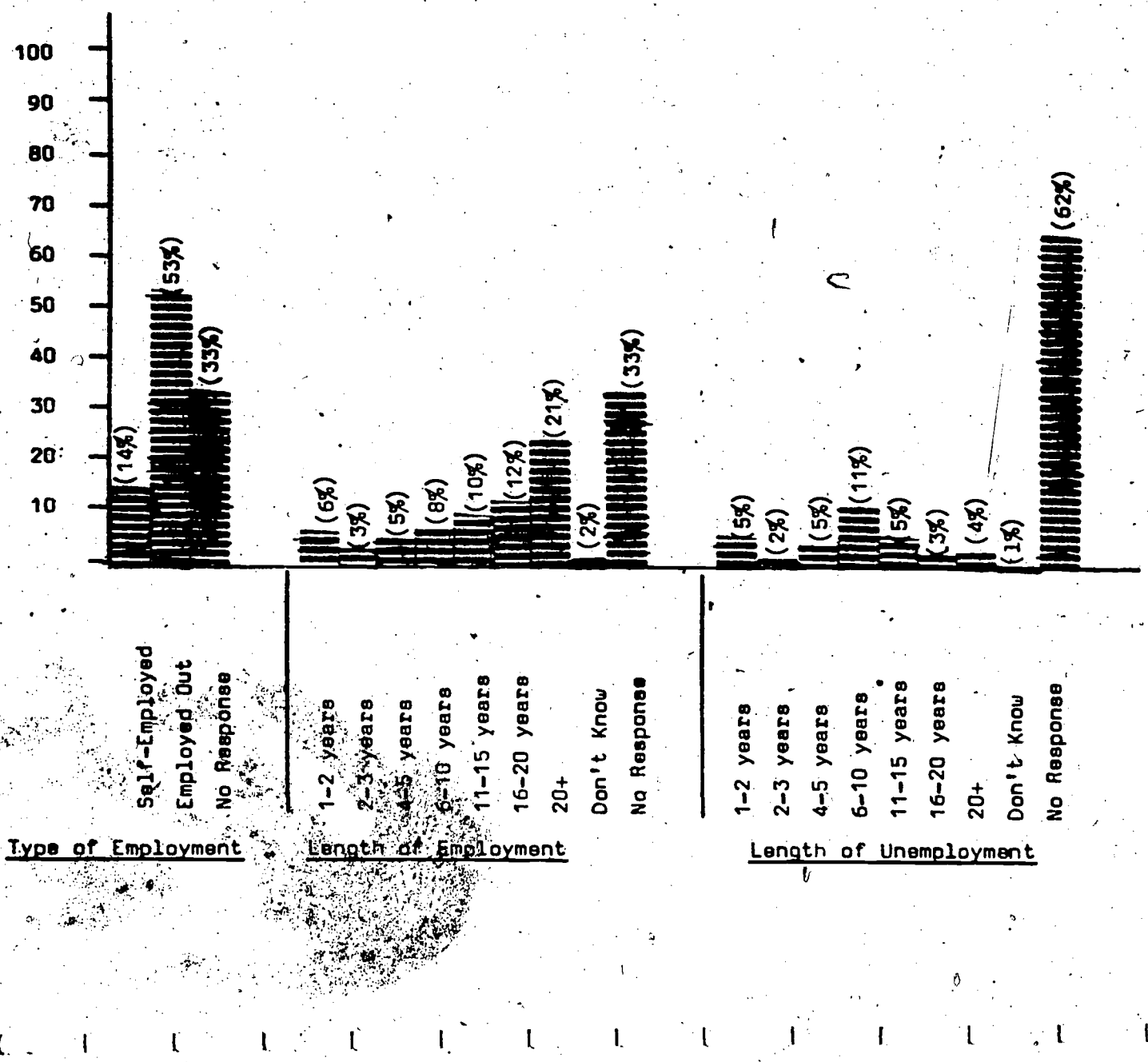


Figure 4
Type of Employment, Length of Employment, and Length of Unemployment



There is a tendacy for persons in Rutherford County to have completed more years of schooling than persons in the other counties. One should note, however, that 40 percent of the study population received less than eight years of schooling, while 50 percent of the study population received 9 to 12 years. Essentially, then, the majority of the population received a high school education or less.

Table 3

Years of Schooling by Counties

Educational Level	Davidson	Williamson	Rutherford	Cheatam
0-8 Years	41%	44%	18%	44%
9-12 Years	49%	52%	66%	28%
Some College	7%	1%	13%	2%
College Graduate or Professional	4%	--	2%	2%
N=	150	97	38	36

The average family size in the survey sample is 2.9 members, and the largest group of respondents' (16.8 percent) gross annual income is in the $10,000-$11,999 range. Twenty one percent of the respondents either did not know their annual income or chose not to respond to that question.

Forty-one percent of the families are composed of two members, while 47.4 percent of the families are dispersed among the families larger than two members. The range for

family size is 1 to 9 or more members. Only one family fell into the nine or more category. The study of these isolated rural areas does not substantiate the notion that rural families are larger than urban families. According to the 1970 United States Census, the average family size for urban Metropolitan Nashville is 2.4 family members. The following table will provide a clearer understanding of the relationship between family size and income.

Table 4

Relationship of Family Size and Income

	1	2	3	4	5	6	7	8	9+	%	Total
0-1,999	7	4	2	2						4.7	15
2,000-2,999	5	8		1	1					4.7	15
3,000-3,999	1	11	2	2	3	2				6.5	21
4,000-5,999	5	14		1	3	1	1		1	8.1	26
6,000-7,999	3	11	7	4	3		1			9.0	29
8,000-9,999	2	12	12	9	6	2	3			14.3	46
10,000-11,999	2	27	6	9	5	3	2			16.8	54
12,000,13,999		6	9	1	4	2				6.9	22
14,000,15,999		2	1	5						2.5	8
16,000+		6	4	1	4					4.7	15
Don't know	9	15	5	9	3	5				14.3	46
No Answer	5	10	2				1			5.6	18
Refused to say	1	3	1								
N= 321	40	129	52	44	32	15	8	0	1		321

Table 5

Relationship of Family Size and Income

Number in Household	1	2	3	4	5	6	7	8	9+
	%	%	%	%	%	%	%	%	%
0-1,999	46.7	26.7	13.3	13.3					
2,000-2,999	33.3	53.3		6.7	6.7				
3,000-3,999	4.8	52.4	9.5	9.5	14.3	9.5			
4,000-5,999	19.2	53.8		3.8	11.5	3.8	3.8		3.8
6,000-7,999	10.3	37.9	24.1	13.8	10.3		3.4		
8,000-9,999	4.3	26.1	26.1	19.6	13.0	4.3	6.5		
10,000-11,999	3.7	50.0	11.1	16.7	9.3	5.6	3.7		
12,000-13,999		27.3	40.9	4.5	18.2	9.1			
14,000-15,999		25.0	12.5	62.5					
16,000+		40.0	26.7	6.7	26.7				
Don't Know	19.6	32.6	10.9	19.6	6.5	10.9			
No Answer	27.8	55.6	11.1				5.6		
Refused to Say	16.7	50.0	33.3						
N +	40.0	129	52	44	32	15	8	0	1

The income level of rural Davidson County respondents covers a wide range, with 44.6 percent falling above $6,000 a year and 28 percent falling below that figure. The respondents from Cheatham County make up 11.2 percent of the total survey sample, the smallest group of the four. However, this group has a wider range of salaries than the Rutherford County respondents, who comprise 11.8 percent of the sample. Cheatham respondents fell primarily into the ranges lower than $11,999 (66.6 percent). The Rutherford County respondents cluster around the middle ranges, and no Rutherford County respondents fell below the $4,000 year range.

Income in this survey is the total income of all family members before taxes. The Davidson County respondents tend to have higher annual income than do respondents from the other three counties. The Cheatham County respondents have the lowest annual incomes.

According to the 1970 Census Data, the median income for Davidson County is $9,469, and only 9.4 percent of Davidson County residents have an income of less than $3,000. The average family for Blacks is two members, and two for Whites. In comparison, our Davidson County sample of 150 rural residents shows some similarities. This study reveals that 10.7 percent of the rural Davidson County residents have incomes below $3,000 a year, and the modal income falls within the $8,000-9,999 range.

While the demographic variables for rural Davidson County respondents are in accord with the demographic variables of the total county, there are some discrepancies involving the other three counties. Cheatham County is unique in that the entire county is 100 percent rural, with 15.4 percent of the residents below the poverty level. The median income is $7,614 a year, and 14.2 percent of families earn less than $3,000. Cheatham County is the poorest county in terms of gross annual incomes, medical or health facilities, and social services. The survey sample from Cheatham County is 11.2 percent of the total sample. Seventeen percent of the Cheatham County respondents earn incomes less than $3,000, and the modal income falls

within the $4,000-5,999 range. Cheatham is also the smallest county in terms of population and land per square mile.

Rutherford County, with a population of 46,226 more people than Cheatham County, comprises 11.8 percent of the sample. The rural population of Rutherford County comprises only 41.3 percent, and 18.8 percent of the residents are below the poverty line. The data collected for this sample show that none of the survey respondents have incomes below $4,000 a year. However, the survey sample represents only .3 percent of the rural population. The modal income for the Rutherford sample falls between $8,000 and 9,999, and according to the 1970 Census Data the median income for Rutherford is $7,614.

It is interesting to note that this survey was conducted in 1976 and that the census data was collected in 1970. Although seven years later the median income for the country has increased, the median income of the survey counties shows very little comparative difference. However, the income level for rural areas typically is lower than for urban areas. These comparisons are based on median incomes for the total county (urban and rural) when applicable.

Williamson County, according to 1970 Census Data, has a population of 34,330 which is smaller than Rutherford; however, 72.6 percent of Williamson's population is rural. Therefore, Williamson County make up 30 percent of the total survey sample. An analysis of the data shows that 6.4 percent

of the Williamson County respondents report annual incomes below $3,000 a year. The census data for 1970 represents a large difference, reporting 13 percent of the families in the county as having incomes of less than three thousand. The median income for Williamson is $8,190, which is larger than Rutherford County although Rutherford is larger in terms of population and land per square mile. According to the survey data, the modal income for Williamson falls within the $8,000-9,999 range, which is in keeping with the 1970 census data.

Table 6

Income by Race

	Black	White	Other
	%	%	%
0-1,999	53.3	46.7	
2,000-2,999	26.7	73.3	
3,000-3,999	23.8	76.2	
4,000-5,999	34.6	61.5	3.8
6,000-7,999	13.8	82.8	3.4
8,000-9,999	17.4	82.6	
10,000-11,999	9.3	90.7	
12,000-13,999	4.5	90.5	
14,000-15,999		100.0	
16,000+	20.0	80.0	
Don't Know	8.7	89.1	2.2
No Answer	22.2	77.8	
Refused to Say	50.0	50.0	
N=	58	260	3

An analysis of data based on race and income reveals that the incomes for Blacks are lower than for whites.

The median income for Blacks in the survey falls within the $4,000-5,999 range and the median income for Whites falls within the $10,000-11,999 range. Twenty-seven percent of the Black respondents report incomes of less than $3,000, while only 6.4 percent of the Whites report incomes of less than $4,000. Of the respondents that fall within the 0-1,999 range, 53.3 percent are Black.

As evidenced by this investigation, the data reveals that 53 percent of the respondents are single family, rural/non-farm homeowners and that 24 percent are in the process of buying. Only 16 percent of the respondents are renting. For the most part, the majority of the respondents (89 percent) feel that their homes are adequate for their needs. However, 14 percent of the study population indicate that their homes are inadequate. A slight majority of the respondents have resided in the geographical areas from 10 to 49 years. An illustration of these findings is presented in Table 7.

Table 7

Percentage of Respondents with Adequate Housing

Home Adequate	Percent
Yes	85.98
No	13.71
No Answer	.31

There has been little migration experienced by this study population. The data on rural to urban immigration patterns reveal that prior to 1920 the rural population in the United States outnumbered the urban population. In 1919 the urban population accounted for 51 percent of the total national population. Between 1950 and 1960, almost two million people left the nation's rural counties for urban areas. Government Printing, 1967). By 1960 and 1965, the metropolitan population growth had increased by 22 percent. (Clark and Beale, 1970). Recent migration patterns appear to be a return to rural areas to reside. The study areas appear to have remained stable during the period sited above.

Summary

A questionnaire was designed and administered to a 50 percent sampling proportion (simple random sample) of households in four Tennessee Counties: Cheatham, Williamson, Rutherford, and Davidson.

A demographic profile of the study population shows that:

1. The majority of the study population are female older married couples with 12 years or less of schooling, and occupations of farmers and household workers;
2. Income ranges vary from region to region, with 17 percent earning gross incomes of $10,000 to $11,999 per year and the remaining distributed in small percentages throughout other income ranges;

3. The proportion of the population in Cheatham County who are Black is slightly greater than the proportion of Blacks residing in Davidson or Rutherford counties; there are no Black respondents in the Williamson County sample;

4. The average family size in the survey sample is 2.9 members, with 41 percent of the families composed of two members, and 47 percent of the families dispersed among the families larger than two members; the range for family size was 1-9 members, with only one family falling into the nine or more category;

5. The median income for Blacks in the survey falls within the $4,000-5,999 range, and the median income for whites falls within the $10,000-11,999 range; twenty-seven percent of the Black respondents report incomes less than $3,000, while only 6.4 percent of the whites report incomes less than $4,000; Of the respondents that fall between the $0-1,999 range, 53.3 percent are Black;

6. Fifty-three percent of the respondents are single family, rural/non-farm homeowners, and 24 percent are in the process of buying.

Chapter 3

An Assessment of Social and Health Services The Agency Provider Perspective

An examination of the health and social services delivery system is an important subject for investitagion. In recent years researchers and others have been very critical of the health and social service delivery system to rural areas. This chapter presents and describes the results of a study of service agencies within which social and health services are performed in areas of Tennessee. The principal objectives were to identify specific gaps and shortcomings in resources and services and to determine the availability and effectiveness of the resources and services in meeting needs.

In service delivery systems the effectiveness of service is constrained by the effectiveness of its workers, its financial resources, and its management, to name a few factors. The study of agencies has been approached from a variety of viewpoints, all of which seem to possess some validity but which also differ widely in the attributes they emphasize. The most practical approach for understanding agencies and their functions is to focus on the following variables:

Organizational Context

1. Type of service
2. Duplication of service
3. Capacity
4. Cost to consumer
5. Time lapse to receive services
6. Transportation
7. Funds allocated
8. Location
9. Number of staff
10. Eligibility requirements

One hundred and eight agencies were surveyed during this investigation, representing sixteen different service categories. (See Table 8.)

Table 8

Number of Agencies by Service Category

Service Categories	
Agriculture Extension Services	4
Alcohol and Drug Abuse Services	4
Day Care Services	19
Employment Services	13
Family and Nutrition Services	8
Family Planning Services	3
Financial Aid Services (Social Security included)	12
Food and Nutrition Services	3
Information and Referral Services	7
Legal Services	2
Mental Retardation Services	9
Out/Patient/Emergency Psychiatry	7
Out/Patient Medical Services	5
Protective Services for Children and Adults	2
Public Health Services	4
Transportation Services	6
TOTAL	108

A description of the service categories is provided below:

Description

Service Category

Agriculture Extension Services: A service that provides information and technical assistance primarily to residence of rural areas to promote farming, home economics, youth, and community development. (Agriculture Extension Agencies)

Alcohol and Drug Abuse Services: The provision of treatment and counseling for persons with drug or alcohol related problems.

Day Care Services: The provision of child care services (community supported).

Employment Services: A service that provides job placement, recruitment and training, career counseling, and rehabilitation for adults and youths who are unemployed.

Family and Individual Counseling: The major community wide voluntary social agency which helps individuals and families understand and find solutions to problems in their family relationships and social functioning. These services are available in three of the counties. Residents in Cheatham utilize services in Davidson County.

Family Planning Services: The provision of clinical educational and counseling services designed to minimize involuntary parenthood, to promote the health of women by minimizing the mortality associated with resulting increase in pregnancy, and to promote the health of individuals by providing comprehensive medical services within the scope of the program.

Financial Aid Services: The provision of temporary general financial assistance for families experiencing loss of income due to illness of the wage earner(s) and/or other qualifying reasons. Ten of the 12 locations reported providing financial aid service to rural families either through the Tennessee Department of Human Service or through the Metropolitan Social Services.

Food and Nutrition Services: The provision of food services with proper authorization and eligibility (Food Stamps, Congregate and Mobile Meals). Only Davidson and Cheatham counties reported data relating to this service category.

Information and Referral Services: A service designed to link people in need with the appropriate agency or service designated to eliminate or alleviate the need.

Legal Aid Services: A major provider of legal assistance in civil cases involving indigent people.

Mental Retardation Services: A specialized service provided for persons (adults and children) who are retarded, handicapped, or developmentally delayed and in need of health maintenance, rehabilitation, vocational job placement, and specialized education.

Out-Patient Emergency Psychiatric Care: A specialized service provided for persons in need of psychiatric care on an out-patient basis. It enables people requiring these services to remain in or return to the community instead of being hospitalized or institutionalized.

Out-Patient Medical Services: Medical services are provided for persons in need of medical care who may be treated without hospitalization.

Protective Services for Children: A specialized child welfare service which carries a delegated responsibility to offer help in behalf of any child considered or found to be neglected, abused, or rejected. (Department of Human Services).

Protective Service for Adults: This service is aimed at protecting the individual, usually 60 years of age or older who is not able to care for himself or his interests without endangering himself or others. (Department of Human Services).

Public Health Services: A comprehensive, county-wide public health service for the prevention of disease and maintenance of personal and environmental health.

Transportation Services: A provider of transportation services (e.g., public transportation services) available to low income, elderly, and handicapped people.

A representation of these service categories varies in size, distribution, and mission. A broad range of services is considered desirable and representative, in general, of the great majority of agenices in the State of Tennessee and the specific counties selected in this study. Since one of the purposes was to obtain information about the number and type of services offered rural people, inclusion of a broad range of services contributed to the depth of the study. The listing, however, provides for descriptive analysis rather than in-depth statistical analysis. The discussion to follow will focus on the organizational context of agencies and the limitations of service provisions.

Organizational Context

A principal objective of this study was to identify determinants or organizational structure. Accordingly, emphasis was placed on program type, size, capacity, and the number of agency programs providing the same type of service.

The organizational frameworks of agencies differ significantly according to size, indicating that the way an organization is run determines, to a large degree, the number of people it employs and the number of people it serves. The number of staff reported in the service categories, ranges from a small number of volunteer workers (2-3 workers) to as many as 214 persons. A relatively large number of staff were reported in such service categories as financial aid services, public health services, out-patient emergency services, family planning, and out-patient psychiatric services. All of the other service categories report relatively small staffs, ranging from 3 to 34 persons. Most of the large staffs reported are concentrated in Davidson County.

The time lapse to receive services from the programs reported ranges from immediate service to 60 days, depending on the demand for services. In addition to the time frame, many of the agencies report open capacity or no limitation on the number of people they are able to serve and again capacity varies with the type of service and the demand for service. The number of people that agencies reported

serving ranges from no limitation to 25 people. These figures do not indicate what percentage of the population is rural. (Refer to Appendix A for a description of key variables.)

There appears to be no serious duplication of services to the rural communities studied. However, a comprehensive and centralized Information and Referral service would benefit residents of the Mid-Cumberland area. Essentially, there are so few services based in the majority of the counties studied that the services provided appear to be essential to the residents residing in those counties. In some instances, however, programs and additional facilities should be provided so that the consumer's needs are better met (e.g. the need for a hospital to be built in Cheatham County).

Cost to Consumer and Eligibility Requirements

The majority of the service categories under investigation provide service free of charge. However, there are four of the service categories that provide services to the county with a sliding fee scale; these categories are Family and Individual counseling, Day Care, Family Planning, and Mental Retardation services. This variable does not necessarily cause services to be inaccessible because the majority of services are provided free of charge.

The type of service and eligibility requirements should be considered significant because the majority of the service categories (depending on type) base eligibility on income levels, residency, age (in some instances), and need for service.

Transportation Services

Another important variable reviewed is transportation services. It is difficult to determine whether transportation services are provided to the residents of the study area. It is apparent, however, that some of the service agencies do provide transportation services to their clients; among them are:

Davidson County: Day Care, Protective Services, Information and Referral, and Mental Retardation;

Williamson County: Transportation Service Agency, Information and Referral, and Mental Retardation;

Rutherford County: Transportation Agency;

Cheatham County: None in all categories except Information and Referral Services provide transportation through the Department of Human Services.

The importance of transportation to rural residents need not be emphasized since it is the major means of linking service needs with service providers. This is especially important in view of the fact that most of the services studied are centrally located. Davidson County is the only county in this study which provides a public transportation system; however, the bus routes do not serve the study areas.

The remaining counties in the study provide limited transportation for social and health purposes by the "Sixty Plus Bus Program." This program provides transportation to persons 60 years and over primarily for health and medical appointments, shopping and recreational activities, and congregate meals at various nutrition project sites. From this analysis transportation services appear to be limited.

Criticisms that distance presents a problem for rural residents seeking health and social services delivery certainly are substantiated, to some degree, by the agency survey. Analysis of data describing the distance of service agencies from the study population reveals that in Davidson County two agencies are 1-2 miles from the study areas. Rutherford County agencies are farthest away from study areas. Nine agencies are 13-25 miles away, while six agencies are 1-12 miles away from the study area. There are five agencies in Cheatham County, two of which are 1-12 miles away from the study area, two more are 13-25 miles away, and the remainder are split between 1-12 miles and 13-25 miles.

Now that distance or location of service has been discussed, it is necessary to focus on the question of what service categories are available to the study population. The conclusions drawn from this investigation substantiate that the number and range of services in this study increase with the population base and economic base of the county. Each county, regardless of size or budget, has a core of services mandated through Federal and State legislation, including such services as Public Health Services, Employment Counseling and Placement Service, Tennessee Department of Human Services' programs which include AFDC, Food Stamps, Protective Services, and Information and Referral Services. Each county is served by social security. One should note that these services are available to the counties but not necessarily conveniently located for use by rural residents.

Service categories identified as being absent in the counties or as providing limited facilities to meet the needs of the rural population are listed below:

I. Day Care
II. Transportation Services
III. Legal Aid Services
IV. Long and Short Term Medical Facilities

In general, the human services examined in this study are centrally located in all counties but significantly distant from the study areas, which seriously affects service availability and accessibility. However, the

following exceptions point the way for better delivery of human services to rural residents:

1. The development of services based in rural areas or branch offices.

   Example: 1) Group Homes for the Mentally Retarded in the Fairview and Pegram communities.

   2) Public Health Clinics in Fairview.

2. The decentralization of service delivery.

   Example: County-wide visitations of public health nurses, rehabilitation counselors, protective service workers, county agricultural agents and other personnel.

3. The development of special transportation programs.

   Example: 1) Community Action Program in Nashville and Franklin.

   2) The Mid-Cumberland Human Resource Agency's "Six Plus Transportation Program"

4. The involvement of citizens, religious organizations and community centers.

   Example: Clothing distribution programs, Mobile meals program for the elderly, Cheatham County Community health services.

Despite these developments there are serious limitations in the delivery of services to rural populations. Service providers were asked whether inadequate facilities, limited staff, or insufficient funds prevented or limited delivery of services. Of the beginning 108 agencies and program services involved in the study, 54 (50 percent) report that from one to all three items place some limitation on delivering service to those seeking services. Limitations are viewed in terms of the total agency operation by county and not solely for the study areas.

In studying all agencies and programs listing limitations, 40 (74 percent) indicate limited staff; 34 (63 percent) indicate insufficient funds; and 31 (57 percent) indicate inadequate facilities. Distribution by county is shown in Table 9.

Table 9

Agencies and Programs with Delivery of Service Limitations by County

	Number of Agencies by County				
Limitations	Davidson	Cheatham	Rutherford	Williamson	Total
Limited Staff	28	3	5	5	40
Insufficient Funds	25	0	6	3	34
Inadequate Facilities	20	1	6	4	31
N =	54				

In considering combined limitations, the situation does not appear as critical, especially in Cheatham, Rutherford, and Williamson counties. In Davidson County, 15 agencies and programs report combined limitations of staff, funds, and facilities

Table 10

Agencies and Programs with Combined Delivery Service Limitations by County

	Number of Agencies by County				
Limitations	Davidson	Cheatham	Rutherford	Williamson	Total
Staff and Funds	4	0	2	1	7
Staff and Facilities	2	1	2	2	6
Funds and Facilities	2	0	1	0	3
Staff, Funds, and Facilities	15	0	1	1	17

An important variable in determining whether services are accessible and effective is how social and health programs are funded. Unfortunately, responses to this question were scanty, thus leaving major gaps in the analysis. However, it was determined that much of the funding resources are appropriated through Federal and State Funds. (In Appendix A only total amounts are provided and in some instances totals for more than one program component.)

This data does not provide:

1. The relative costs of different procedures.
2. The extent to which staff salaries are commensurate with the responsibilities of staff postions.
3. The extent to which there are duplicated staff functions that could result in possible ambiguity.
4. The extent to which program activities are related to program objectives and/or to program survival.

In conclusion, there appears to be merit in the criticism lodged against rural health and social services, specifically, physician shortage and the need for a comprehensive approach to health care delivery. On the other hand, social services tend to be fragmented, non-existent, or inaccessible. It is important to note that the present rural social and health system in Tennessee, and specifically the target population, exemplifies these gaps in the delivery of services.

Summary

The organizational frameworks of agencies differ significantly according to size, indicating that the way an organization is run determines, to a large degree, the number of people it employs and the number of people it serves.

A profile of the agency study shows that:

1. The number and range of services in this study increases with the population base and economic base of the county.

2. Each county, regardless of size or budget, has a core of services mandated through Federal and State legislation (e.g. Agricultural Extension service, Public Health services, Employment Counseling, Department of Human Services).

3. Each County is served by the social security administration and mental health centers, though service availability varies.

4. In general, the human services examined in this study are centrally located in all counties but significantly distant from the study areas, which seriously affects service availability.

5. Service categories identified as being absent in the counties or limited to meet the needs are: 1) day care, 2) transportation services, 3) legal aid services, and 4) long and short term medical services facilities.

6. There are changes occurring in the rural communities that appear to point the way for

better delivery of human services to rural residents:

--The development of branch offices based in rural areas to serve the rural residents;

--The decentralization of service delivery;

--The development of special transportation programs;

--The involvement of citizens, religious organizations, and community centers in the delivery of social and health services.

Chapter 4

Utilization and Underutilization: The Consumer Report

This chapter is concerned with the utilization or contacts made to social and health agencies in the study. The context of this analysis will focus on the wait period of services to be received, the degree of satisfaction, and the degree to which the needs are fulfilled. A major concern was who and how many people seek, use, and fail to use services. A corollary focus, however, deals specifically with underutilization or nonutilization of services. The research question concerns the extent to which people who need help fail to use appropriate services for help. Demographic characteristics such as age, sex, race, income, education, and occupation are cross-tabulated with utilization of service agencies in an attempt to determine possible relations associated with the data received from the study population.

Service Agencies

Thirty-three service agencies and twenty local hospitals and medical centers were examined in the consumer survey. The

services reviewed in the consumer survey are discothomized with the agency survey in the following schema.

Figure 5
Category of Services

Category I: Social Services

Consumer Survey

Human Services Department
Social Security Office
Day Care Services
Senior Citizen Center
Family and Children Services
Food and Nutrition
Legal Services
Information and Referral
Food Stamp Office
Transportation Services
Financial Aid Services
Food and Nutrition Services
Family and Individual Counseling
Day Care Services
Protective Services for Children and Adults
Legal Aid Services
Information and Referral
Transportation

Category II: Health and Mental Services

Consumer Survey

Health Department/Public Health
Nursing Homes
Family Planning
Ambulance Services
Mental Health/Mental Retardation
Community Clinic
Health Department/Public Health

Agency Survey

Out-patient Medical Care
Family Planning Services
Out-patient Emergency Psychiatry Care
Mental Retardation Services
Alcoholism and Drug Rehabilitation
Public Health Services

Category III: General Public Services

Consumer Survey	Agency Survey
Council/Magistrate Services	Employment Services
Police Department	Agriculture Extension Services
Metro-Government Office	
Community Centers	
Public Schools	
Employment Services	
Agriculture Extension Service	

Category IV: Utility Services

Consumer Survey	Agency Survey
Telephone Department	None
Electric Company	
Street Department	
Gas Company	
Fire Department	

The following tables provide the frequency distribution of the number of persons making contact with services agencies in each service category.

Table 11

Number of Contacts Made to Social Service Facilities

I. Social Services	Number of Persons Making Contact	Percentage of Total Population
Social Security Department	40	13.0
Human Services Department	27	8.0
Food Stamps	27	8.0
Family Planning	16	5.0
Day Care	7	2.0
Senior Citizen Center	4	1.2
Legal Services	4	1.2
Family and Children Services	2	.62
Information and Referral	2	.62
Food and Nutrition Services	2	.31
Transportation Services	1	.31
N =	131	321

Table 12

Number of Contacts Made to Health and Medical Services Facilities

II. Health and Medical Services	Number Persons Making Contact	Percentage of Total Population
Hospitals	58	18.0
Health Department	46	14.0
Nursing Homes	8	2.0
Ambulance Services	8	2.0
Mental Health/Mental Retardation	5	1.6
Public Health Nursing	4	1.2
Community Clinics	3	.93
Alcohol and Drug Rehabilitation	0	0.0
N =	132	321

Table 13

Utilization of General Public Services

III. General Public Services	Number of Persons Making Contact	Percentage of Total Population
Public Schools	48	15.0
Community Centers	19	6.0
Public Department	14	4.0
City Councilman	11	3.0
Employment Services	11	3.0
Agricultural Extension Services	9	2.8
Metro Government Office	3	.9
Mayor's Office	3	.3
N=	116	321

Table 14

Utilization of Utility Services

VI. Utility Services	Number of Persons Making Contact	Percentage of Total Population
Telephone Department	91	28
Electric Company	81	25
Gas Company	29	9
Street Department	10	3
Fire Department	9	3
N=	220	321

Only two of the service agencies were not contacted at all; they were the alcoholism and drug abuse treatement center and the Model Cities Offices. The remaining 31 services were contacted by the respondents. The most frequent services contacted were:

Services	Rank
Telephone Company	1
Electric Company	2
Hospitals	3
Public Schools	4
Health Department	5
Human Services	6
Social Security	6
Gas Company	7
Food Stamp	8

The total number of persons making contacts is summarized below:

	Total Number Making Contacts	Percentage of Total Population
Social Services	131	40
Health and Medical	132	41
General Public	116	36
Utility Services	220	68.5
	N = 321	

It is worthy of note that the majority of the study population made contact with Utility Services. The problems associated with utility services are those that relate to utility bill adjustments, interrupted services, and general complaints and/or repairs. For purposes of this report, only Social Services, Health Medical Services, and General Public Services will be analyzed.

Degree of Satisfaction and Fulfillment of Needs

One of the most striking observances relating to the degree of satisfaction and the degree to which needs are fulfilled is the lack of conferring with the consumer receiving the services regarding service satisfaction. It is often assumed that services are adequately satisfying the needs of the consumer without making appropriate inquiry. In seeking to determine the degree of satisfaction, respondents were asked to comment on their experiences after each encounter with the service agency. Interesting here is that the respondents were satisfied with the services and felt that their needs were adequately met. (See Tables 17 and 18.) The majority of the respondents waited for service from one to three hours, depending on the nature of the service.

A total of eleven services in Area I, Social Services, were reviewed. However, only 4 of the 11 services are statistically significant for data analysis. They are Social Security, Human Services Department, Food Stamps, and Family Planning.

The four service agencies and the percentage of respondents making contact are presented below:

Table 15

Number and Percentage of Respondents Making Contact with Social Services

Area I: Social Services	Contacts Made		Did Not Use	Percentage of Total Population
	Number	Percent		
Social Security Office	40	12.46	281	87.5
Human Services	27	8.40	294	91.5
Food Stamps	27	8.40	294	91.5
Family Planning	16	4.90	305	95.0

N = 321

Table 16

Time Wait

Social Agency	Less than 1 Hour	2-3 Hours	4-5 Hours	6-7 Hours	8 or Hours	Other	Not Reported
	%	%	%	%	%	%	%
Social Security	73.0		2.5		5.0	18.0	2.5
Human Services	70.0	22.0			7.4		
Food Stamps	37.0	44.0	3.7	3.7	3.7	7.4	
Family Planning	62.5	37.5					
Totals	68	24	2	1	5	9	1

Table 17

Satisfied with Way Treated

Service Agencies	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	Inappropriate
	%	%	%	%	%
Social Security	7.5	5.0	62.5	25.0	--
Human Services	3.7	14.8	77.7	--	3.7
Food Stamps	7.4	18.5	66.6	7.4	--
Family Planning	--	6.2	62.5	31.2	--
Totals	6	12	74	17	1

Table 18

Were Needs Fulfilled?

Services Agencies	Not at All	Not Com-pletely	Com-pletely	Inappropriate
	%	%	%	%
Social Security	5.0	5.0	87.5	2.5
Human Services	3.7	11.11	81.4	3.7
Food Stamps	7.4	3.7	85.13	3.7
Family Planning		6.2	93.7	
Totals	5	7	95	3

Table 19

Did Things Turn Out the Way Hoped?

Services Agencies	Not at All	Not Com-pletely	Com-pletely	Inappropriate
	%	%	%	%
Social Security	5.0	7.5	85.0	2.5
Human Services	11.11	3.7	81.4	3.7
Food Stamps	11.11	7.4	77.7	3.7
Family Planning		6.2	93.7	
Totals	8	7	92	3

Health and Medical Services

The second area, Health and Medical Services, is comprised of two services that constitute the analysis, i.e., health department and hospitals.

Table 20

Number of Persons Making Contact With Health Services

Service Agencies	Made Contacts		Did Not Make Contacts	
	Number	Percent	Number	Percent
Health Department	46	14.3	275	85.6
Hospitals	58	18.0	263	81.9

Table 21

Time Wait

Service Agencies	Less Than 1 Hour	2-3 Hours	4-5 Hours	6-7 Hours	8 or More	Totals
	%	%	%	%	%	
Health Department	78.2	19.5				46
Hospitals	79.3	13.7	1.7		1.7	58

Respondents were again asked to respond to (1) satisfaction with the way treated, (2) length of wait period, (3) the degree to which needs are fulfilled, and (4) expectation of things turning out the way hoped.

Again, the 78 to 79 percent of the respondents are satisfied with the way they are treated at Health Departments and Hospitals, and 95 percent of the study population feel their needs and anticipated expectations are fulfilled.

Table 22

Satisfied with the Way Treated

Services Agencies	Very Dissa-tisfied	Dissa-tisfied	Satis-fied	Very Satis-fied	No Response
	%	%	%	%	
Health Department	2.1	8.6	78.2	10.8	
Hospitals	3.4	1.7	81.0	12.0	1.7
Totals	3	5	83	12	1

Table 23.

Were Needs Fulfilled?

Service Agencies	Not at All	Not Com-pletely	Com-pletely	No Response	Total
	%	%	%	%	
Health Department		4.3	95.6		46
Hospitals	5.1	1.7	91.3	1.7	58
Total	3	3	97	1	104

Table 24

Did Things Turn Out the Way Hoped?

Service Agencies	Not at All	Not Completely	Completely	Inappropriate	No Response	Total
	%	%	%	%	%	%
Health Department	2.2	--	97.8	--	--	46
Hospitals	3.4	--	93.1	1.7	1.7	58
Total	3		99	1	1	

General Public Services

The General Public Services category is comprised of nine agencies; however, only five of those nine agencies are areas of discussion based on ten or more frequencies.

Those agencies are City Councilman's Office, police department, community centers, public schools, and employment security services. The majority of the respondents utilize these services; slightly more people have longer waiting periods for services in this category than for services in the health services category. This is due, perhaps, to the nature of the service sought and the fact that health problems demand almost immediate attention. The data does not reveal, however, why the time wait is longer. Despite the time wait for services, the majority of the respondents are satisfied with the service (55 to 89 percent for each service agency). More respondents appear to be dissatisfied

with police services (17 percent). The table below provides a graphic view of the number of respondents utilizing services in the General Public Services category.

Table 25

Number and Percentage Utilizing General Public Services

Service Agencies	Number Used	Percent of Total Population	Number Did Not Use	Percent of Total Population
City Councilman	11	3.0	310	97.0
Police Department	18	5.6	303	94.4
Community Centers	19	5.9	309	96.3
Public Schools	48	15.9	273	85.0
Employment Security	11	3.0	310	97.0

Background Characteristics and Service Agency Contacts

The background characteristics to be analyzed in this section of the report are: sex, race, age, income, occupation, and education. It is informative to look at background characteristics as they relate to agency utilization. In other words, who is making use of services and do the federal, state, and local agencies provide services for the same kinds of individuals (i.e., the poor, handicapped, the elderly, etc.)? These questions can be viewed with respect to the possible relationships of background characteristics (i.e., race, age, sex, marital status, income, education, and occupation) to utilization of service agencies. The tables below show the percentages of each of the service categories in relation to the geographical regions and utlization of service agencies.

Table 26

Relation of Geographical Region to
Utilization of Service Agencies - Category I

Service Agencies	% Davidson	% Williamson	% Rutherford	% Cheatham
Social Security	10	10	29	11
Human Services	8	12	5	3
Food Stamps	7	11	8	6
Family Planning	1	5	21	3
Totals	150	97	38	36

Table 27

Relation of Geographical Area to Utilization

Area II: Health and Medical Services

Service Agencies	Davidson	Williamson	Rutherford	Cheatham
	%	%	%	%
Health Department	7	27	21	6
Hospitals	25	29	3	17
Total	150	97	38	36

Table 28

Relation of Geographical Area to Utilization

Area III: General Public Services

General Public Services	Davidson	Williamson	Rutherford	Cheatham
	%	%	%	%
City Councilman's Office	3	6		
Community Center	2	16		
Public Schools	10	29	10.5	
Employment Services	.7	8		5.6
Police Department	6	8		2.8
Totals	150	97	38	36

Table 29

Relation of Geographical Area to Utilization

Area IV: Utility Services

Service Agencies	Davidson	Williamson	Rutherford	Cheatham
	%	%	%	%
Telephone Company	28.0	45.4	2.6	11.1
Street Department	3.3	5.2		
Gas Company	6.7	13.4		16.7
Electric Company	26.7	32.0	15.0	18.9
Total	150	97	38	36

An analysis of Tables 26 thru 29 reveals that Region III, Rutherford County, utilizes social services slightly more than the other three regions. On the other hand, Williamson County reports utilization of services in Health Services, General Public Service, and Utility Service slightly more than other geographical regions. Rutherford County utilizes only one service agency in General Public Services Agencies and Utility Services. In Cheatham County, respondents make more contacts with utility services than the other service categories. It may be summarized that Williamson and Davidson Counties' respondents utilize all services listed in all the services categories.

It is worthy of note that employment services are the least utilized services in all counties except Williamson County. An explanation of this accounting would emphasize that 36 percent of the total populations' ages range from 50 to 64 and above: therefore, the need for employment services are waning. Generally, persons residing in the geographical areas studied are not seeking employment because they are already employed or have retired.

Research shows that the lower the level of education, the greater the likelihood of contact with social service agencies. The 1970 U.S. Census reports that in 1910, 19 percent of 18 and 19 year olds were enrolled in school, whereas in 1970, 57 percent of that age group were attending school. (Department of Commerce, 1972). The U.S. Census also reports that the median education level in 1970 was 12.2 years. (U.S. Census, 1970).

Further, it is the high school graduate who is most likely to receive unemployment compensation and job training according to the census findings. The above data seem to substantiate these findings. Moreover, one notices that as the education level decreases, utilization of medical facilities (e.g., hospitals) increases. This is not the case with utilization of health department services. There appears to be a slightly higher rate of utilization among those respondents with 9-12 years of school. It is interesting to note that there is an increase in the number of persons making use of services in public and utility services regardless of the level of education attained. Respondents appear to have made frequent contact with utility services. An increase in utilization of general public services would tend to substantiate the respondents' increased interest in community affairs.

Other research studies have found that education is a significant variable in terms of citizen perspectives both toward service delivery and the manner in which government responds to citizen contact. These and other researchers show that the higher the level of education, the greater the likelihood of contact with government, and moreover, the greater the level of education, the greater the proclivity of receiving a more positive response. When race is controlled similar patterns result. (Schuman and Gurenberg, 1972).

Table 30*

Relation of Education to Utilization of Service Agencies

Area I: Social Services

Services Agencies	0-8 Years	9-12 Years	Some College	College Graduate	Grad or Prof.	Not Reported	Total
	%	%	%	%	%	%	
Social Security	13.3	11.3	15.0	22.2			40
Human Services	14.1	5.0		11.1			27
Food Stamps	16.4	3.8					27
Family Planning	1.6	8.8					16
Total	128	159	20	9	1	4	

*Percentage will not equal 100% in Tables 30 and 31

Table 31*

Relation of Education to Utilization of Service Agencies

Area II: Health Services

Service Agencies	0-8 Years	9-12 Years	Some College	College Graduate	Grad or Prof.	Not Reported
	%	%	%	%	%	%
Health Department	12	19	5	-	-	-
Hospitals	23	17	5	11	-	
Totals	128	159	20	9	1	1

*Percentage will not equal 100% in Tables 30 and 31.

Table 32

Relation of Education to Utilization

Area III: General Public Services

Service Agencies	0-8 Years	9-12 Years	Some College	College Graduate	Grad or Prof.	Not Reported; Refused to say
	%	%	%	%	%	%
City Councilman's Office	1.6	5.0	5.0	–	–	–
Police Department	3.1	6.9	15.0	–	–	–
Community Center	6.3	17.0	5.0	–	–	–
Public Schools	12.5	5.0	15.0	11.1	100	–
Employment Services	2.3					
Totals	128	159	20	9	1	1

There have been studies completed that have demonstrated variations of the use of sociodemographic data (age, sex, education, race). McKinlay points out that such studies are usually based on secondary analysis of routinely collected data, a technique that has been criticized by Kitsuse, Cicourel and Selling (1966). While the relation of some sociodemographic factors to utilization of services has remained stable, others have changed. Bice and associates present data from the U.S. National Health Survey indicating that when health status is taken into account, differences in utilization of physician services among different income groups persist only among children and among adults who experience the most severe levels of disability; race and educational level continue to be strongly associated with utilization of services. (Bice, Eichlorn, Fox, 1972).

Age is usually a determinant when considering eligibility for services. Social services, food stamps, and human services are utilized highest among people 35-49 years of age. It is only after the age of 64 that there is a drop in utilization of human services and food stamp programs. It is interesting to find that 33 percent of the people 65 years of age and above are turning to hospitals for medical services. This is not an unusual finding because the elderly tend to require increased use of hospitalization or extended care because of the nature of the illness. As age levels decrease, utilization of health department services seem to increase.

Table 33

Relation of Age to Utilization of Service Agencies

Area I: Social Services

Services Agencies	0-17	18-24	25-34	34-49	50-64	65+	Not Reported
	%	%	%	%	%	%	
Social Security		11	4	8	24	18	
Human Services		3	4	10	18	5	
Food Stamps		3	7	9	13	10	
Family Planning		13	11	4	2		
Totals	1	38	57	102	55	61	7

Table 34

Relation of Age to Utilization of Service Agencies

Area II: Health Services

Services Agencies	0-17	18-24	25-34	35-49	50-64	65+	Not Reported
	%	%	%	%	%	%	
Health Department		26	33	12	7	2	
Hospitals		21	21	17	13	21	1
Totals	1	38	57	102	55	61	7

Table 35

Relation of Age to Utilization of Services Agencies

Area III: General Public Services

Services Agencies	0-17	18-24	25-34	35-49	50-64	65+	Not Reported
	%	%	%	%	%	%	
City Councilman's Office		2	1	3	4	1	
Police Department		5	1	5	3	3	
Community Center		4	7	3	3	2	
Public Schools		3	15	26	3	1	
Employment Service		5	4	2			
Total	1	38	57	102	55	61	7

Tables 36 through 38 report the percentage of blacks and whites utilizing services in the three service categories. While there are more whites than blacks utilizing services, on a percentage basis, blacks utilize social security and food stamps services slightly more than whites. Family Planning Services are utilized by both races at the same rate.

Table 36

Relation of Race to Utilization of Services

Area I: Social Services

Service Agencies	Black	White	Other
	%	%	%
Social Security	20	11	
Human Services	18	9	
Food Stamps	13	7	
Family Planning	5	5	
Totals	60	360	1

Table 37

Relation of Race to Utilization of Services

Area II: Health Services

Service Agencies	Black	White	Other
	%	%	%
Health Department	10	15	
Hospitals	22	17	
Totals	60	260	1

Table 38

Relation of Race to Utilization of Services

Area III: General Public Services

Service Agencies	Black	White	Other
	%	%	%
City Councilman	2	4	
Police Department	2	6	
Community Center	3	7	
Public Schools	10	16	
Employment Service	2	4	
Totals	60	260	1

Even though the findings show that there are three times as many females as males interviewed, males are heavier users of social security and hospital services. Females are predominant users of all services in the four areas studied. It is not readily apparent why male respondents do not utitlize employment services. It is possible, however, that males do not take advantage of these services because of accessibility and knowledge of the rate of employment placements through employment agencies. It is also possible that employment services are not utilized because the majority of the males are already employed.

Table 39

Relation of Sex to Utilization of Service Agencies

Area I: Social Services

Social Agencies	Male	Female	Not Reported
	%	%	
Social Security	15	12	
Human Services	7	9	
Food Stamps	7	9	
Family Planning	3	6	
Totals	75	244	2

Table 40

Relation of Sex to Utilization of Service Agencies

Area II: Health and Medical Services

Service Agencies	Male	Female	Not Reported
	%	%	
Health Department	7	17	
Hospitals	17	18	
Totals	75	244	2

Table 41

Relation of Sex to Utilization of Service Agencies

Area III: General Public Services

Social Agencies	Male	Female	Not Reported
	%	%	
City Councilman	3	4	
Police Department	3	6	
Community Center	4	7	
Public Schools	5	18	
Employment Services		5	
Total	75	244	2

More married and widowed females utilize social services; however, married couples dominate utilization in all of the study. Public and Utility services are the most heavily utilized. (See Tables 42 through 44.)

A review of the literature indicates that income, occupation, and education appear to be farther below the national standard of living in rural America than in urban America. The Economic Research Service of the Department of Agriculture conducted research in this area. The findings reveal that in spite of improvement of non-metro incomes in the 1960's, the generally lower level of income in non-metro than metro areas has produced a disproportionate extent of

Table 42

Relation of Marital Status to Utilization of Service Agencies

Area I: Social Services

Service Agencies	Single		Married		Separated		Widowed		Divorced		Not Reported	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Social Security	1	6%	26	11%	1	7%	11	28%	1	13%	1	100%
Human Service	2	13%	14	6%	5	36%	6	15%	0			
Food Stamps	3	19%	14	6%	5	36%	5	13%	0			
Family Planning	2	13%	13	5%	1	7%	0	-	0			
N=	16		239		14		40		8		1	

Table 43

Relation of Marital Status to Utilization of Services Agencies

Area II: Health Services

Service Agencies	Single		Married		Separated		Widowed		Divorced		Not Reported	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Health Department	0		37	16%	6	43%	1	3%	1	13%	1	
Hospitals	1	6%	49	21%	0		6	15%	0		2	
N=	16		239		14		40		8			

Table 44

Relation of Marital Status to Utilization of Services Agencies

Area III: General Public Services

Service Agencies	Single		Married		Separated		Widowed		Divorced		Not Reported	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
City Councilman	1	6%	10	4%			2	5%			1	
Police Department	1	6%	14	6%			1	3%				
Community Center			18	8%			2		2	5%	1	
Public Schools			39	16%	4							
Employment Services	1	6%	10	4%								
N=	16		239		14		40		8		2	

poverty among families outside of metro areas. (Economic Research Services, 1971).

Rodgers' and Burdge's research concurs with the Economic Research Services Report. Rodgers and Burdge report that the average income of farm people is about half as much as the average income for non-farm people. (Rodgers and Burdge, 1960).

In trying to determine the relation of occupation and income with service utilization in this study, the findings seem to indicate that persons with occupations such as service workers, farmers, household workers, and professionals tend to seek the use of social services, and service workers utilize health services more often than managerial and clerical workers.

Service experiences are differentiated by income categories in the Tables to follow. (See Tables 45 through 50.) As income levels increase (to mid-income range), utilization of services also increases. Specifically, as income increases, utilization of health department services increases. Conversely, as income decreases, utilization of hospital services increases. In other words, low income families tend to use hospital services more often than health department services when seeking medical care. Another interesting finding is that as income levels increase, the number of contacts with services like family planning and social security also increase. This finding is specifically prevalent with families whose income range from $8,000 to 9,999.

Table 45

Relation of Occupation to Utilization of Service Agencies

Area I: Social Services

Service Agencies	Farmer	Professional and Managerial	Clerical Sales Trades and Crafts	Household	Service Worker	Laborer	Retired	Other/ No Response
Social Security	21%	5%	22%	9%		6%	4%	17%
Human Services	7%	5%	6%	7%	29%	6%	4%	17%
Food Stamps	7%	3%		5%	57%	13%	4%	19%
Family Planning		5%	6%	8%	14%	6%		6%
N =	71	37	18	100	7	16	24	48

Table 46

Relation of Occupation to Utilization of Service Agencies

Area II: Health Services

Service Agencies	Farmer	Professional and Managerial	Clerical Trades Sales and Crafts	Households	Service Worker	Laborer	Retired	Other/ No Response
Health Department	4%	16%	17%	21%	29%	25%	13%	8%
Hospitals	21%	11%	28%	16%	14%	14%	21%	19%
N =	71	37	18	100	7	16	24	48

Table 47

Relation of Occupation to Utilization of Service Agencies

Area III: General Public Services

Service Agencies	Farmers	Professional and Managerial	Clerical Sales Trades and Crafts	Household	Service Workers	Laborer	Retired	Other/ No Response
City Councilman	3%	11%		4%				2%
Police Department	4%	3%	17%	8%		6%		4%
Community Center	1%	3%	6%	11%		6%	8%	6%
Public Schools	1%	3%	6%	21%		31%	16%	15%
Employment Services		16%	6%	5%	29%		12%	4%
N =	71	37	18	100	7	16	24	48

Table 48

Relation of Income to Utilization of Service Agencies

Area I: Social Services

Service Agencies	0-$3,999 %	$9,999 %	$15,999 %	$16,000+ %	Other Don't Know No Answer, etc %
Social Security	8.7%	12%	16.4%	50%	6%
Human Services	4.3%	12%	7.4%	33%	7%
Food Stamps	10.9%	12%	5.7%	17%	7%
Family Planning	2.2%	1.3%	8.2%	50%	1%
N =	46	75	122	6	72

Table 49

Relation of Income to Utilization of Service Agencies

Area II: Health Services

Service Agencies	0-$3,999	$4,000-9,999	$10,000-15,999	$16,000 and Up	Other
Health Department	7%	17%	19%	17%	8%
Hospitals	28%	19%	12%	50%	18%
N =	46	75	122	6	72

Table 50

Relation of Income to Utilization of Service Agencies

Area III: General Public Services

Service Agencies	0-$3,999	$4,000-9,999	$10,000 15,999	$16,000 and Up	Other
City Councilman	4%	3%	2%	33%	4%
Police Department	13%	7%	2%	33%	4%
Community Center	4%	4%	8%		7%
Public School	9%	8%	17%	100%	14%
Employment Service	2%		4%		7%
N =	46	75	122	6	72

Thirty-eight percent of the respondents in this study report gross incomes of less than $10,000 per year. The same percentage is reported in the $10,000 to 15,999 income range. This data would appear to indicate a kind of equal distribution of income among the families studied.

Non-Users of Services

In the community survey the researchers were interested in the number of people who utilize services as well as the number who do not utilize services. The services that were examined are Social Services, Health Services, and General Public Services.

Each service is crossed tabulated by education, age, race, occupation, marital status, and income.

The area of non-utilization is of particular interest to the researchers because of the limited number of available resources to the rural survey population. The fact that the areas surveyed in this study are isolated from many of the resources in question has an impact upon the non-utilization (100 percent) found among the college graduates and the professionals. There tends to be slightly higher non-utilization of hospitals than the health department. This is particularly true when age is considered; in the 35 to 64 and above category, the respondents utilize hospitals more, and in 18-34 year

category, there is a higher utilization of health departments. (See Table 51.)

Table 51

Percentage of Non-Utilization of Health Services by Age

Service Agencies	17 & Below	18-24	25-34	35-49	50-64	64+	No Response
Health Department	100	73.7	66.7	88.2	93.0	98.3	100
Hospital	100	79.0	79.0	83.3	87.3	78.7	85.7

An examination of race as a variable reveals again a higher utilization of hospitals than of the health department. Of the Black respondents, 91.5 percent do not utilize the health department, and 81.4 percent do not utilize hospitals. Although whites utilize the health department more, 84.3 percent do not utilize health department facilities and 82 percent do not have any contact with hospitals.

Single respondents have the highest percentage of non-utilization when marital status is a variable. It is interesting to note that 57.1 percent of the separated respondents are non-utilizers of health department services and that 100 percent are non-utilizers of hospitals. Of the 239 married respondents, there is a higher non-utilization of health departments than hospitals, 84.5 percent and 79.5 percent respectively.

The largest occupational categories in this study are household workers, farmers, and retired and professional workers. The percentage of non-utilization for these occupations shows some interesting differences. The farmers have the highest percentage of non-utilization of health departments (95.79 percent) than all the other occupations considered, which is higher than the percentage of non-utilization of hospitals. In contrast the professional workers have a higher percentage of non-utilization of hospitals (88 percent) as opposed to health departments (80 percent). Household workers have a higher percentage of non-utilization of hospitals, and 79 percent non-utilization of health departments. Eighty-seven and a half (87.5) percent of the retired respondents do not utilize the services of health departments, 79.17 percent do not utilize hospitals.

When income is a variable in every category but three, there is a higher non-utilization of health departments. Table 52 shows the percentage of non-utilization for each income level.

The non-utilization of services is found to be over 50 percent when all variables are considered and averages between 70 and 80 percent. The percentage of non-utilization is particularly high for health and medical services, which indicates that the availability of services is inadequate.

Table 52

Percentage of Non-Utilization of Health Services by Income

Service Agencies	0-1,999	2,000-2,999	3,000-3,999	4,000-5,999	6,000-7,999	8,000-9,999	10,000-11,000	12,000-13,999	14,000-15,999	$16,000+	Don't Know
	%	%	%	%	%	%	%	%	%	%	%
Health Department	87.5	100	93.3	90.4	84.0	76.0	78.2	83.3	82.0	83.0	91
Hospitals	68.7	80.0	66.7	71.4	80.0	90.0	89.1	93.0	73.0	50.0	81

The services offered by the Public Health Department generaly include blood tests, birth control clinics, immunization programs, and other lab tests. These services can also be obtained at hospitals. In the case of the survey population, the respondent probably utilize the health facility most convenient to their community. In many cases the nearest facility is 10-15 miles away.

The social services in question (Social Security, Human Services Departments, Food Stamps and Family Planning) are also crossed with each demographic variable. The highest percentage of non-utilization is found among the respondents with some college, those in graduate school and professionals when education is crossed with social services. The lowest percentage of non-utilization is social services. The percentage of non-utilization is lower for those respondents who had completed 0 - 8 years and 9 - 12 years of school. (See Table 53.)

Table 53

Percentage of Non-Utilization of Social Services by Education

Service Agencies	0-8	9-12	Some College	College Graduate	Graduate Profession	None
Social Security	86.9	89.0	85	78	100	100
Human Services Department	86.1	95.0	100	89	100	100
Food Stamps	84.0	96.2	100	100	100	100
Family Planning	98.4	91.2	100	100	100	100

The cross of age with social services is consistent with the norm. The percentage of non-utilization of family planning clinics seems unusually high when one considers that 239 of the respondents are married and that 75 percent of the population is female. The 50-64 year old age group has the lowest percent of non-utilization for social security, food stamps, and human services departments. However, the figures differ slightly for the 64 and above age group; they have a higher non-utilization for all four categories. (See Table 51.) This difference may be attributed to the transportation problems of the elderly as well as to a lack of availability of services.

Household workers and farmers comprise the largest group of respondents when occupation is a variable. Of these two groups there is a higher percentage of non-utilization among household workers. Among the household workers in particular there is a high non-utilization of food stamps (95 percent). The non-utilization of services by retired individuals is high for all social services. Of the seven service workers in the survey, 42.8 percent do not utilize food stamps, which indicates the possibility that over half of the service workers do utilize food stamp service. Generally, non-utilization is high for all occupations across each service area.

It was assumed that the cross of income and social services would show that as income increased, non-utilization would also increase. This pattern does not appear in

the $16,000+ category, which shows a 100 percent non-utilization of family planning, food stamps, and human service departments by the individuals in the 0-$1,999 income range. Characteristically, it is individuals in this income bracket that utilize these services.

The police department, employment services, public school systems, community centers, and city councils are considered general public services. These are services that are available to the entire community as a result of paying taxes. However, most of these services are located out of the community and have to be traveled to by car in the nearest city. The percentage of non-utilization remains high for the general public services as is true for the social services and health services.

When education is considered, the respondents who have completed 0 - 8 years and 9 - 12 years of schooling are the largest group of respondents. Within this group there is a higher percentage of non-utilization among respondents who have completed 0 - 8 years of schooling. The percentage of non-utilization is lower for public schools for each education level. Generally, the percentage of non-utilization runs from the high 80's to 100 percent.

The consideration of age does not show any important differences. Non-utilization is high for all age groups. The lowest percent of non-utilization is 86.8 percent, which is found for 18-24 year olds in dealing with the police

department and employment services. Generally, non-utilization is high.

Comparatively, when race is a variable, there is little difference in the percentage of non-utilization. However, black respondents tend to have slightly higher percentages of non-utilization than white respondents, and for each race there is a lower non-utilization of public schools than the other services. (See Table 54.)

Table 54

Percentage of Non-Utilization of General Public Services by Race

Service Agencies	Black	White
Police Departments	96.6	94.0
Employment Services	98.3	96.1
Public School Systems	90.0	84.0
Community Centers	97.0	93.5
City Councils	98.3	96.1

Marital status shows that the married, separated, and divorced respondents have a lower percentage of non-utilization of public schools than single and widowed respondents. In all the other categories, the percentage of non-utilization is over 90 percent.

There is some variation in the percentage of non-utilization when occupation is crossed with general public services. The table below shows that the lowest percentage

Table 55

Percentage of Non Utilization of General Public Services by Occupation

Service Agencies	Farmer	Profes-sional	Manage-ment	Clerk Worker	Sales Worker	Laborer	Retired	Other	No Response
Police Departments	96.0	96.0	100	100	*	93.7	100	95.6	100
Employment Services	100	100	100	100	100	100	87.5	95.6	100
Public Schools	98.5	84.0	83.3	100	100	71.4	83.3	85.0	50
Community Centers	98.5	96.0	100	100	100	100	92	93.4	100
City Councils	97.1	88.0	91.6	100	100	100	100	98.0	100

*One respondnet did utilize employment services.

of utilization for public schools is lower than it is for the other services included in general public services. As has been consistent throughout the general public services category, the percentage of non-utilization for public schools has been lower, ranging in percent from the upper 70's to the mid 80's.

Health and Medical Services

This chapter would not be complete without a discussion of the analysis of health and medical services provided rural isolated residents. An earlier section of this report reveals that 20 hospitals were reviewed. Of that number, approximately seven health facilities are utilized with any degree of frequency.

When the seven health facilities are cross tabulated with geographical areas, the following findings are revealed: (See Table 56.) This data supports the notion that residents of Williamson and Cheatham counties utilize medical facilities in Davidson County. The data reveals that persons in Rutherford County do not travel outside of the county to receive the necessary medical care. On the other hand, all of the respondents in Cheatham County seeking medical care travel to Davidson County for services.

During the 1976 survey year, 84 percent of the study population saw a doctor within a 12 month period. Significantly, eighty-eight percent of the study population had exerienced

Table 56

Number of Respondents Utilizing Medical Facilities

Service Agencies	Davidson		Williamson		Rutherford		Cheatham	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Hospital I. Davidson County	33	22						
Hospital II. Davidson County	19	13	11	11			2	6
Hospital III. Davidson County	42	28	4	4			1	3
Hospital IV. Davidson County	5	3	2	2			5	14
Hospital V. Davidson County	9	6					2	6
Hospital VI. Rutherford County					16	42		
Hospital VII. Williamson County			26	29				
Hospital VIII. Davidson County Other	26	17	19	20			6	18
Hospital IX. Williamson County Other			50	5				

hospitalization. Another significant finding shows that 60 percent of the study population feel they could receive adequate and timely medical care in cases of emergencies.

At least 67 percent had some type of medical insurance, with at least 27 percent of the population with Medicare insurance and 9 percent of the population with Medicaid. These trends seem to substantiate that medical care is slightly more accessible when financial barriers are removed. Yet, the majority of the population (67 percent) are dissatisfied with the availability of medical care.

Other findings include:

-- 32 percent of the population seek medical attention from private physicians in the community.

-- 66 percent utilize private physicians outside the community.

-- 21 percent of the population have access to ambulance service.

-- 63 percent purchase medical supplies in a nearby community, while 22 percent purchase medical supplies in a distant community.

While 22 percent purchase medical supplies in a distant community, there is still the question of satisfaction of services, time to receive services, and fulfillment of medical needs. The majority of the respondents wait less than one hour to receive medical care. The findings also reveal that the majority of respondents utilizing medical

services are satisfied and feel that their needs are fulfilled and that things turn out the way they hope they will.

As with all major variables of this study, each factor has been analyzed by income, age, race, region and other variables, and the following generalization can be made:

-- persons with 9-12 years of education and middle income tend to use medical services more frequently than persons with less income and less educational experience;

-- persons of all ages utilize medical facilities in the counties studied, but usage increases with age;

-- rural Blacks on a percentage basis utilize 3 of the medical facilities slightly more than whites;

-- married families with occupations as farmers, household workers, and laborers utilized medical facilities more than persons in other professions.

Despite the findings, the survey data shows, generally, a high level of satisfaction with services (health and social services). Yet, the data shows that more than one half of the study population indicate a dissatisfaction with the health and social system. Why this paradox exists is unknown.

Respondents attribute the non-use of both health and social services to the availability of service in the community. (See Table 57.)

Table 57

Reasons for Non-Use of Services

Responses	Number of Respondents	Percent
Not available in community	175	54.52
Embarrassed because appeal to poor		
Don't believe in welfare or charity	6	1.87
Not eligible	4	1.25
Believe in paying for services	1	.31
Have no need for service		
Other	14	4.36
No Answer	121	37.69

Further, respondents express a need for assistance in getting adequate services to the counties. Unquestionably, the most requested service needs are medical, transportation, and social services in the counties studied.

Table 58

Number of Persons Requesting the Need for Adequate Services

Assistance in Getting Adequate Services	Number	Percent
Medical Service	239	74.45
Social Service	157	48.91
Legal Services	117	36.45
Child Welfare	145	45.17
Improving House	121	37.69
Transportation	158	49.22
Employment Services	135	42.06
Other	27	8.41

In spite of these mixed perceptions about the health and social service systems, the survey conducted in this region provides important new insights into the service delivery system and is a study of importance to practitioners, providers, and governmental officials alike.

Non-Users of Health Services

Five of the medical facilities are located in the Metropolitan Nashville community; the minimum number of miles required to drive from one of the survey communities to one of the hospitals in the Nashville area is approximately ten miles. Other health facilities are located in two of the survey counties; however, the services at these facilities are limited, and patients are sometimes transferred to hospitals in the Nashville, area.

Of the seven medical facilities, one is a Black hospital located in a Black community with a 90 percent Black staff. The survey population is 18 percent Black. The non-utilization of this facility by white respondents is 99.6 percent.

The tables presented show the actual numbers and percentage of non-utilization for each hospital in the counties surveyed, by education, age, race, marital status, occupation, and income. In the survey population, hospitals are utilized slightly more than health centers; however, non-utilization for both is high.

Hospital III tends to have a lower percentage of non-utilization than the other six hospitals. This facility also has the lowest percentage of non-utilization (56.2 percent) of any hospital across all variables when income is controlled. The individuals falling in the $2,000-2,999 range make up the 56.2 percent who do not use hospitals.

The findings also reveal that there is high non-utilization of health services (ranging from 88 to 90 percent) among the survey population. This high percentage of non-utilization is, perhaps, an indication of distance or an indication that the survey population has no need for hospital services.

It is assumed that the percentage of non-utilization among those respondents in the 64+ years category would be lower because elderly people are hospitalized more frequently than younger people. They are also frequently recipients of Medicare and Medicaid, which means that they can afford medical services. When occupation is considered, the lowest percentage of non-utilization is 79.1 among retired respondents for Hospital III.

As evidenced by Census data relative to Tennessee, there is a physician shortage in all counties studied. Moreover, Cheatham County has no short-term general hospital in the county. Other statistical data reveals that the majority of the respondents in the community survey attribute inadequate medical facilities and distance as the primary problems.

Table 59

Problems with Medical Services

Problem Medical Services #1	Number of Respondents	Percent
Inadequate medical facilities in and around community	99	30.84
Medical care is too high priced	25	7.79
Not enough health services for those on meidcal assistance	3	.93
Hospital and other health facilities too far away	69	21.50
Lack of concern for individual at health care center	--	--
Not enough facilities for the elderly	4	1.25
Not enough facilities for mothers with children	--	--
Other	4	1.25
Don't Know	5	1.56
No Answer	112	34.89

Even though the respondents attribute distance and inadequate facilities as the major problems, more than 80 percent of the respondents seek health services within a 12 month period. Sixty-six percent seek private physician care outside their communities, while 32 percent seek private physician care inside the community.

Transportation

For years, this country has experienced a long-term trend away from public transportation. Its use has been declining in all but the largest cities. Public transportation is most used for travel to and from work. There have been cries from interested public to provide additional services by increasing bus lines to include outlying and rural areas. Others have indicated a need for more people to use public transportation for purposes of saving energy. There are some problems associated with public transportation, especially for those persons who are elderly and those persons who cannot afford personal vehicles. The problems associated with two groups of people may be categorized as follows: "(1) those who could use existing public transportation but cannot afford it, (2) those who for one reason or another need to be picked up and returned directly to their homes, (3) those who live in areas where there is no transportation. Solutions that have been tried in various communities include: (1) reduced fares for older people at specific hours, (2) public subsidy to improve bus schedule and routing, (3) use of volunteers in private automobiles, (4) non-profit transportation services operated by senior centers and other social services, (5) the use of church buses." (Atchley, 1972).

The proferred solutions to the transportation problem do not aid those persons residing in rural areas. Essentially,

the rural transportation problem is that there is no public transportation available. The solution to the transportation problem in the areas studied is ownership of personal vehicles. The findings in this study indicate that the respondents of driving age have available personal transportation that is in good to excellent condition.

Table 60

Number of Persons Owning Vehicles

Do You Own Car?	Number	Percent
Yes	281	87.54
No	38	11.84
No Answer	2	.62
N =	321	100

Even though the majority of the study population owns vehicles, ten percent of the respondents feel a need to correct the transportation situation. A suggested correction to the transportation problem is identified as rerouting public transportation so that it better serves the rural community.

Other interesting factors regarding the transportation issue is centered around the geographical location of goods and services. In all cases, the study population has to travel from 13 to 25 miles for services (e.g., employment offices, day care centers, hospital, etc.). The majority of the population uses personal vehicles because this is essentially the only mode of transportation in the communities.

One notes that automobiles are an essential item for persons residing in rural areas. There still remains a strong sense of union and close relations with neighbors and friends. Those persons who do not own vehicles or have transportation problems are provided transportation by relatives, friends, and neighbors. Respondents were asked what means of transportation they used to get to various services. An overwhelming majority of the study population indicated the use of personal vehicles.

Table 61

Mileage from Different Agencies

Agencies	1-12	13-25	26-38	40 & Over	Don't Know	No Response
	%	%	%	%	%	%
Human Service Dept.	18	75	1	--	2	2
Food Stamps	17	75	.9	--	4	2
Social Service	18	73	3	--	2	2
Employment	12	70	4	.6	8	4
Day Care Center	16	62	3	.3	12	4
Family Counseling	11	65	3	.3	15	4
Community Center	23	59	2	.3	9	4
Hospitals	23	70	2	.3	.3	3
Clinics	23	66	3	--	2	3
Physicians Office	23	69	2	.6	1	3
Dentist	38	53	2	.6	1	3
Health Department	18	72	2	.6	2	3
Bus Lines	38	52	1	.9	2	3

N = 321

Table 62

Transportation Usage to Service Agencies

Service Agencies	Car/Neigh/Friend Number	Car/Neigh/Friend Percent	Ambulance Number	Ambulance Percent	Personal Vehicle Number	Personal Vehicle Percent	No Response Number	No Response Percent
The Hospital	32	10%	7	2.18%	276	86%	6	2%
Department of Human Services	20	7%			243	65%	-	28%
To Work	20	6%			243	76%	58	18%
Food Stamp Office	23	7%			210	65%	88	27%
Community Center	23	7%			205	64%	91	28%
Employment Office	18	6%			210	65%	93	29%
Day Care	17	5%			205	64%	99	31%
Social Security Office	30	9%			225	70%	66	21%
Health Department	23	7%			226	70%	72	22%
Downtown Shopping and Business Details	33	10%			261	81%	27	8%
Doctors Office	34	11%			261	81%	26	18%
Medical Clinic	29				247	78%	45	14%
Other (ambulance)			7	2.18%				

N- 321

There are only three persons who make use of public transportation when accessible; however, 9 percent of the respondents reveal that they are dissatisfied with public transportation

A second series of transportation questions was directed to those persons with available transportation who still encountered problems. Respondents were asked to indicate whether transportation is a problem to them. As indicated, the majority of respondents (84 percent) state that it is not; however, the remaining minority (14 percent) indicate that it is a problem and attribute the primary problems to inadequate bus routes, insufficient number of direct routes from the community to such places as downtown, and other personal reasons.

Summary

A review of this chapter reveals that in all areas the respondents who make contact with the service agencies are satisfied with treatment and basically feel that their needs are fulfilled completely. Though there are fewer people making contact with General Public Services as compared to Social Services and Health Services, there is a slight increase in the number of persons who are dissatisfied with services and needs fulfillment. Utility Services have the largest participation rate of service contacts. It is obvious that this service category would

have the largest percentage of persons being dissatisfied with service. This is due partly to the fact that opinions on utility services can be more easily gaged than can opinions on some of the other services reviewed (i.e., Social Services).

The following statements provide a summary of findings related to utilization of services and background information.

Education

-- There appears to be a slightly higher rate of utilization among those respondents with 9-12 years of schooling.

-- Social services, food stamps, and human services are utilized highest among people 35-49 years of age. It is only after the age of 64 that there is a decrease in the utilization of human services and food stamp programs.

Age

-- As age levels decrease, utilization of health department services seem to increase.

-- Persons of all ages utilize medical facilities in the counties studied; however, usage increased with age.

Race

-- While there are more whites than Blacks utilizing services, on a percentage basis, Blacks utilize social security and

food stamp programs slightly more than do whites. Family planning services are utilized by both races at the same rate.

-- Rural blacks on a percentage bases utilize 3 of the medical facilities slightly more than whites do.

Sex

--While the findings show that there are three times as many females as males interviewed, males are heavier users of social security and hospital services. Females are the predominant users of all services.

Occupation and Income

-- Persons with such occupations as service workers, farmers, household workers, and professionals tend to seek the use of Social Services.

-- Household workers and service workers utilize health services more often than managerial and clinical workers.

-- As income levels increase (to mid-income range), utilization of services increases. Specifically, as income increases, utilization of health department services increases. Conversely, as income levels decrease, utilization of hospital services increases. In other words, low income families tend to use hospital services more often than they do health department services when seeking medical care.

-- Married families with occupations as farmers, household workers, and laborers utilize medical facilities more than persons in other professions.

-- As income levels increase, the proportion of contacts with respect to services like family planning and social security increases.

Transportation

-- Eighty-eight percent of the study population own their vehicles.

-- The majority of the respondents have no problem with transportation

-- The percentage of the population who were experiencing transportation problems attribute the problems to 1) inadequate bus routes, 2) an insufficient number of direct routes from the community to places downtown.

-- There is no public transportation servicing the study area.

Distance

-- The average distance from all services is 13 to 25 miles.

-- The majority of the respondents in the community survey attributed inadequate medical facilities (99%) and distance (69%) as the primary problems in rural areas.

Other Concerns

-- A small minority of the respondents are not satisfied with the services received. There is no empirical data to substantiate the reasons for dissatisfaction or lack of needs fulfillment. One can only assume that the nature of certification and approval for services has a negative effect on the respondents who are seeking service. It is likely that in those cases where the respondents are not satisfied with service, they are not eligible for services or do not receive the services sought.

-- Thirty-two percent of the population seek medical attention from private physicians in the community.

-- Sixty-six percent utilize private physicians outside the community.

-- Twenty-one percent of the population have access to ambulance service.

-- Sixty-three percent purchase medical supplies in a nearby community, while 22 percent purchase medical supplies in a distant community.

-- Sixty-seven percent of the population is dissatisfied with the availability of medical services.

-- Respondents attribute the non-use of both health and social services to their not being available in the community. (5.5 percent of study population for both services).

Chapter 5

Needs Assessment

Community and Family Needs

"The study of rural society is a practical as well as scientific pursuit. It supplies a knowledge of the importance of rural American in the national life of the rural heritage of that life, and of rural-urban relationships. It shows the importance of social forces, groups, and organizations and the parts they play in community life. It also furnishes, if not techniques at least, clues for the understanding of rural life and the problems faced by rural families and communities," (Brunner and Kolb, 1971). By studying four isolated communities in Tennessee, it was assumed that some determinations could be made about their customs, problems, and needs, assuming that needs are determined by what that community perceives as needs.

Brunner and Kolb (1971) also state that people are vital and distinguishing features of any community. They give it life and meaning. However, people change, and what may be perceived as a need in one time frame may be

totally different in another. This investigation is interested in the respondents' assessment of needs in their communities. The respondents were asked to identify the greatest needs in their families and communities and to rank them according to priority. The needs identified are ranked in the following table.

Table 63

Community and Family Needs Identified by Survey Population

Needs	Rank	Percent
Community Needs:		
Medical	1	57.3
Public Transportation	2	25.9
Improved Housing	3	21.8
Day Care Facilities	4	20.2
Improved Roads	4	20.2
Family Needs:		
Utility Services	1	12.8
Baby Sitting Service	2	6.5
Medical	3	5.6
Money	4	3.1
Transportation	5	1.9

In identifying family and community needs, the list reflects those services that are absent from the community or too far away. Therefore, need is being defined by the consumer or respondents as the presence of those social,

public and health service agencies that would improve the quality of living in rural communities and families.

Family and community needs are also crossed with counties to show individual county ranking of needs. Family and community needs were listed as follows:

Table 64

Family and community Needs by Counties

	Number	Percent	Rank
Davidson County			
Community Needs:			
Medical	72	48	1
Public Transportation	54	36	2
Improved Housing	34	23	3
Social Services	26	17	4
Improved Roads	24	16	5
Day Care Facilities	21	14	6
Fire Protection	16	11	7
Employment Services	15	10	8
Police Protection	10	7	9
Recreation	9	6	10
Legal Services	9	6	10
Family Needs:			
Utility Services	44	29	1
Transportation	8	5	2
Medical	7	5	3
Money	4	3	4

(See next page.)

Table 64 Continued	Number	Percent	Rank
Williamson County			
Community Needs:			
Medical	69	71	1
Day Care	42	43	2
Improved Housing	19	20	3
Employment Services	19	18	3
Public Transportation	18	19	4
Legal Services	18	19	4
Social Services	17	17.5	5
Improved Roads	11	11	6
Recreation Facilities	5	5	7
Fire Protection	3	3	8
Police Protection	3	3	8
Family Needs:			
Baby Sitting Facilities	14	14	1
Medical	13	13	2
Money	8	8	3
Utility Service	4	4	4
Transportation	1	1	5
Rutherford County			
Community Needs:			
Employment Services	26	68.4	1
Medical Services	25	65.8	2
Improved Roads	16	42.1	3
Improved Housing	15	39.5	4
Social Services	13	34.2	5
Public Transportation	4	10.5	6
Day Care	1	2.6	7
Recreation Facility	1	2.6	7
Family Needs:			
Money	7	18.4	1
Medical	5	13.2	2

(See next page.)

Table 64 Continued	Number	Percent	Rank
Cheatham County			
Community Needs:			
Medical	18	50	1
Improved Roads	14	38.9	2
Public Transportation	7	19.4	3
Social Services	4	11.1	4
Improved Housing	2	5.6	5
Day Care	1	2.8	6
Legal Services	1	2.8	6
Recreation Facilities	1	2.8	6
Family Needs:			
Utility Services	4	11.1	1
Baby Sitting Facilities	2	5.6	2
Money	2	5.6	2
Transportation	1	2.8	3

The need for medical services is ranked first in priority, with 57 percent of the respondents feeling a need for medical services in their communities. This expression of need is consistent with the fact that 67 percent of the respondents are dissatisfied with availability of services. They attribute the medical need to inadequate medical facilities and feel that the medical facilities are too far away.

Public Transportation also ranks high in the priority of needs. The respondents do not use public transportation because it is not available in their communities. Those respondents who do not own vehicles are provided transportation by relatives, friends, and neighbors.

It is ironic that money is not a high priority need (31 percent), assuming that money could provide for better medical

care as well as bring doctors into the rural communities. Further analysis reveals that money ranks higher in Rutherford County as a family need than in the other three counties. One would think that the Cheatham County respondents would rank money higher, based on the present economic conditions of the county and the need for increased financial resources.

As for the relationship between the utilization of services and the need for services, 82 percent of all respondents do not utilize hospitals and 85 percent do not utilize the health department. These percentages reflect the fact that services are not convenient to the community. Therefore, the community perceives medical services as both a community need and a family need. In several cases family and community needs overlap.

The need for money, medical service, transportation, and day care service are identified as both family and community needs. Of the needs identified, only the need for medical services is identified by greater than 50 percent of the respondents. Other needs are identified by an average of 14 percent of the total sample.

Family and community needs are analyzed in relationship with race, age, income, occupation, and marital status. The analysis shows many similarities in terms of priority needs when all variables are considered, but also shows some important differences in ranking when each variable is looked at individually.

Community in this study is considered as the geographical community, and needs are identified by respondents reference to things that would improve the living conditions of their individual families.

When family needs were crossed with marital status, only 12.5 percent of the total number of single people in the survey responded. The single people identify medical and transportation as priority needs. The divorced and separated respondents, trying to make ends meet on their own, rank money as their most important need. Among the married and widowed, the ranking of needs is consistent with the total sample.

The cross of occupation with family needs shows household workers and farmers as the largest number of individuals interviewed, and both groups identify the need for utility services as a priority need. Of the 25 professionals interviewed in this survey, one expresses a need for money; however, no clerical workers or sales workers express a need for money. In every occupational category, need for utility services is a high priority need.

The largest number of respondents fall into the 35-49 year old category (32 percent). The need most often identified by this group is the need for utility services, which 26.5 percent of respondents identify. The largest percentage (33 percent) of individuals identifying money as a need fall in 18-24 year old category. In the 25-34 year category, the priority need is baby sitting services,

Table 65

Family Needs by Marital Status, Occupation, Age, Education, and Income

	Baby Sitting	Money	Transportation	Medical	Utility Service
	%	%	%	%	%
MARITAL STATUS:					
Single			1	1	
Married	15	13	5	19	41
Separated	1	6	1	2	3
Widowed		1	3	2	7
Divorced		1		1	1
OCCUPATION:					
Farmer		3	5	5	13
Professional		1		4	2
Manager	1		1	1	6
Clerical Worker					2
Sales Worker				1	
Trades/Craftsman					2
Household Worker	11	6	1	10	11
Service Worker		2		1	
Laborer		1			4
Retired	1	4	1		7

Table 65 Continued

Family Needs

	Baby Sitting	Money	Transportation	Medical	Utility Service
	%	%	%	%	%
AGE:					
18-24	4	7	1	4	2
25-34	10	5	2	8	4
35-49	2	4	4	3	27
50-64		3	1	3	8
65+		2	2	7	10
EDUCATION:					
0-8 years	3	9	3	11	20
9-12 years	12	12	6	11	25
Some College	1		1	2	4
College Graduate					3
Graduate/Professional				1	
INCOME:					
0-1,999			1	2	1
2,000-2,999					7
3,000-3,999			3	2	3
4,000-5,999		2		1	3
6,000-7,999	1	2	3	2	5
8,000-9,999	1	3	1	3	5
10,000-11,999	1	5	1	4	6
12,000-13,999	7	5	0	2	7
14,000-15,999	2			4	8
16,000+	1				3

identified by 17.2 percent of the respondents. Of the individuals thirty-five and older, the priority need is utility services.

Typically, the respondents are middle-aged and elderly married couples, with approximately 50 percent of the respondents having received more than 8 years of schooling. The family needs identified are again overwhelmingly the need for utility services. The respondents that had achieved grade levels above the eighth grade also identify baby sitting services as a high priority need.

The breakdown of income levels shows the priority family needs as utility services and baby sitting services. Of the individuals who fall in the income brackets lower than $4,000 a year, none identified money as a priority need. However, in every other category falling above $6,000 a year, there are some individuals who identify money as a need. This is ironic, considering that a family of two earning $3,700 is below the poverty line and 26.7 percent of the families that fall below $4,000 a year are larger than two members.

When race is correlated with family needs, for both Blacks and Whites the need for utility services is the most important family need. The Black respondents in the sample identify the need for money and medical as having the same importance and the need for baby sitting services as having a low priority need. For the white respondents in the sample, medical is second in the priority of needs and money is third

in the priority of needs. In addition, the need for baby sitting services out ranks the need for public transportation. The ranking of needs by race seems consistent with the fact that the income of Blacks are typically lower than the incomes of Whites, accounting for the need for more money and medical services.

Table 66

Ranking of Family needs by Race

Respondents	Rank	Percent
Black		
Utility Services	1	31.0
Medical	2	8.6
Money	2	8.6
Transportation	3	6.9
Baby Sitting	4	1.7
White		
Utility Services	1	13.1
Medical	2	7.7
Money	3	6.2
Baby Sitting	4	5.8
Transportation	5	2.3

When community needs are analyzed in terms of race, medical services rank number one in importance, with 48.3 percent of the Blacks and 60 percent of the Whites identifying the need for medical services. Of interest is the fact that 32.7 percent of the Black respondents identify the need for fire protection, and no Whites identify the need for fire protection.

Consistent with family needs, Blacks identify day care as a low priority, with 6.9 percent of the Black respondents identifying the need, while Whites rank it third, with 23.5 percent of the White sample responding.

When community needs are analyzed in relationship with age, marital status, occupation, and education, the most important needs were medical services and public transportation. (See Table 67.)

The cross of marital status shows that the respondents who are separated identify the need for social services as a high priority need. In comparison with the total sample, need for improved roads ranks number one, and need for employment services ranks number two. The need for employment services is ranked fifth in the overall sample.

The analysis of occupation shows that professionals in the survey identify and rank the need for social services number two and the need for employment services as three. Typically, professionals are not the beneficiaries of employment services and social services. However, they may feel the absence of such services from the community in justification for the need of the service.

The need for employment services is a high priority for individuals who fell into the 9-12 grade level of education, those with some college, and college graduates. Among almost every educational level, medical and public transportation rank one and two, except among the 9-12 grade range, where employment service is ranked two.

Table 67

Community Needs by Marital Status, Occupation, Education
Age, Race, and Income

	Medical	Public Transportation	Improved Housing	Day Care	Improved Roads	Social Services	Employment Services	Legal Services	Fire Protection
	%	%	%	%	%	%	%	%	%
MARITIAL STATUS:									
Single	3	2	3		5	3	4	1	
Married	145	61	55	59	46	46	46	23	17
Separated	8	4	4	3	3	5	3		
Widowed	21	12	6	2	9	5	5	3	1
Divorced	4	3	2	1	2	1	2	1	
OCCUPATION:									
Farmer	39	21	12	2	16	12	8	3	3
Professional	18	5	4	4	6	9	7	3	
Manager	7	8	1	3	2	3	1	1	3
Clerical Worker	9	3	2		3	1	3	1	
Sales Worker	1	1	1	1		1		1	
Trades/Craftsmen	3	1		1	1			1	2
Household Worker	59	21	30	31	25	15	25	9	7
Service Worker	3	1	1	1	1	3	1		
Laborer	8	6	3	5	2	5	5	3	2
Retired	8	6	9	7	3	3	7	2	
Other	28	10	7	9	6	8	3	5	1

Table 67 Continued

Community Needs

	Medical	Public Transportation	Improved Housing	Day Care	Improved Roads	Social Services	Employment Services	Legal Services	Fire Protection
	%	%	%	%	%	%	%	%	%
EDUCATION:									
0-8 years	78	32	27	25	23	21	10	8	7
9-12 years	88	39	39	37	36	35	43	18	10
Some College	11	8	3	2	5	2	5		1
College Graduate	6	4	1	1	1	2	2	2	1
Graduate/Professional	1								
AGE:									
18-24	25	10	6	14	8	9	8	8	4
25-34	39	17	16	16	12	9	15	5	4
35-49	54	21	20	21	17	18	20	7	6
50-64	29	19	23	12	9	10	10	6	2
65+	34	13	5	1	17	12	6	2	3
RACE:									
Black	28	18	13	4	17	10	7	2	19
White	158	65	57	61	48	50	53	26	0

(See next page)

Table 67 Continued

Community Needs

	Medical	Public Transportation	Improved Housing	Day Care	Improved Roads	Social Services	Employment Services	Legal Services	Fire Protection
	%	%	%	%	%	%	%	%	%
INCOME:									
0-1,999	6	7	3	3	3	5	4	2	3
2,000-2,999	7	7	2	1		3	0	1	0
3,000-3,999	13	3	2	1		4	0	2	0
4,000-5,999	11	6	2	3		5	0	3	1
6,000-7,999	16	7	4	3	1	5	1	1	1
8,000-9,999	16	6	5	5	9	6	3	0	2
10,000-11,000	27	7	10	13	11	10	15	5	4
12,000-13,999	28	14	19	18	14	5	17	4	2
14,000-15,999	17	6	6	5	3	6	5	3	2
16,000+	4	1	2	1	1	2	1	0	0
Don't Know	30	14	14	11	8	9	12	7	2

The cross of other demographic variable with community needs shows only some slight variations when compared to the overall sample's ranking of needs.

Community Participation

Community participation has been found to be significant, especially by Wells, who reviewed consumer participation in regional medical programs. He concludes that consumer involvement generates innovation in planning. Other studies relating to citizen participation in health care have focused on what may be termed "detached" health behavior (i.e., participation in policies and management of health care services). (Wells, 1970).

Williams suggests consumer participation to resolve the questions of trade-off among attributes of costs, assessibility, and scope of treatment in planning health care systems. Bryant and his colleagues report on OEO Neighborhood Health Center programs directed by community leadership and advised by health professionals, concluding that this type of participation contributes to meeting the needs of the poor. (Williams, 1970 and Bryant, 1970).

The researchers are concerned about the roles of consumers or citizens in the development of services in the areas studied. The findings reveal that the majority of the respondents have no active roles in determining the types of services in the community; moreover, the majority of the

respondents rarely if ever, get together to discuss community problems, nor is there a community organization. Failure to participate in community development may be a determining factor in regards to the development of services in the community. Despite the need for specific services, residents of these areas have become accustomed to the rural life styles and customs. The long trek into the central city provides an outlet; thus the community people look forward to this type of outing. It is only when emergencies arise that there is opposition to the proximity of service to residence. Many respondents express a need for services in their community on the one hand, and in the same breath do not wish to have an influx of business encroach upon their communities. It appears that the residents of these rural areas prefer the uncluttered life style that rural Tennessee has to offer rather than urban living.

This study of rural society and the assessment of community and family needs is an important aid to social and health planners in developing and planning services to meet the needs of rural residents. Gaps in services can be closed, patterns of behavior can be established, and existing services can be examined for utilization. In this needs assessment, the survey method was used to obtain data from the residents. The residents themselves assessed their needs. The following table summarizes their assessments.

Table 68

Community and Family Needs Identified and Ranked by the Survey Population

Needs	Rank
Community Needs	
Medical	1
Public Transportation	2
Improved Housing	3
Day Care Facilities	4
Improved Roads	5
Family Needs	
Utility Services	1
Baby Sitting Service	2
Medical Service	3
Money	4
Transportation	5

Chapter 6

Test of the Hypotheses

The paradigm outlined in Chapter 1 provides the guidelines for the major thrust of this study. It also indicates the number and kinds of variables under investigation and the procedures to be used. However, this study is not only concerned with the variables; equally important is the subject matter of this chapter--the relationships among variables.

The relationships to be explored and analyzed in this chapter are assessed to test the six hypotheses below:

1. It is expected that rural residents will be unaware of when services are available.

2. It is expected that distance and isolation are present when there is failure to make use of the service.

3. It is expected that transportation to the service is unavailable or non-existent.

4. It is expected that services are inappropriate to the need of the rural resident.

5. It is expected that services are insufficient in that they do not meet the current demand.

6. It is expected that cultural personal obstacles may prevent the use of services when available.

A final analysis is necessary in order to provide an overall assessment of these hypotheses as well as to determine the extent to which the factors reported in previous chapters interact to contribute to utilization, satisfaction, and additional need of services. For this purpose the Automatic Interaction Detection (AID) program will be employed. (Sonquest, Baker, and Morgan, 1973). Basically, the procedure takes one variable and searches all classifications of all other variables included in the analysis (as independent or predictor variables), which, when divided into two groups, explains more of the variance in the dependent variables than any division of any other predictors. Once the split is made, the program continues in the same manner, working with the resulting groups in a series of binary splits until the criterion for stopping the program has been reached or when no further variance can be explained. Unlike multiple regression techniques, which require non-categorical data, this program accepts data of any type, categorical, nominal, interval, or ordinal. Also, unlike regression techniques, which assume additivity, this procedure requires no such assumption. Indeed it was developed and intended as a

means for locating interactions to determine whether data are suitable for regression procedures. The user specifies the criteria for the splitting process (and consequently the termination). For the analysis reported below, the criteria for the splits are that: 1) the resulting groups must be significant at the .05 level and 2) there must be at least 20 subjects included in any group for that group to be considered a candidate for splitting.

For this analysis some variables are summed to from scores. Utilization is counted across health and social services. Satisfaction is summed for all services used to form a total satisfaction score. Needs are counted to form a total need score. Distance to all services is averaged and cultural obstacles are determined by selected responses to questions regarding non-use of services (i.e., "don't believe in welfare" as a response to the food stamp question).

Three separate AID analyses were performed: 1) utilization, 2) satisfaction, and 3) needs. For each of these analyses, 12 predictors were included, based on relationships determined in prior analyses or by the hypotheses of the study. These twelve predictors are: county, area, education, age, race, sex, occupation, income availability, average distance, transportation, and cultural obstacles.

Chapter 6

Test of the Hypotheses

The paradigm outlined in Chapter 1 provides the guidelines for the major thrust of this study. It also indicates the number and kinds of variables under investigation and the procedures to be used. However, this study is not only concerned with the variables; equally important is the subject matter of this chapter--the relationships among variables.

The relationships to be explored and analyzed in this chapter are assessed to test the six hypotheses below:

1. It is expected that rural residents will be unaware of when services are available.

2. It is expected that distance and isolation are present when there is failure to make use of the service.

3. It is expected that transportation to the service is unavailable or non-existent.

4. It is expected that services are inappropriate to the need of the rural resident.

5. It is expected that services are insufficient in that they do not meet the current demand.

6. It is expected that cultural personal obstacles may prevent the use of services when available.

A final analysis is necessary in order to provide an overall assessment of these hypotheses as well as to determine the extent to which the factors reported in previous chapters interact to contribute to utilization, satisfaction, and additional need of services. For this purpose the Automatic Interaction Detection (AID) program will be employed. (Sonquest, Baker, and Morgan, 1973). Basically, the procedure takes one variable and searches all classifications of all other variables included in the analysis (as independent or predictor variables), which, when divided into two groups, explains more of the variance in the dependent variables than any division of any other predictors. Once the split is made, the program continues in the same manner, working with the resulting groups in a series of binary splits until the criterion for stopping the program has been reached or when no further variance can be explained. Unlike multiple regression techniques, which require non-categorical data, this program accepts data of any type, categorical, nominal, interval, or ordinal. Also, unlike regression techniques, which assume additivity, this procedure requires no such assumption. Indeed it was developed and intended as a

means for locating interactions to determine whether data are suitable for regression procedures. The user specifies the criteria for the splitting process (and consequently the termination). For the analysis reported below, the criteria for the splits are that: 1) the resulting groups must be significant at the .05 level and 2) there must be at least 20 subjects included in any group for that group to be considered a candidate for splitting.

For this analysis some variables are summed to from scores. Utilization is counted across health and social services. Satisfaction is summed for all services used to form a total satisfaction score. Needs are counted to form a total need score. Distance to all services is averaged and cultural obstacles are determined by selected responses to questions regarding non-use of services (i.e., "don't believe in welfare" as a response to the food stamp question).

Three separate AID analyses were performed: 1) utilization, 2) satisfaction, and 3) needs. For each of these analyses, 12 predictors were included, based on relationships determined in prior analyses or by the hypotheses of the study. These twelve predictors are: county, area, education, age, race, sex, occupation, income availability, average distance, transportation, and cultural obstacles.

Utilization of Services

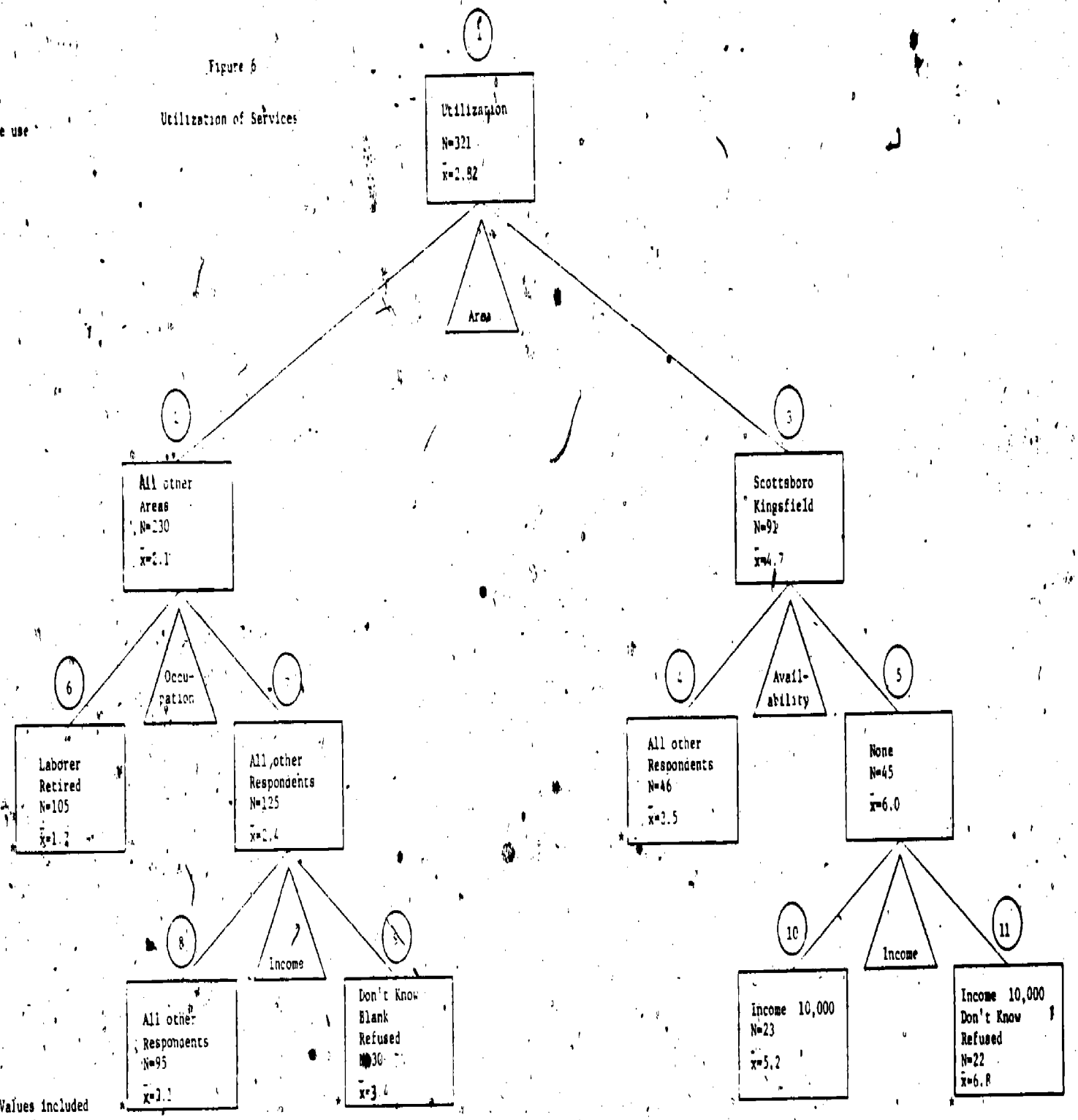
The mean utilization rate for all services is almost three (2.8) services used per person. (See Figure 6.) However, the area in which one resides is the strongest predictor of utilization. For those persons who live in the Scottsboro (Davidson County) or Kingsfield (Williamson County) area, the rate increases to almost 5 services per person (Group 3), while for those living in all other areas, the rate decreases to 2.1 services per person (Group 2). Awareness of availability of services in the community is an important predictor for the Kingsfield and Scottsboro residents. Those who are aware of services available in their community (Group 4) use fewer services (3.5 per person) than those who say no services are available (6.0 per person) in their community (Group 5). For the Scottsboro and Kingsfield residents who know of services available, no further splitting is possible. The utilization rate decreases to 5.2 services for those persons with an income of less than $10,000 and who are not aware of services, (Group 10) while for those whose incomes are greater than $10,000, or who refuse to report income, the rate of utilization increases to almost 7 (6.8) services per person (Goup 11). Income appears to overcome the problems created by lack of availability, allowing the individuals to seek services from private sources outside their community for these residents. (Review right side of Figure 6.)

Figure 6

Utilization of Services

Higher score = more use

R^2 = .395



Key:

2 Group #

Variable and Values included

Variable which formed the split

N Number of subjects included in the group

$\bar{x}$ Mean of the dependent variable for the group

* Final grouping, no further splits

Socio-economic status is, again, an important predictor of utilization for those persons who reside in areas other than Scottsboro or Kingsfield. Retired persons and laborers in all other areas use fewer services than all other groups (1.7 per person - Group 6) with no further explanation possible. For Group 7, the rate of utilization for all occupations except retired persons and laborers is 2.4. Income is again an important predictor for Groups 8 and 9. Those who do not report their incomes have a higher rate of utilization (3.4) than those who report income (2.1). (Review left side of Figure 8.)

This analysis demonstrates the substitutive interaction between area (location) and economic status. The Kingsfield area of Williamsom County and the Scottsboro area of Davidson County have reasonable access to services offered in Nashville and thus utilize more services. While half of these respondents are not aware of available services to their community, income compensates for this lack, and those with higher incomes utilize more services, presumably obtained outside their communities. Whether income reflects private purchasing power or a more indirect influence such as transportation or the ability to take time off from work remains a question. Thirty-nine percent of the variance of utilization is explained by this analysis

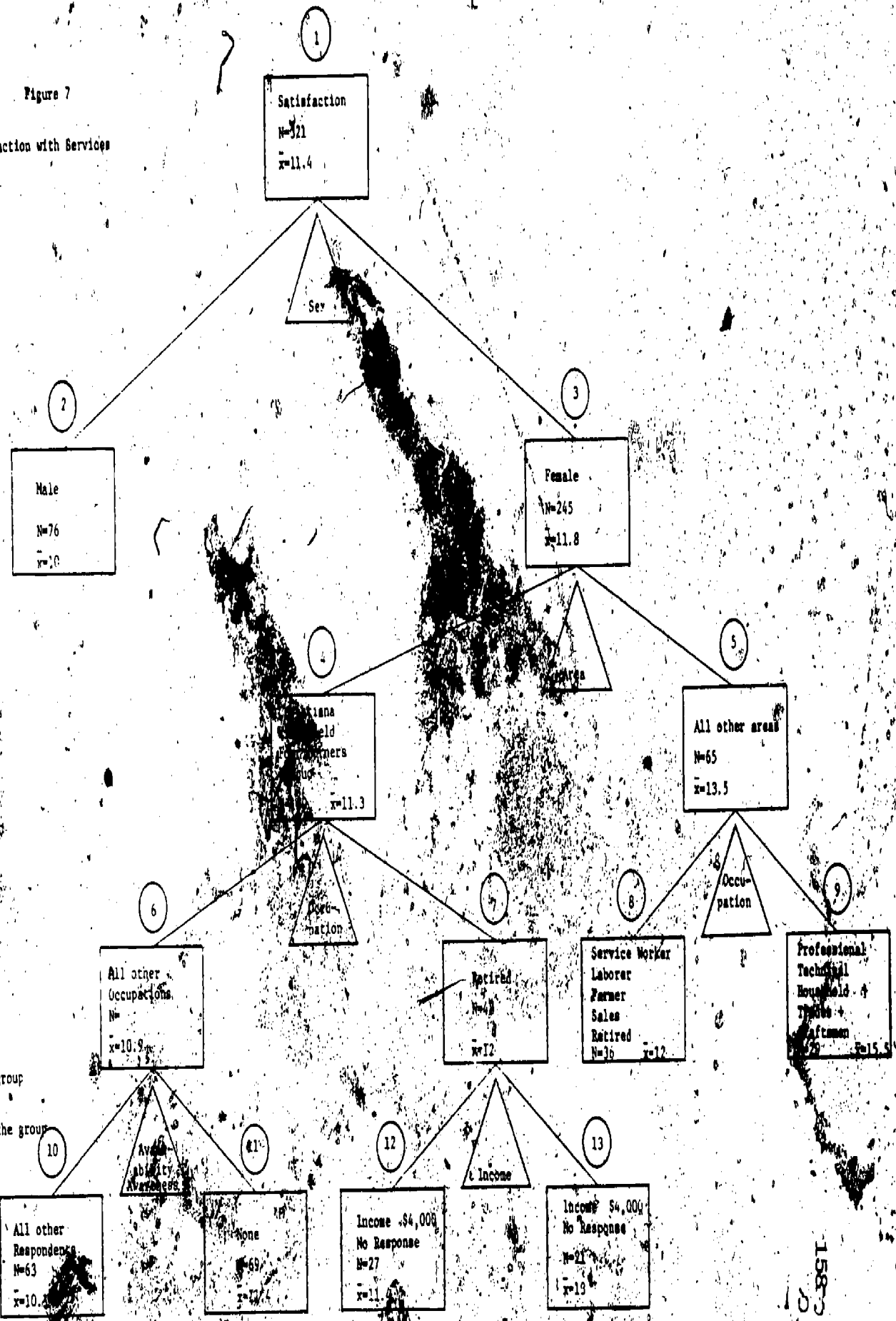
The following table provides a one-way analysis of variance on the final groups.

Figure 7

Satisfaction with Services

Higher Score = greater satisfaction

R^2 = .204



Key:

2 Group #

Variable and Values included

Variable which formed the split

N Number of subjects included in the group

$\bar{x}$ Mean of the dependent variable for the group

* Final grouping, no further split

Table 69

One-Way Analysis of Variance on Final Group

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square
Between	6	7032.60	1172.10
Error	314	11216.18	35.72
Total	320	18248.78	57.02

Satisfaction with Services:

Mean satisfaction with services is very low for the total population (Figure 7), even though most people who use services are fairly satisfied with the service. Females are slightly more inclined to satisfaction than males (Groups 2 and 3), due probably to the larger number of females who make service contacts. Women who live in Christiana, Kingsfield, Four Corners, or Pasquo (Group 4) are less satisfied with services than those who live in other areas (Group 5). Those with generaly higher professions (Group 9) are the most satisfied of any group, while males (Group 2) and women living in Christiana, Kingsfield, Four Corners, and Pasquo (Group 10) who are not retired and who are aware of services are least satisfied. Retired women with incomes over $4,000 report increased satisfaction with services. Only 20 percent of the variance in satisfaction is explained by this model, though

six locations and occupation are obviously important contributions to satisfaction. Table 70 shows the one-way analysis of variance over the final groups of this analysis.

Table 70

One-Way Analysis of Variance on Final Groups

Source of Variation	DF	Sum of Squares	Mean Square
Between	7	803.54	114.79
Error	313	313.72	10.02
Total	320	394.08	12.31

Needs

Our final AID analysis is of the number of needs (either family or community) specified by the respondents (Figure 8). This powerful model indicates that cultural obstacles are the best predictor of needs, with persons reporting such feelings as "believe in paying for what I get" or "don't believe in welfare (charity)" specifying a larger number of needs (Group 3) than those who do not give these types of answers to questions regarding their not using services (Group 2). For persons who have cultural obstacles, the area in which they live is the final determinant of need, with persons living in Scottsboro, New Hope, and Kingsfield (Group 11) reporting greater needs (mean 5.6) than those living in

Pasquo, Fairview, or Pegram (Group 10, mean 4.2) or Belltown, Christiana, and Four Corners (Group 6, mean 2.9).

For persons who display no cultural obstacles (Group 2), area is also an important predictor. Again, Scottsboro, New Hope, and Kingsfield (this time with Christiana added) cite a greater number of needs (Group 5) than those living in ohter areas (Group 4). Need increases for younger respondents (Group 9) while it decreases for those over 35 years of age (Group 8). Those persons over 35 years of age and residing in Davidson and Rutherford Counties report a greater number of needs (Group 15) than those living in Williamson County (Group 4).

Persons who specify fewer needs are those who have no cultural obstacles (Group 2), those who reside in areas other than Christiana, Kingsfield, Scottsboro, or New Hope (Group 4), thos with occupations of household workers, managers, and retirees (Group 12), and those with no more than 12 years of schooling (Group 16).

Thirty-six percent of the variance in needs is accounted for by this model. (Review Table 71.) This data appears to substantiate that cultural barriers and location are important contributors to need.

Figure 8

Analysis of Needs

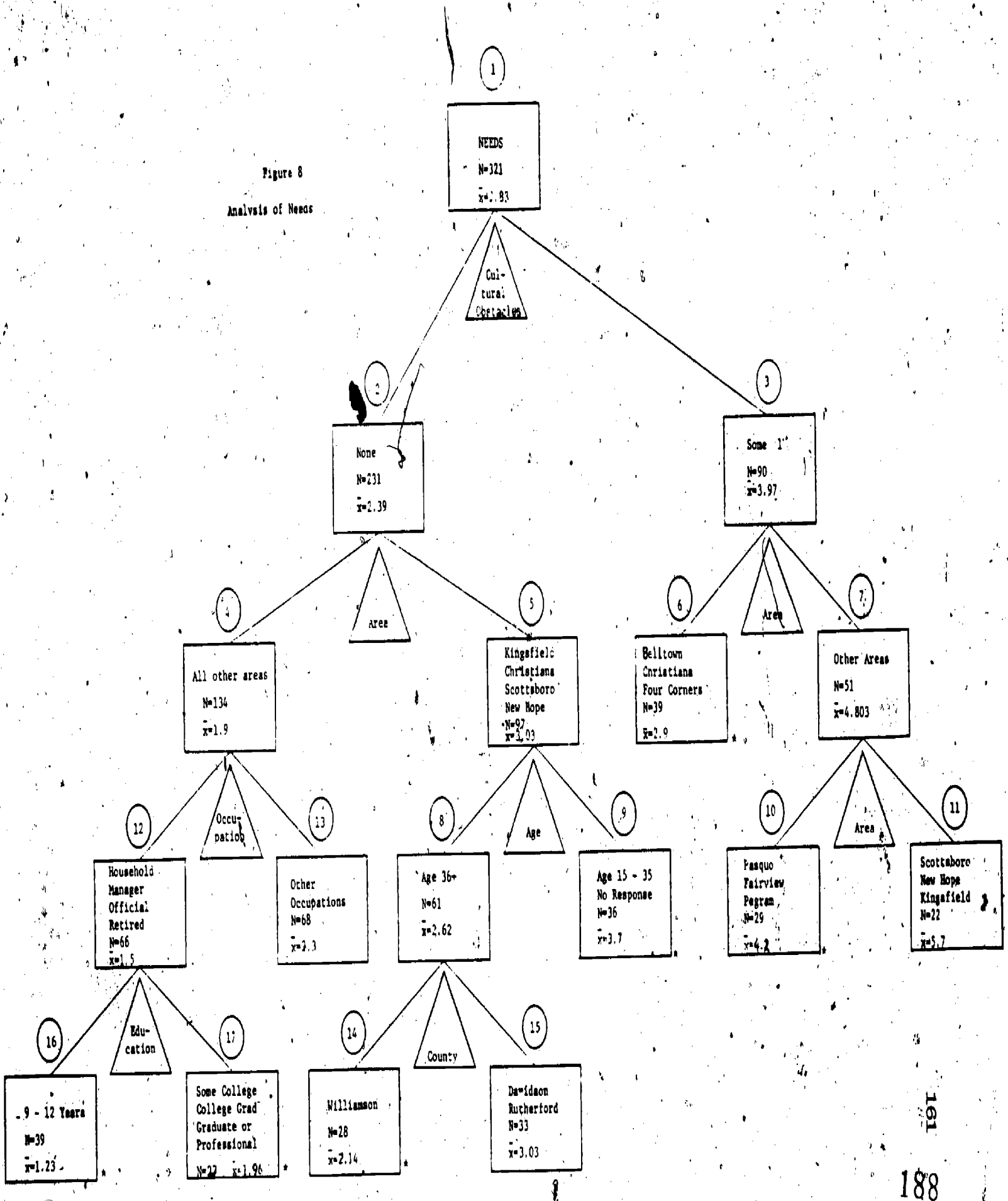


Table 71

One-Way Analysis of Variance in Final Groups

Source	DF	Sum of Squares	Mean Square
Between	9	4074.0	452.67
Error	311	1408.4	23.82
Total	320	11482.4	35.88

Conclusions

The above analysis of utilization, satisfaction, and needs generally confirms the hypotheses of the study.

Hypothesis I: It is expected that rural residents will be unaware of services when available.

Results: Not proven conclusively; however, unawareness of available servites is an important predictor of utilization of services for the Scottsboro and Kingsfield areas but for no other area. One can certainly make the argument that if services are used, they are obviously available. The argument that if used to a greater extent by those who are unaware of existence of the services partially supports this hypothesis.

Hypothesis II: It is expected that distance and isolation are present when there is failure to make use of the service.

Results: Confirmed. While mileage to various services does not prove to be an important factor in predicting utilization, the areas in which the respondents live does prove to be a powerful predictor of service utilization, with two areas being fairly accessible to Nashville.

Hypothesis III: It is expected that transportation to the service is unavailable or non-existent.

Results: Confirmed. This hypothesis was confirmed in an earlier analysis which indicates that public transportation is unavailable in the areas under study and that transportation is not provided by most service agencies. Transportation does not prove to be a factor in service utilization; however, financial considerations, income, and occupation do prove important. These economic characteristics may indicate ability to pay for private or ownership of personal transportation (AID Analyses).

Hypothesis IV: It is expected that services are inappropriate to the need of the rural resident.

Results: Not proven conclusively; however, one may argue that residents of the counties utilized services outside the communities because services were inappropriate to meet their needs. The argument that specialized services were not available, specifically medical services, partially supports this hypothesis.

Hypothesis V and VI: It is expected that services are insufficient in that they do not meet current demand. It is expected that cultural obstacles may prevent the use of services when available.

Results: Confirmed. These hypotheses are confirmed in earlier analysis which indicates that there are a number of needs reported to which services are not available and/or are not being received. The third AID analysis provides information on the characteristics contributing to this need. The major contributor; cultural

obstacles, confirms the final hypothesis of the study. Persons who for some reason feel that it is wrong to accept services report more needs than those who do not report cultural obstacles. The location (area) of the respondents' residence contributes further to this need, increasing needs in Scottsboro, New Hope, and Kingsfield to an average of almost 6 needs reported per person (the highest in the sample).

Thus, from this analysis, it is quite clear that the six hypotheses posted are basically confirmed.

Chapter 7

Summary and Conclusions

This research has primarily been an attempt to determine types of services provided (specifically health and social services) to residents of rural areas and to assess the present status of the delivery system by focusing on needs, availability, and utilization of services. In addition to these concerns, the researchers were interested in the respondents' experience and satisfaction with health and social services in rural areas.

Previous chapters indicate that each county included in the study, regardless of size or budget, provides a core of services as mandated through Federal and State Legislation (e.g. Agricultural Extension services, Public Health). Each county is served by the Social Security Administration and Mental Health Services. The number and range of services available differ by county, with a greater number and range in counties with larger populations and a higher economic base. In general, the services are centrally located in all counties at significant

distances from the areas chosen for this study. This distance seriously affects service availability for a large number of the respondents in the study.

Over half (54.5 percent) of all respondents attribute their non-use of both health and social services to them not being available in their community, and 2/3 of the population report that they are dissatisfied with the availability of medical services. This is further reflected in the fact that 6 percent go outside their community for physician services.

Other findings infer that availability of resources to overcome the distance to services might be a factor. For instance, persons with higher incomes and more years of education tend to use services more than less educated and lower income persons. Some differences in utilization of services are also found by age, with utilization increasing with age for some services and decreasing for others.

In addition to these findings, major gaps in services provided rural areas were identified. The greatest needs identified are medical services (I), public transportation (II) improved housing (III), day care services and improved roads (IV), social services and employment services (V).

If one were to design programs to meet the needs of these rural residents and to increase utilization of existent services, the single most important barrier to overcome is that of cultural obstacles (analyses reflected in AID); feelings that it is somehow wrong to accept services

free or at reduced rates even when need is great, has been a prevalent theme throughout this study. There are no clear-cut answers to this dilemma. Walker (1977) puts it quite clearly when she states that "rural folks don't understand impersonal, centralized and bureaucratized societal structures . . . Our families and friends help us and when they can't or won't we simply don't know what to do. We don't know how to apply for help; help is not something we receive; its something we exchange." It is essential, however, that rural people become more involved in the policy-making process. The need to belong is great in rural areas; somehow rural residents must have some input into the nature and scope of services to be delivered to them. The services must be sanctioned by the community before there is adequate utilization of the services.

If the reader can accept that premise, there are some things occuring that point the way to better service delivery to resideats of rural Tennessee, for example:

1) The development of services passed in rural areas or branch offices.

Example: 1) Group Homes for the mentally retarded

2) The decentralization of service delivery.

Example: County-Wide visitations of public health nurses, rehabilitation

counselors, protective service workers.

3) The development of special transportation programs, e.g.

Suffice it to say, these changes only scratch the surface and do not begin to meet the needs as explained in Chapter 5. Despite these developments, in the delivery system, other serious limitations hamper the provisions of service (e.g., inadequate facilities, limited staff, and insufficient funds).

There are some things that can be recommended as possible alternatives to the rural service delivery problem. Again quoting Walker, "We don't have to wait until funds are appropriated to build facilities. Existing community buildings, i.e. churches, schools, community centers stand under utilized". In areas of Tennessee some of the schools are no longer being used because of school desegregation. For example, an under utilized high school in Rutherford County could easily be converted to a multi-purpose facility to house medical, and social services.

Since four different counties were studied, it is advantageous to develop components of a model of service for a county with the least services provided, e.g., Cheatham County. As stated earlier, most of the residents of Cheatham County go outside of the county for medical and health services. There is no hospital, but they are provided

clinical services and do have access to a county health department. Obviously, these two services are not meeting all the health and medical needs of residents of this county. In fact, the need for medical services ranks number one in priority in all of the counties studied. Some factors that need to be considered in a model for health services are presented in a graphic illustration in Figure 9.

The illustration emphasizes the need to identify portions of the total population who are public and private users of services (commonly referred to as service population) and to identify potential users of services.

Background and economic status of the community along with information pertaining to demand for service should be considered, which would include perceptions of persons to receive services and perceptions of persons providing the existing services in the county.

Other components in this suggested model should perhaps, include the following:

Phase I: Identification of specific medical problems and identification of population to be served.

Phase II: Planning Phase (consumer input)

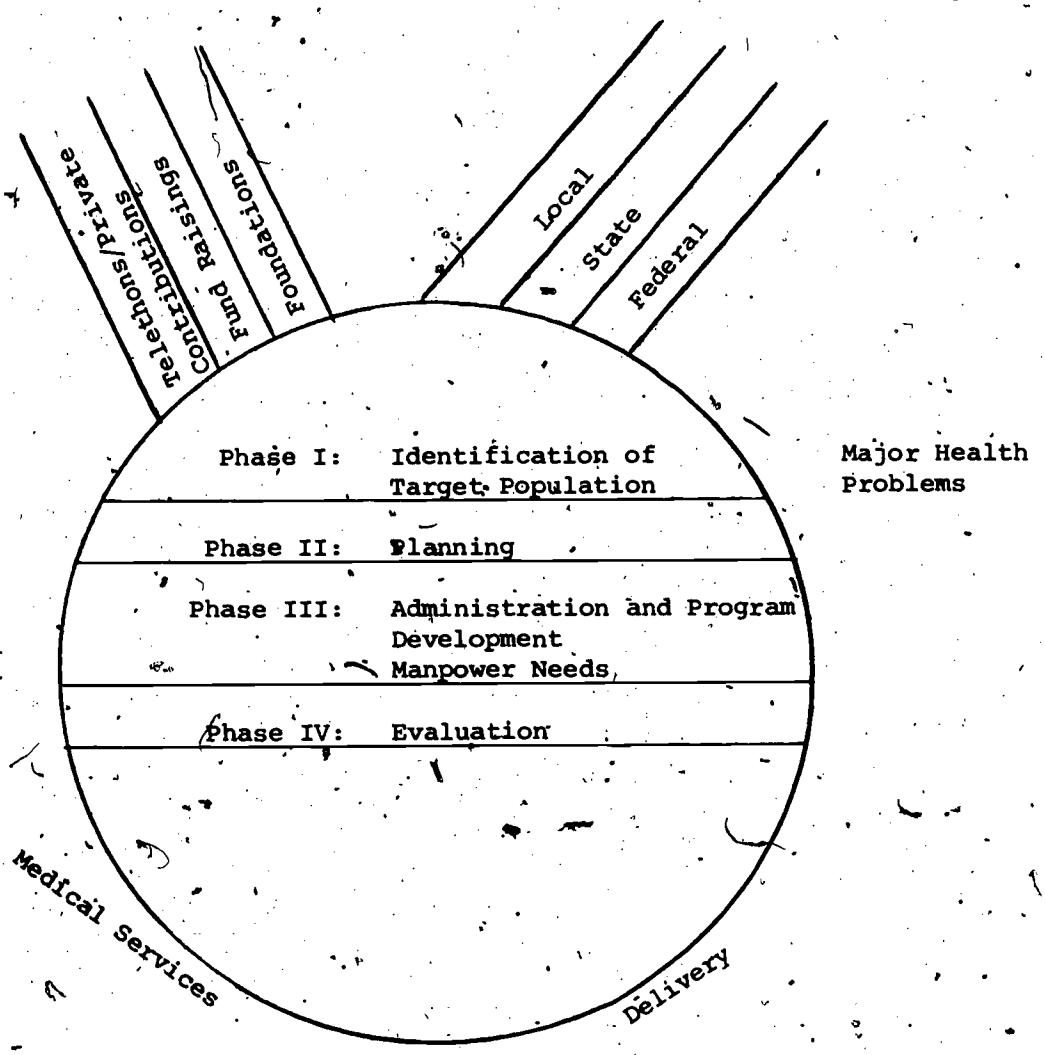
1. Can underutilized facilities be used in the community to house programs?

Figure 9

Consumer and County Governmental Officials

Input

Funding Sources



2. To what extent can existing services be expanded? (e.g. health departments.)
3. Identification of barriers that prevent use of existing services.
4. Alternative solutions to medical service delivery.

Phase III: Administration and Program Development

Phase IV: Evaluation of Service

This phase should be implemented at the outset of the development of the program. Information from this type of input should identify gaps in the delivery system as well as identify problems of the users' in receiving services.

Phase V: Funding Sources

Alternative funding sources should be explored.

It is realized that to implement a model of this type will demand time, money, and expertise, all of which are limited resources to the rural consumer. Needless to say, failure of the rural consumer to participate in community development may be a determining factor in relation to the development of services in the rural community. In short, rural people may have developed standards and values that will not allow the type of development as suggested in this study.

Implications for Further Research

A single study of this nature is never definitive. Each hypothesis included in a study is always threatened by the possibility of its rejection. A single study only heightens the awareness that further research is needed, specifically in program evaluations and public and social policy development. This is the challenge set forth by the current research.

REFERENCES

Acton, Jan Paul. The Demand for Health Care Among the Urban Poor, With Special Emphasis on the Role of Time. The New York Rand Institute, R-1151-OEO/NYC (April, 1973).

American Medical Association. Health Care Delivery in Rural Areas. Illinois: American Medical Association, 1976.

Anderson, Ronald and Benham, Lee. "Factors Affecting the Relationship between Family, Income and Medical Care Consumption," Empirical Studies in Health Economics. Herbert E. Warman, Ed., John Hopkins University Press, Baltimore, 1970, pp. 73-100.

Atchley, Robert. Social Forces in Later Life. California: Wadsworth Publishing Company, 1972.

Baum, Martin, David F. Bergwell, and Phillip N. Reeves, "Planning Health Care Delivery Systems," American Journal of Public Health, March 1975, Vol. 65, No. 3, p. 272.

Baumheier, Edward C., Janet Derr, Robert Gage. Human Services in Rural America: An Assessment of Problems, Policies, and Research: A Research Monograpy, University of Denver, Social Welfare Research Institute, May 1973.

Bible, Bond, "Health Services for Rural Areas," in Models of Rural Social and Health Services, ed. Joylean P. Sampson and Gloria Jenkins, Nashville: Tennessee State University Press, 1978.

Bice, T. W., R. L. Eichhorn, P. D. Fox. "Socio-Economic Status and the Use of Physical Services: A Reconsideration." Medical Care, 1972; 10:261.

Billy, R. W. and Benson, R. Public Perception of Rural County Social Services Agencies. Journal of Sociology and Social Welfare, 4 (7).

Bleth, George, Robin Schaef, and Michael Lippit. Alameda County Human Services Council: Analysis of Needs Assessment Methodologies, Report 1. California: Alameda Human Services, August, 1977.

Brunner, Edmund and John D. Kolb. A Study of Rural Society. Connecticut: Greenwood Press Publishers, 1971.

Bryant, T. E., R. C. Long, P. Louinger, and P. W. Purdom, "Discussion of the Role of the Health Professional in Achieving Effective Consumer Participation". Bulletin of New York Academy of Medicine. 46:1054; December, 1970.

Buell, Emmett H. Jr., "Uncertain Warriors: The Political Roles of Members of An Antipoverty Agency Governing Board". Unpublished Ph.D. Dissertation, Vanderbilt University, 1972.

Carter, Genevieve W., "Measurement of Need". Social Work Research. Illinois: The University of Chicago Press, 1970.

Cloar, J. B., "Transportation and Communications for Social and Economic Development in Rural America," National Growth: The Rural Component, U.S. Department of Agriculture. 1971.

Commission on Community Services. "A Future for Nashville: A Report of the Community Services Commission for Davidson County and the City of Nashville, June, 1952. 1-198.

Committee for Economic Development: Shaping Government in in Metropolitan Areas. New York, 1970.

Cordes, Sam, "Medical Care in Rural Communities: Problem Identification and Alternative Solutions", in Models of Rural Social and Health Services, eds. Joylean P. Sampson and Gloria Jenkins, Tennessee State University Press, August, 1978.

Copp, James H. Our Changing Rural Society: Perspectives and Trends. Iowa State University Press. 1964.

Davis, Vernon. "Development of a Scale to Rate Attitude of Community Satisfaction". Rural Sociology, Vol. 10, Sept. 1945.

Donovan, John C. The Politics of Poverty. Pegaus Publishing 1967.

Drobney, Abraham. "Latin American Experiences Related to the Solution of Rural Health Problems in the United States". American Journal of Public Health. Vol. 63, January, 1973.

Everett, Rogers and Rabel J. Burdge, Social Change and Rural Society. New York: Appleton Crofts Inc., 1960.

Feldstein, Martin B. Economic Analysis for Health Services Efficiency, Markham, Chicago, 1968, pp. 229-260.

Fuller, Varden, Rural Worker Adjustment to Urban Life: An Assessment of the Research, Joint Publication of The University of Michigan, 1970).

Gilbert, Neil. "Assessing Service Delivery Methods: Some Unsettled Questions." Welfare in Review, 10(3): 1972.

Ginsberg, Leon H. Social Problems in Rural America." Social Work Practice, 1969. Selected Papers, 96th Annual Forum of the National Conference on Social Welfare, 1969, pp. 176-186.

Grossman, Michael. The Demand for Health: A Theoretical and Empirical Investigation. NBER, Occasional Paper No. 19, New York, 1972.

Hahn, Harlan, ed. People and Politics in Urban Society. Bevery Hills: Sage Publications, 1972.

Hawkins, Brett. "Propositions about Opposition and Support for Metropolitan Integration: The Nashville Experience,'" in Nashville Metropolitan: The Politics of City County Consolidation. Vanderbilt University Press, 1969.

Hogg, Thomas C. "Socio-Cultural Impacts of Water Development: Proceedings of the Oregon State University Water Resources Research Institute Seminar, People and Water'". Corvallis: Oregon State University, Smith, Thomas C. Hogg and Michael J. Reagan, "Economic Development: Panacea or Perplexity for Rural Areas?" Rural Sociology, Vol. 36, #2, June 1971.

Kerlinger, Fred N. Foundation of Behavioral Research. New York: Holt, Rinebart and Winston, Inc., 1964.

Kitsuse, J. and A. B. Circourel. "A Note on the Uses of Offical Statistics." Social Problems, 11:131, 1963 and J. T. Sellin, "Testing the Accuracy of Clinic Ststistics, Social Problems, Vol. 14:214, 1966.

Everett, Rogers and Rabel J. Burdge, Social Change and Rural Society. New York: Appleton Crofts Inc., 1960.

Feldstein, Martin B. Economic Analysis for Health Services Efficiency, Markham, Chicago, 1968, pp. 229-260.

Fuller, Varden, Rural Worker Adjustment to Urban Life: An Assessment of the Research, Joint Publication of The University of Michigan, 1970).

Gilbert, Neil. "Assessing Service Delivery Methods: Some Unsettled Questions." Welfare in Review, 10(3): 1972.

Ginsberg, Leon H. Social Problems in Rural America." Social Work Practice, 1969. Selected Papers, 96th Annual Forum of the National Conference on Social Welfare, 1969, pp. 176-186.

Grossman, Michael. The Demand for Health: A Theoretical and Empirical Investigation. NBER, Occasional Paper No. 19, New York, 1972.

Hahn, Harlan, ed. People and Politics in Urban Society. Bevery Hills: Sage Publications, 1972.

Hawkins, Brett. "Propositions about Opposition and Support for Metropolitan Integration: The Nashville Experience,'" in Nashville Metropolitan: The Politics of City County Consolidation. Vanderbilt University Press, 1969.

Hogg, Thomas C. "Socio-Cultural Impacts of Water Development: Proceedings of the Oregon State University Water Resources Research Institute Seminar, People and Water'". Corvallis: Oregon State University, Smith, Thomas C. Hogg and Michael J. Reagan, "Economic Development: Panacea or Perplexity for Rural Areas?" Rural Sociology, Vol. 36, #2, June 1971.

Kerlinger, Fred N. Foundation of Behavioral Research. New York: Holt, Rinebart and Winston, Inc., 1964.

Kitsuse, J. and A. B. Circourel. "A Note on the Uses of Offical Statistics." Social Problems, 11:131, 1963 and J. T. Sellin, "Testing the Accuracy of Clinic Ststistics, Social Problems, Vol. 14:214, 1966.

Landis, Benson Y. Rural Welfare Services, New York: Columbia University Press, 1949.

Levitan, Sar A. The Great Society's Poor Law: A New Approach to Poverty. John Hopkins Press, 1969.

Lipsky, Michael. "Protest as a Political Resource". The American Political Science Review, December 1968, Vol. LXII, No. 4.

Luft, Harold S., Hershey, John C., and Joan Merrill. American Journal of Public Health, Vol. 66, September 1976, No. 9 (865-871).

Maslow, Abraham. Motivation and Personality: New York: Haper and Row, 1970.

Merrill, Frances E. Society and Culture. New Jersey: Prentice Hall, Inc., 1965.

Osgood, Mary and Sam Cordes. Changing the Poor or Changing The System? A Basic Issue in Improving the Poor's of Medical Services. Department of Agricultural Economics and Rural Sociology. Penn State University. 1977

Ostrom, Elinor and Whitaker, Gordon, "Does Local Community Control of Police Make a Difference? Some Preliminary Findings", American Journal of Political Science, Vol. XVII, No. 1, February 1973.

Peel, Evelyn, and Scharff, Jack, "Impact of Cost Sharing on Use of Ambulatory Services Under Medicare, 1969" Social Security Bulletin, Vol. 36, No. 10 (October 1973), pp. 3-24.

Penn, Rhesa, Jr. M.D., "The Application of a Model for Health Care Services in a Rural Setting," American Journal of Public Health, January 1973, Vol 63 #1 pp. 33-39.

Phelps, Charles E. and Newhouse, Joseph P., "Effect of Coinsurance: A Multivariate Analysis", Social Security Bulletin, Vol. 35, #6, June 1972 pp.20 -28 and p. 44.

Riley, Mathelda, W. Sociological Research: A Case Approach. New York: Harcourt Brace & World Inc., 1963.

Rodgers, Bruce D. and Lipsey, McCurdy, "Metropolitan Reform: Community Size and the Preception of Public Service." Unpublished paper presented at the Southern Sociological Association, April, 1974.

Rodgers, Everett M. and Rabel J. Burdge. Social Change and Rural Society. New York: Appleton Crafts, Inc., 1960.

Reid, Richard A., Betty J. Eherle, et.al. "Rural Medical Care, An Experimental Delivery System", American Journal of Public Health, March 1975, Vol. 65, No. 3, pp. 266-271.

Ruel, Myrtle. Territorial Boundaries of Rural Poverty. Profiles of Exploitation. Michigan State University, 1974.

Rojek, Dean, Frank Clements, Gene F. Summers. "Community Satisfaction: A Study of Contentment with Local Services," Rural Sociology, Vol. 40 #2, 1975.

Rosett, Richard and Lien-Fu Huang, "The Effect of Health Insurance on the Demand for Medical Care", Journal of Political Economy, Vol. 81. March - April, 1973 pp. 281-305

Sampson Joylean P. and Robert Meadows, Human Services Needs in Rural Areas: A Preliminary Report, Nashville: Tennessee State University Press, Bulletin #31, 1976.

Schuman, Howard and Barry Gunenberg. "Dissatisfaction with City Services: Is Race an Important Factor?" in People and Politics in Urban Society. Ed. Harlan Hahn, Beverly Hills: Sage Publications, 1972.

Scitousky, Ann and Snyder, Nelda M., "The Effect of Coinsurance on the Use of Physician Services," Social Security Bulletin, Vol. 35, #6 June, 1972, pp. 3-19.

Singh, Surendra, Health Care Services in Tennessee: Distribution and Efficiency, Nashville: Tennessee State University Press, Bulletin #37, 1976.

*Schulman, Eveline D. Intervention in Human Service. St. Louis: C. V. Mosley Company, 1974.

Slocum, Walter L. Aspirations and Expectations of the Rural Poor--A Guide to Research.

*Not in alphabetical order

Smelser, Neil J. "Toward a Theory of Modernization", in Amitia andEva Etzioni, Social Change. New York: Basic Books, Inc. 1964.

Stout, Robert Lewis, "A Survey of the Rough Rock Community, to Develop a Group Act on Plan" (Davidson County) Tennessee State University, 1971. Unpublished, M.S. Thesis.

Sonquest, J. A., E. L. Baker, J. N. Morgan. Searching for Structure. Ann Arbor, Michigan: Social Research, 1973.

Tyalor, W. G., Aday, L. Aday, L. A. and Anderson, R. A., "Indicator of Access to Medical Care." Journal of Helath and Social Behavior, 16(1); 39-49, 1975.

Tennessee Department of Human Services. Annual Title XX Services Plan (Davidson County), 1976-77.

Tennessee Industry, "Early Industry in Tennessee", February, 1972, p. 14.

Thomas, George. Poverty in the Non-Metropolitan South: A Course Analysis. Massachusetts: Lexington Books. 1972.

U.S. Department of Agriculture, Committee on Government Operations, Economic Development of Economic Research Service, "The Economic and Social Condition of Rural America in the 1970's, Committee on Government Operations, United States -- 92nd Congress - 1st Session, May, 1971, pp. 29-34.

U.S. Department of Agriculture, Economic Research Service, Rurality, Poverty, and Health. Agricultural Economic Report No. 172, pp. 1-2.

U.S. Department of Agriculture, Economic and Social Condition of Rural American in the 1970's prepared by Economic Development Division, Economic Research Service, The Committee on Government Operations, United States Senate, 92nd Congress, First Session, Part I, May 1971, p. 107.

U.S. Government, The People Left Behind: A Report by the President's National Advisory Commission on Rural Poverty. Printing Office, 1967.

University of Tennessee, Center of Business and Economic Research. Tennessee Statistical Abstract, ed. Mary G. Currency, 1971.

Walker, Fay. "A Rural Perspective on Social Welfare: Consumer, Policy Makers, and Providers". in Models of Rural Social and Health Services. eds. Joylean P. Sampson and Gloria Jenkins. Tennessee State University Press, 1978.

Walton, J. "A Systematic Survey of Community Power Research" pp. 443-463 in M. Aiken and P. E. Mott (eds.), The Structure of Community Power, (New York: Random House), 1970.

Wells, B. C. "Role of the Consumer in Regional Medical Care Programs," American Journal of Public Health, 60:2133, November, 1970.

Willman, Don A. and Kenneth R. Tremblay, Jr. "The Quality of Life in Rural America," The Annals of the American Academy of Political and Social Science, 1977, January, 115-129.

Appendix A

Study Agencies and Program Services

Table 72

Services Category: Financial Aid Services

Dependent Variables Studied	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	5 Locations	2 Locations	2 Locations	1 Location
Cost to Consumer	None	None	None	None
Capacity (No. Served)	16,200	Open	Open	
Transportation Provided	Only two agencies provided transportation	None	Provided for related services	None
Time Lapse to Recive Services	Immediate to 45 days	10 to 45 days	1 wk to 45 days	Up to 45 days
Funds Allocated	$2,119,540; four agencies; 1 not reported	Not Reported	Not Reported	Not Reported
Location	Central City	County Seat	County Seat	County Seat
Number of Staff	144 Direct Staff 10 Indirect Staff	22	30	8
Eligibility	Very specific eligibility guidelines, i.e. income residency	Income guidelines, county resident, emergency need for aid	Income level, need for emergency assistance	County resident family income

Table 73

Service Category: Food and Nutrition Services
(Food Stamp, Mobile Meal's)

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	4 Locations	Not Reported	Not Reported	1 Location
Cost to Consumer	No fee to payments for Mobile Meals and Food Stamps			None
Capacity (No. Served)	2 agencies (92, 000) 211 (200 miles a day)			Open
Transportation Provided	1 agency provides transportation to congregate meal site			None
Time Lapse to Receive Services	Immediately to 30 days			3 to 5 days
Location	Central city			County seat
Number of Staff	3 agencies reported 84 (34 indirect); 1 agency used volunteers			8 staff
Eligibility	Income level, age, Physical or mental disabilities, and food stamp guidelines			Income level

Table 74

Service Category: Family and Individual Counseling

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of agencies	6 locations	1 location	1 location	None
Cost to consumer	$0-35/depending on annual income	Sliding fee scale $3-30 per session	$0-35 per session	None
Capacity (No. served)	Agencies total 6,700 (two agencies	Open	Open	None
Transportation provided	None	None	Limited transportation for after care clients	None
Time lapse to receive service	Immediately to three weeks	Varies	Up to 10 days	None
Funds allocated	5 agencies reported total allocated $494.591	$70,000	$340,000	None
Location	Central city	County seat	County seat	None
Number of Staff	37 (for all agencies) (33 direct, 4 indirect	8	13	None
Eligibility	Based on need for Service	Based on need for service	Based on need for service	None

Table 75

Service Category III: Day Care Service for Children

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of agencies	9 locations	1 location	3 locations	None
Cost to Consumer	$0-$25 depending on family size and income	Sliding fee scale $2-$8/week	Sliding fee $0-$20/week	None
Capacity (No. served)	652 (nine agencies)	25	79 children	None
Transprotation provided	6 agencies provide; 3 do not	None	2 agencies provide; 1 does not	None
Time Lapse to receive service	1- to 60 days	Up to 1 month	1 to 2 weeks	None
Funds Allocated	Tota; $1,084.058	$42,000	$124,500 (Total)	None
Location	Central city	County seat	County seat	None
Number of Staff	112 - 97 Direct; 15 Support	5	10	None
Eligibility		Must meet Title XX Guidelines	Handicapped services and children ages 3-5	None

Table 76

Protective Services for Children and Adults

Davidson County

Number of Agencies	2 Locations
Cost to Consumer	None
Capacity	Not Applicable
Transportation	Yes
Time Lapse to Receive Services	Immediately for investigation up to 10 days of service
Funds Allocated	Not Reported
Location	Central-City
Number of Staff	Total 32 (24 Direct Staff) (10 Support Staff)
Eligibility	Children under 18; Adults over 18 in need of service

Table 77

Legal Aid Services

Davidson County

Number of Agencies	2 locations
Cost to Consumer	No Fee
Capacity	1 agency--3000, the other agency is required by law to meet demand
Transportation	None
Time Lapse to Receive Services	Immediately to 4 weeks 1 agency reported
Funds Allocated	$247,344
Location	Central City
Number of Staff	Total 35; 23 direct staff 12 support staff
Eligibility	Residents in need of legal representation in civil cases and indigent persons accused of violating state laws.

Table 78

Transportation Services

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	3 locations	1 location		None
Cost to Consumer	None	None	None	None
Capacity (No. Served)	Varies with travel need and distance	Open	Open	
Transportation Provided	Yes	Yes	Yes	None
Time Lapse to Receive Service	1 day depending on time of appointment and purpose	Not Reported	Schedule 1 day in advance	None
Funds Allocated	$721,021 (1 agency other users all volunteers	Not Reported	1 agency reported $190,000 (12 county area)	None
Location	Central city	County seat	County seat	None
Number of Staff	5 for one agency	1	18	None
Eligibility	U.S. Department of Labor Guidelines and Elderly	Low income families	Residents meeting poverty income guidelines and 60 years and older	None

Table 79

Information and Referral Services

Dependendt Variables	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	5 locations	2 locations	Provided through Human Service Department	Provided through Human Service Department
Cost to Consumer	None	None		
Capacity (No. Served)	N/A 12,690 request during reporting period	Open		
Transportation Provided	Only two agencies reported yes	1 agency provides and 1 referred to other agencies		
Time Lapse to Receive Services	Immediate to 1 hour depending on request	Immediately		
Funds Allocated	$59,635.00	Not Reported		
Location	Central city	County seat		
Number of Staff	23: 19 direct 4 support	8		
Eligibility	Need for service	Need for service		

Table 80

Public Health Services

Dependent Variables				
Number of Agencies	1 location	1 location	1 location	1 location
Cost to Consumer	None	Some costs for test and permits	Some costs for test and permits	Fees for certificates tests and permits
Capacity (No. served)	Not Applicable	Open	Open	Open
Transportation Provided	None	None	None	None
Funds Allocated	Not Applicable	$201,786	$317,636	$55,015
Location	Central city several community clinics	County seat	County seat	County seat
Number of Staff	102 nurses (82 of these are field nurses)	16	25	6
Eligibility	Based on need for services	Based on need	Based on need	Based on need

Table 81

Family Planning

Davidson County*

Number of Agencies	3 locations
Cost to Consumer	$2.00 for testing up to $155 for medical services
Capacity (Number served)	No limitation
Transportation provided	None
Time lapse to receive service	Immediately up to 10 days total for three agencies
Funds Allocated	$1,175,000.00
Location	Central City
Number of Staff	Total 73, plus volunteers
Eligibility	Need for services

*Family planning in other counties provided by the county health departments.

Table 82

Out-Patient Medical Care

Davidson County

Number of Agencies	3 locations
Cost to Consumer	$3-$16.00; lab test office visit no cost to indigents
Capacity	No Limitations
Transportation Provided	None
Time lapse to receive services	Immediately to two hours
Funds Allocated	$153,916 (1 agency not reporting
Location	Central city
Number of Staff	10 persons
Eligibility	Need for service

Table 83

Employment Services

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	6 locations	2 locations	2 locations	1 location
Cost to Consumer	None - 5 agencies; sliding scale - 1 agency.	None	None	None
Capacity (No. served)	Not Applicable	Open	Open	Open
Transportation Provided	None; 1 agency provides transportation	None	None	None
Time Lapse to Receive Services	1 to 6 weeks training time varies for employment	Varies on availability of jobs	Varies immediate to 40 days	1 week
Funds Allocated	4 agencies did not report; 2 agencies $170,000	Not reported	Not reported	Not reported
Location	Central city	County seat	County seat	County seat
Number of Staff	35 total; 29 direct, 6 support	6 staff	22 staff	3 staff
Eligibility	16 years and older in need of service	16 years and older in need of service	16 years and older in need of service	16 years or older in need of service

Table 84

Agricultural Extension Services

Dependent Variables	Davidson	Williamsson	Rutherford	Cheatham
Number of Agencies	1 location	1 location	1 location	1 location
Cost to Consumer	No Cost	No Cost	No Cost	No Cost
Capacity (No. served)	No limitation	Open	Open	Open
Transportation Provdied	None	None	None	None
Time Lapse to Receive Services	Up to one week	Varies according to demand	None	None
Funds Allocated	Not Reported	Not Reported	Not Reported	Not Reported
Location	Central city	County seat	County seat	County seat
Number of Staff	35	6	Not Reported	Not Reported
Eligibility	Residents requesting service	Resident of county	Nee for services	Need for services

Table 85

Out-Patient and Emergency Psychiatric Care

Davidson County

Number of Agencies	4 locations
Cost to Consumer	$1.00 to $40.00 an hour, depending on income
Capacity	No limitation
Transportation	None
Time lapse to receive service	Immediate to five days
Funds Allocated	3 agencies reported $3,378,000
Location	Central city
Number of Staff	2 agencies; 106 staff 2 agencies did not report
Elgibility	Residents in need of service

Table 86

Mental Retardation Services

Dependent Variables	Davidson	Williamson	Rutherford	Cheatham
Number of Agencies	6 locations	1 location	Not Reported	1 location
Cost to Consumer	$0-$60 (sliding fee scale)	None	Not Reported	$200/month
Capacity	Total: 1,218	45	Not Reported	30
Transportation Provided	Only 4 locations provide transportation	Yes	Not Reported	None
Time Lapse to Receive Service	2-3 weeks depending on waiting list	30 to 60 days	Not Reported	Varies with bed availability
Funds Allocated	4 agencies reported $873,594	$68,000.00	Not Reported	Not Reported
Location	Central city	County seat	Not Reported	Pegram (Study site)
Eligibility	Developmentally disabled children and adults	18 years or older and developmentally disabled	Not Reported	17 years old ambulatory with potential for rehabilitation

Appendix B

Service Category and Agencies

by Counties

Table 88

Service Category and Agencies by Counties

Service Category	Cheatham	Davidson	Rutherford	Williamson	Regional/ State
Employment Counseling Training and Placement Service	Tennessee Department of Employment Security	Tennessee Department of Employment Security Goodwill Industries Mayor's Youth Employment Service Opportunities Industrialization Center (OIC) Recruitment and Training Program (RTP) Comprehensive Employment and Training Act (Rochelle Training and Rehabilitation Center) service to mentally retarded	Tennessee Department of Employment Security Tennessee Vocational Training Center	Tennessee Department of Employment Security (Tennessee Vocational Training Center)	Division of Vocational Rehabilitation Tennessee Opportunity Program for Seasonal Farmworkers (TOPS) Tennessee Vocational Training Centers
Financial Aid Services-Government Auspices and Social Insurance	Tennessee Department of Human Services Aid to Families with Dependent Children (AFDC)	Tennessee Department of Human Services Aid to Families with Dependent Children (AFDC) Metropolitan Social Services-General Assistance	Social Security Administration Tennessee Department of Human Services Council of Social Agencies	Tennessee Department of Human Services (AFDC)	
Financial Aid Services-Volutary Auspices		Big Brothers of Nashville Ladies of Charity Red Cross-Services to Military Families	Council of Social Agencies	Voluntary Financial Assistance (TDHS administered)	

Table 88 Continued

Service Category	Cheatham	Davidson	Rutherford	Williamson	Regional State
Rural Development	Agricultural Extension Service	Agricultural Extension Service	Agricultural Extension Service	Agricultural Extension Service	
Public Health Services (Public Health Nursing & Outpatient Services)	Cheatham County Health Department	Metropolitan Health Department	Rutherford County Health Department	Williamson County Health Department	
Outpatient Medical Care	(See Health Department)	(See Health Department) Cayce Homes Community Clinic Waverly-Belmont Community Clinic General Hospital	(See Health Department)	(See Health Department)	Veteran's Administration Hosptial (Nashville) Crippled Children's Service
Family Planning Services	(See Health Department)	Metropolitan Health Department Planned Parenthood Association Birthright of Nashville, Inc.	(See Health Department)		
Outpatient/ Emergency Psychiatric Care	Harriett Cohn Mental Health Center (in Clarksville	Dede Wallace Mental Health Center Luton Mental Health Center Meharry Mental Health Center Vanderbilt Mental Health Center	Rutherford County Guidance Center		Veteran's Administration Hospital (Murfreesboro)

Table 88 Continued

Service Category	Cheatham	Davidson	Rutherford	Williamson	Regional/ State
Alcoholism and Drug Abuse Services		Meharry Alcohol and Drug Abuse Program (MADAP) Nashville Drug Treatment Center Dede Wallace Alcohol Program Salvation Army's Men's Social Service Center			Middle Tennessee Mental Health Institute, Alchohol and Drug Abuse Treatment
Mental Retardation Services	Cave Springs Home and School	Meharry Child Development Center J.F. Kennedy Experimental School for REtarded Children Duncanwood Day Care Center and School for Retarded Children Heads Up Child Development Center, Inc. Rochelle Training and Habilitation Center	Rutherford County Guidance Center		Clover Bottom Developmental Center
Food and Nutrition Services	Tennessee Department of Human Services	Tennessee Department of Human Services Food Stamp program Senior Citizens, Inc.- Mobile Meals & Homebound Meals Supplemental Food Program	Tennessee Department of Human Services	Tennessee Department of Human Services	

Table 88 Continued

Service Category	Cheatham	Davidson	Rutherford	Williamson	Regional/ State
Transportation Services		Metropolitan Action Commission (MAC)	Mid-Cumberland Community Action Agency Mid-Cumberland Human Resource Agency-Sixty Plus Bus	Fairview Community Center	
Legal Aid		Legal Services of Nashville Public Defender of Nashville, Davidson County			*Legal Services of Nashville and Middle Tennessee
Protective Services for Children & Adults	Tennessee Department of Human Services	Tennessee Department of Human Services	Tennessee Department of Human Services	Tennessee Department of Human Services	
Information and Referral Services	Tennessee Deaprtment of Human Services	Tennessee Department of Human Services Downtown Association of Churches-Storefront Ministry Metropolitan Health Department Nashville Mental Health Association Mid-Cumberland Council on Alcohol and Other Drugs	Tennessee Department of Human Services Mid-Cumberland Community Action Agency	Tennessee Department of Human Services Fairview Community Center	

Table 88 Continued

Service Category	Cheatham	Davidson	Rutherford	Williamson	Regional State
Individual and Family Counseling Services		Catholic Social Services Christian Counseling Service Madison Church of Christ Social Services Rap House Family and Children's Service Association for Guidance, Aid, Placement and Empathy (AGAPE)	Rutherford County Guidance Center	Williamson County	
Day Care					
Children		Donelson Child Development Center Grace M. Eaton Day Home Nashville Child Center & Primary School, Inc. Donner Belmont Child Care Center Eighteenth Avenue Community Center Head School Day Care Center McNeilly Day Home Association, Inc. United Methodist Neighborhood Centers North Nashville Day Care South Nashville Day Care J.F. Kennedy Center of Peabody College Duncanwood Day Care Center and School Heads Up Child Development Center, Inc.			

Table 88 Continued

Service Category	Cheatham	Davidson			
Day Care (Cont'd)					
Children		Martha O'Bryan Community Center St. Luke's Community House South Street Community Center	MTSU Day Care Center Circle Day Care	Child Community Center	
Ex-psybhiatric Patients		House of Friendship			
Older People		Knowles Home for the Aged Senior Citizens, Inc.			
Handicapped People		Outlook Nashville, Inc.			
	6	69	17	9	7
	5.5%	63.9%	15.7%	8.3%	6.5%

Appendix C

Number of Service Recipients

by Service And Study Area

Table 87

Number of Service Recipients by Service and Study Area

Services	Davidson County	Four Corner's Park	Pasquo	Scottsboro/ New Hope	Cheatham County	Pegram/ Bell Town	Rutherford County	Christiana	Williamson County	Fairview
Financial Aid Services	6,600 Families	n.r.	18	n.r.	114	n.r.	523	n.r.	455	68
Food and Nutrition	94074 Households	n.r.	n.r.	n.r.	289	n.r.	697	n.r.	419	n.r.
Social Security	63,577 Recipients	n.r	n.r.	n.r.	2,283	n.r.	10,625	327	5,189	510
Family & Ind. Counseling	n.r.	n.r	n.r.	n.r	n.r.	n.r	n.r.	n.r.	n.r.	n.r.
Day Care	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	20
Protective Services	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Legal Aid	8,543	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Employment	n.r.	n.r.	n.r.	n.r.	7,430	n.r.	8,567	n.r.	5,561	n.r.
Information and Referral	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Transportation	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Public Health	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	8,001 Nursing Visits	n.r.	6,029 Nursing Visits	n.r.

Table 87 Continued

Services	Davidson County	Four Corner's Park	Pasquo	Scottsboro/ New Hope	Cheatham County	Pegram/ Bell Town	Rutherford County	Christiana	Williamson County	Fairview
Family Planning	12,505	n.r.	n.r.	n.r.	554	n.r.	1,897	n.r.	1,127	n.r.
Outpatient Medical Care	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Outpatient Psychiatric	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	233 calls 920 patients 24,000 visits	n.r.	n.r.	n.r.
Mental Retardation	n.r.	n.r.	n.r.	n.r.	30	n.r.	189	n.r.	175	n.r.
Alcohol and Drug Abuse	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Agricultural Extension	75 Families	nr.r	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.

Appendix D

Additional Tables

Table 89

The Relation between Medical Service and Time

	Less 1 hr. %	2-3 hrs. %	4-5 hrs. %	6-7 hrs. %	8+ %	Other %
Hospital A	2	1	0	.3	.3	0
Hosptial B	2	1	1	0	0	.3
Hospital C	7.5	1	0	0	0	0
Hospital D	11	.3	0	0	0	0
Hospital E	4	4	2	.3	.3	0
Hospital F	2	3	0	0	0	0
Hospital G	6	2.5	1	0	.3	0

Table 90

The Relation Between Medical Services and Degree of Satisfaction

	Very Dissatisfied	Dissatisfied	Satisfied	Very Satisfied	Inappro-priate	No Answe
	%	%	%	%	%	%
Hospital A	.3	.3				
Hospital B	.3		2.5	1		
Hospital C	1.0	7.5				
Hospital D		1.0	13.0	1		
Hospital E	1.0	1.0	8.0	1		
Hospital F	.3	.3	3.0			
Hospital G	.3	1.0	7.5	1		3

Table 91

The Relation Between Medical Services and Needs Fulfilled

	Not at All %	Not Complete %	Complete %	Inappropriate %	Don't Know %	No Answer %
Hospital A		.3	3			
Hospital B	.3		3			
Hospital C		.3	8			
Hospital D		1.0	14			
Hospital E	.3	1.0	9			
Hospital F		1.0	4			
Hospital G	1.0	.3	9			.3

Table 92

The Number and Percentage of Non-Utilization of Hospitals by Education

	None		0-8		9-12		Some College		College Graduate		Graduate Professional	
	#	%	#	%	#	%	#	%	#	%	#	%
Hospital A	1	100	123	94.6	155	96.8	20	100	9	100	1	100
Hospital B	1	100	125	96.1	156	97.5	18	90	9	100	1	100
Hospital C	1	100	118	90.7	146	91.2	20	100	9	100	1	100
Hospital D	1	100	114	87.6	135	84.3	16	80	7	77.7	1	100
Hospital E	1	100	110	84.6	147	91.8	20	100	9	100	1	100
Hospital F	1	100										
Hospital G	1	100	116	89.2	144	90.0	19	95	8	88.9	1	100

Table 93

The Number and Percentage of Non-Utilization of Hospitals by Race

Hospital	Black		White	
	Number	Percent	Number	Percent
Hospital A	57	93.4	252	96.9
Hospital B	51	83.6	259	99.6
Hospital C	61	100	234	90.0
Hospital D	54	88.5	220	84.6
Hospital E	53	86.9	235	90.3
Hospital F	54	88.5	251	96.5
Hospital G	55	90.1	234	90.0

Table 94

The Number and Percentage of Non-Utilization of Hospital by Age

	18-24		25-35		35-49		50-64		64+		0-17		No Response	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Hospital A	38	100	56	98.2	100	98.0	51	92.7	57	93.4	1	100	6	85.7
Hospital B	38	100	56	98.2	97	95.1	54	98.1	58	95.0	1	100	6	85.7
Hospital C	29	76.3	46	80.7	99	99.0	53	96.3	60	98.3	1	100	7	100
Hospital D	33	86.8	50	87.7	81	79.4	52	94.5	52	85.2	1	100	5	71.4
Hospital E	37	97.3	51	89.4	88	86.2	46	83.6	58	95.0	1	100	0	0
Hospital F	38	100	54	94.7	95	93.1	53	96.3	57	93.4	1	100	0	0
Hospital G	30	78.9	47	82.4	98	96.0	51	92.7	56	91.8	1	100	7	100

Table 95

The Number and Percentage of Non-Utilization of Hospitals by Income

Hospitals	0-1999		2-2999		3-3999		4-5999		6-7999		8-9999		10-11999		12-13999		14-15999		16+		DK
	#	%	%	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Hospital A	16	88.8	16	100	13	100	15	100	20	95.2	22	88	27	93.1	46	100	54	100	22	100	6
Hospital B	17	94.4	14	86.6	13	100	15	100	20	95.2	22	88	29	100	46	100	53	98.1	22	100	6
Hospital C	18	100	16	100	14	86.6	13	86.6	20	95.2	24	96	28	96.5	39	84.7	49	90.7	20	90.9	5
Hospital D	16	88.8	9	56.2	15	80	13	86.6	16	76.1	23	92	25	86.2	42	91.3	42	77.7	19	86.3	6
Hospital E	17	94.4	16	100	12	80	13	86.6	19	90.4	24	96	26	89.6	43	93.4	43	79.6	21	95.4	5
Hospital F	18	100	16	100	15	100	55	100	21	100	23	92	26	89.6	41	89.1	49	90.7	21	95.4	6
Hospital G	18	100	14	87.5	12	100	15	100	20	95.2	23	92	27	93.1	40	86.9	51	94.4	19	86.3	3

Table 96

The Number and Percentage of Non-Utilization of Hospital by Occupation

	Farmer		Professional		Managerial		Clerical		Sales		Trades		Household		Service Worker		Laborer		Rat.
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Hospital A	64	90	23	92	12	100	13	100	1	100	4	100	100	100	7	100	15	83.7	24
Hospital B	67	94.3	25	100	12	100	13	100	1	100	4	100	98	98	7	100	14	87.5	23
Hospital C	69	97.1	25	100	12	100	13	100	-	--	4	100	84	84	7	100	15	83.7	24
Hospital D	62	87.3	23	92	7	58.3	11	84.6	1	100	1	25	86	86	7	100	12	75	19
Hospital E	64	90.1	22	88	12	100	12	92.3	1	100	4	100	86	86	6	87.5	14	87.5	23
Hosptial F	70	98.5	22	88	11	91.6	12	92.3	1	100	4	100	94	94	6	85.7	16	85.6	24
Hospital G	67	94.3	25	100	11	91.6	12	92.3	1	100	3	75	87	87	5	71.4	12	75	21

Table 97

The Number and Percentage of Non-Utilization of Hospitals by Marital Status

	Single		Married		Separated		Widow		Divorce		No Response	
	#	%	#	%	#	%	#	%	#	%	#	%
Hospital A	16	93.7	231	96.6	14	100.0	38	95.0	7	87.5	0	0
Hospital B	16	100.0	231	96.6	14	100.0	37	92.5	8	100.0	0	0
Hospital C	15	93.7	215	89.9	13	92.8	40	100.0	8	100.0	4	100
Hospital D	16	100.00	197	82.4	14	100.0	36	90.0	7	87.5	4	100
Hospital E	15	93.7	212	88.7	13	92.8	37	92.5	7	87.5	0	0
Hospital F	16	100.00	227	94.9	12	85.7	39	97.5	7	87.5	0	0
Hospital G	14	87.5	212	88.7	14	100.0	37	92.5	8	100.0	4	100

Table 98

Medical Information

Where do you go to get Medical attention?	Number	Percent
Private Physician in community	104	32.40
Private Physician outside community	211	65.73
To a hospital clinic	3	.93
Private Clinic	--	--
Health Center near home	--	--
Health Center in different community	--	--
Other	--	--
Don't Know	--	--
No Answer	3	.93

Is there a local Drug store in the community?	Number
Yes	157
No	47
Don't Know	--
No Answer	108

Where do you shop for medical supplies?	Number	Percent
In nearby community	301	62.62
In a distant community	72	22.43
Out of the city	--	--
Other	--	--
Don't know	45	14.02
No Answer	3	.93

Access to Ambulance Services	Number	Percent
Yes	68	21.18
No	239	74.45
Don't know	--	--
No Answer	14	4.36

How often do you visit a physician?	Number	Percent
Very often	5	1.66
Often	83	27.41
Not very often	182	56.70
Not at all	11	3.43
No answer	9	2.80

When last see physician?	Number	Percent
Less than 1 month ago	80	24.92
2-4 months ago	50	15.58
4-6 months ago	33	10.28
6-8 months ago	36	11.21
8-10 months ago	31	9.66
10-12 months ago	39	12.15
More than 1 year	49	15.26
No answer	3	.93

Table 98 Continued

Medical Information

Ever been hospitalized?	Number	Percent	Did you receive adequate medical care in emergency cases?	Number	Percent
Yes	282	87.85	Yes	221	68.85
No	35	10.90	No	98	30.53
Don't Know	--	--	Don't know	1	.31
No Answer	4	1.25	No answer	1	.31

N = 321

Table 99

Number of Persons with Insurance

Medicare Insurance	Number	Percent
Yes	86	26.79
No	--	--
No Answer	235	73.21

Hospital Insurance	Number	Percent
Yes	215	66.98
No	--	--
No Answer	106	33.02

Medicaid Insurance	Number	Percent
Yes	33	9.35
No	--	--
No Answer	291	90.65

Life Insurance	Number	Percent
Yes	240	74.77
No	--	--
No Answer	81	25.23

Other Medical Insurance	Number	Percent
Yes	33	10.28
No	--	--
No Answer	288	89.12

Property Insurance	Number	Percent
Yes	200	62.31
No	--	--
No Answer	121	37.69

Burial Insurance	Number	Percent
Yes	115	35.83
No	--	--
No Answer	206	64.17

N = 321

Table 100

Dental Information

Is there a dentist in the community	Number	Percent
Yes	72	22.43
No	226	70.40
Don't Know	20	6.23
No Answer	3	.93

N = 321