THE AGING IN A
CENTRAL ILLINOIS COMMUNITY

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This publication is a report on a survey of the aging in Decatur, Illinois, which was proposed by the City of Decatur and conducted under the auspices of the University of Illinois Council on Community Development with the support of the City of Decatur, the University Research Board, and the Department of Sociology.

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ABSTRACT

An interview-survey was conducted within the city limits of Decatur, Illinois, of a probability sample of persons aged 60 or older. Interviews were obtained from 346 individuals and questionnaire data were collected from the family physicians of a majority of respondents. The city of Decatur is located in central Illinois. It serves the surrounding agricultural area and has both light and heavy industry.

The 1960 population was 78,000, with an aged population of 12,300. These figures were projected to 1980, yielding estimates of from 17,200 to 18,400 persons 60 or over at that date.

Housing "needs", as defined in terms of gaps between desires and ratings of the present housing situation, included in descending order of importance: no stairs, low noise level, ease of housecleaning and maintenance, low payments, well-maintained neighborhoods, large amounts of storage space, and pleasant-appearing exteriors.

There was a current basic requirement for slightly over 3,000 housing units in the group able to afford housing without subsidy (income over $80 per month) but only 12% or 375 would find special housing units for the elderly more attractive than their present housing. A conservative appraisal indicates a market for about 250 units, ranging from efficiency or one-bedroom units through more elaborate units for the higher income brackets.

One-sixth of the sample indicated that they were in poor health, half had one or more chronic illnesses, half were not able to do heavy work around the house, and one-tenth had moderate blunting of mental acuity or definite senility. Most were satisfied with their physicians and with hospital facilities, but many had a poor opinion of the nursing homes. Few were familiar with the health services offered by organizations in Decatur. Medical costs were a heavy burden to a minority, but few asked help from community sources. Dental care was the most common service curtailed for financial reasons. Over two-thirds had some health insurance, and cost and inability to qualify were the major reasons for not having insurance. Over half of the respondents had periodic medical checkups, and those who didn't generally did not know of any health reasons for doing so. Adequate communication between physician and patient is a factor affecting many aspects of the physician-patient relationship.

In the area of activities, there is generally limited awareness of present recreational and educational facilities and activities. The great majority of older individuals have substantial periods of free time, yet more than half do not belong to any clubs or organizations. Lack of or inability to use present transportation facilities was a major problem blocking use of recreational facilities. About 12% lack transportation and 29% were unable to travel readily.

There seems to be a general decline in contact with family and friends with increasing age.
Major gaps between occupational goals and present degree of fulfillment of these goals were demonstrated for retired individuals. The greatest gaps have to do with income, opportunities to make use of abilities and skills, and the feeling of doing useful things. One-third of the retired would be interested in part-time work if it was available.

About two-thirds of the respondents presently attend religious services at least once a month, as compared to three-fourths who attended that often at age 50. Lack of or inability to use present transportation facilities seems to be the major factor in this decline.

Nearly 90% of the respondents claimed to have voted in the 1960 presidential election. According to the respondents, their present degree of political interest is greater than at age 50.

Health and relationships with family and friends were the most important areas of life for the sample, with housing, employment, and recreation following in that order. Generally, they disapproved of the situation of the aged, and there was a widespread tendency to identify themselves as middle-aged or younger than their actual age. That group was better-adjusted than those who felt as old or older than their actual age. Physical health was the major factor affecting how old the respondent felt; other factors were employment status, behavior of family and friends, and chronological age.
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I. AIMS AND METHODS

A. INTRODUCTION

This study represents an attempt to bridge the gap between basic and applied research. To the extent that the effort is successful, knowledge will be gained concerning the role of the aged and processes affecting their adjustment and, in addition, the scientific basis for applied programs will be provided.

Chapter I contains a discussion of methods of data collection, characteristics of the sample, and measurement and analysis procedures. Chapter II is devoted to a demographic analysis, and emphasizes population projections. Chapters III, IV, and V focus on specific content areas: housing, health, and activities (recreational, social, employment, religious, political), respectively. In each of these areas the present situation, attitudes, and preferences of the sample is described, the relationships between some of these factors and the personal adjustment of the aged is explored, and conclusions are drawn.

Chapter IV, HEALTH, is somewhat unique in that it includes, in addition to the above, certain relationships other than those having to do with adjustment, e.g., communication with physician and satisfaction with physician.

Chapter VI, THE ROLE OF THE AGED, is theoretical in orientation and is primarily concerned with relationships. Topics include the general situation of the aged, the standards which they feel they must meet, the origins and effects of their feelings about their age, and the sample's assessment of priorities among the different content areas (housing, health, activities).

B. DATA COLLECTION AND ANALYSIS

This study is based on an interview-survey of a probability sample of all persons 60 years of age or older residing in private dwelling units within the 1959 boundaries of Decatur, Illinois, or living in those built-up areas immediately surrounding the Decatur city limits.1

The field work and data processing involved a series of steps which are outlined as follows:

1. The following technical materials are included in TECHNICAL MATERIALS FOR AN INTERVIEW-SURVEY OF THE AGING, Research Report 62-3, a supplementary publication of the Small Homes Council--Building Research Council: (1) Interview Schedule (questionnaire); (2) Interviewer's Report; (3) Questionnaire Mailed to Physicians; (4) Instructions for Interviewing; (5) Interviewer Qualifying Examination; (6) Instructions for Listing; (7) Cover Sheet; (8) Address Sheet; and (9) Lister's Daily Work Report. This report is available for $2.50 from the Small Homes Council--Building Research Council, University of Illinois, Mumford House, Urbana, Illinois.
1. **Obtaining a Probability Sample**

For the details of the method, see Appendix 1. A number of procedures were involved: calculation of the sampling fraction; selecting a cluster sample from the street directory portion of the Decatur City Directory; selecting and training a group of 27 screening interviewers to locate the aged individuals; field phase of the screening process; and final selection of the sample from among aged individuals located.  

2. **Selecting and Training Interviewers**

From a large number of applicants, a group of 28 final-phase interviewers were selected on the basis of education, maturity, and ability to do half-time work over a 5-week period. With the aid of detailed instructions for interviewers, specially prepared for the purpose, interviewers were trained during two 3-hour sessions. After successful completion of a qualifying examination, interviewers proceeded with several trial interviews. Finally, a third 3-hour training session was held.

3. **Sample**

Of the 417 potential respondents selected by sampling procedures, two were found to be under 60 years of age, leaving a total of 415.

Of these, 32 respondents proved to be too ill physically and/or mentally to be interviewed. In almost every case this was corroborated by two different individuals, usually from a relative or friend. These 32 individuals may be viewed as representing the 8% of the aged in the population who are not well enough to be interviewed.

Among the remaining 383 potential respondents, 346 interviews were obtained for a response rate of 90%. The 37 non-respondents break down into 22 refusals and 15 "not-at-homes" after the required number of callbacks. Efforts to limit the number of refusals included changing interviewers and long-distance calls from the project director. Data obtained for the 37 non-respondents with respect to age, sex, income, health, home ownership, marital status, and employment status are very close to those obtained for the respondents. We may conclude that the sample of 346 is not biased by the 10% refusals and non-contacts. However, it is extremely important to recognize that it is only representative of the non-institutionalized aged in Decatur who are well enough to be interviewed for almost two hours. The characteristics of those respondents too ill to be interviewed will be discussed in Section C of this chapter.

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1. Since the field problems involved in interviewing more than one eligible respondent in a given dwelling unit are considerable, it was decided to interview no more than one. In order to avoid over-representing dwelling units with only one eligible respondent, it was decided to randomly select one-half of these dwelling units. In those dwelling units where there were two eligible persons, one of these was randomly chosen. Only nine dwelling units contained more than two eligible respondents, and these were treated in the same way as the two-respondent dwelling units for purposes of simplicity, although the original analysis plans called for duplicating information from these respondents to weight their probabilities. As a result of these procedures, the overall sampling fraction was 1 in 26.
4. **Collection of Data**

Interviews were obtained during a five-week period starting in late April, 1961. All interview schedules were edited by the field director, and controls were maintained, with respect to "don't knows," refusals, inconsistencies, blanks, and interviewer's bias. In addition, phone calls were made to a sample of respondents to check on the accuracy of the interview data reported in the schedules.

5. **Data Coding and Processing**

Interview data for all of the structured questions (those with answers fitting into definite categories) were coded and punched on IBM cards, a sample of cards were verified, and all cards were checked.

6. **Data Analysis**

All scales were developed, and appropriate analysis cards were set up. A computer program was developed to produce difference-scores and summed difference-scores (described in Section D-2) on an IBM 650. These were then computed and punched onto appropriate analysis cards.

The analysis was performed on two high-speed computers. For the correlational analysis, an IBM 650 was utilized, while a cross-tabulational analysis was performed on an IBM 1401.

The less structured data based on the more open-end questions, were analyzed in the following manner:

a. All answers to each question were recorded consecutively. The identification number of the individual giving the response was recorded alongside the response.

b. Categories were determined for the answers to each question.

c. Answers were coded or placed into the appropriate categories.

d. Frequency distributions and percentages were obtained.

e. Where desired in a few cases, the coded data for a given question was punched onto IBM cards and analyzed in the usual manner. This could be done because the identification numbers with each open-end answer permitted all data for a given respondent to be put together.

7. **Statistical Tests**

Statistical tests were performed. Because the sample was drawn on a clustered random rather than a simple random basis, a correction factor was introduced.\(^1\)

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\(^1\) Approximately one-half of the 346 respondents were found to be located in clusters with other respondents. In order to take this into account and to permit the use of simple random sampling formulae, 25% is added to the standard error of all statistics utilized in this study.
C. CHARACTERISTICS OF THE SAMPLE

In this section some of the important characteristics of the sample of 346 will be described, with the details to be given in the following chapters. These characteristics will be compared with the characteristics of the 32 respondents too ill to be interviewed in the regular fashion.

1. **Age**

Forty-five per cent of the sample of 346 are 70 years old or older as compared with 78% of the sample of 32.

2. **Sex**

Sample of 346: 57% female. Sample of 32: 78% female.

3. **Housewives**

Sample of 346: 38% are housewives who have done no work for an income for the past year. Sample of 32: 67%.

4. **Marital Status**

Sample of 346: 60% married and living with spouse, 30% widowed, 6% single, 4% divorced or separated. Sample of 32: 41% married and living with spouse, 59% widowed.

5. **Children**

Sample of 346: 20% with no living children. Sample of 32: 23%.

6. **Employment Status**

Sample of 346: 67% have done no work for an income for the past year. Sample of 32: 97%.

7. **Total Income of Respondent and Spouse**

Sample of 346: 13% under $20 per week, 16% $20-39, 14% $40-59, 11% $60-79, 13% $80-99, 8% $100-119, 7% $120-159, and 18% $160 or over. For comparative purposes: 29% of the sample of 346 have an income of under $40 per week, while 71% of the sample of 32 are at this income level.

8. **Health**

Eleven per cent of the sample of 346 rated their present health as poor or very poor, while 54% of the sample of 32 rated their health in this manner.

9. **Health Insurance**

Sample of 346: 32% presently have no health insurance. Sample of 32: 60%.

10. **Home Ownership**

Sample of 346: 78% home owners. Sample of 32: 61%

11. **Summary**

With respect to the sample of 346, it is apparent that they are quite dissimilar with respect to one another. We should be careful not to treat them en masse as "the aged," but rather strive to take into account this variability.
Comparing the two samples, the sample of 32 has a much higher proportion with low income, who are widowed, are not working, who rate their health as poor, and who have no health insurance. Interviewer comments such as the following were common: "R is 86 years old and very feeble. Very hard of hearing. Fell 2 weeks ago and has been failing since. Has a large kidney stone and too weak to undergo operation. Daughter was very sympathetic with the importance of the study." Of the 32 respondents, 56% had physical illness or disability, 19% had mental illness or senility, and 25% had both.

D. SOME TECHNICAL ASPECTS OF MEASUREMENT AND ANALYSIS

Several types of scales, coefficients, etc., are used to assist the valuation of the information collected in the interviews.

1. Simple Scales

Simple scales allow respondents to indicate a degree of preference rather than a straight yes or no answer. The person interviewed is often given the opportunity to select from a scale of five or six answers. For example: "On the whole, how satisfied are you with your present housing?"

a. Not at all  
b. Somewhat  
c. A great deal  
d. Very  
e. Extremely

2. Summed Difference-Score

The summed difference-score scale is based on a set of pairs of items, and it is the set of differences between items within each pair which is totaled. In this report, summed difference-score scales generally involve differences between what the individual wants and what he gets or expects to get. For example, in the question on housing, respondents were asked how much they wanted each of a number of things in their ideal housing, such as, a large amount of room, a good deal of privacy. They were also asked to rate their present housing in these respects. A high difference-score with respect to the single item, amount of privacy, would indicate that privacy is desired to a great degree and also relatively unobtainable in the respondent's present quarters. A zero difference-score on this item would indicate that the degree of privacy presently available is at least as great or greater than the amount desired. Note that things available to a greater extent than they are desired are scored zero. Thus, when adding difference-scores over a number of different housing desires, a high summed difference-score would indicate a large gap between what is wanted, and what is available in the general area of housing, and a zero score would indicate either no gap or that the housing was better than needed.

1. Three additional weighting formats involving summed difference-scores were utilized. Results from these are not significant for the purposes of the present report.
3. Guttman Scale

It is essential to be sure that adequate measurements are made for important ideas and concepts in a study, such as the "Adjustment" in the present case. If the measurement of these intangible factors is not valid or reliable, our conclusions may be incorrect.

One of the ways to improve this measurement is to include a number of questions or observations designed to measure a single concept. Such a set of items is said to form a "scale" of the concept. One of the most widely used scales in sociological research is the "Guttman scale."

Although the method of constructing a Guttman scale is somewhat involved, it provides the following results:

a. It measures the extent to which the items used to measure a given concept are related. This degree is called the Coefficient of Reproducibility (C.R.). The value of this coefficient varies between 0 and 1.00. If it is .90 or greater, it indicates that the questions and observations in the scale are related to each other and do, in fact, measure a single concept. If the C.R. is less than .90, it means that the series of items in the scale are not sufficiently related to measure the concept, and that the items may be measuring separate concepts.

b. In addition to telling us whether or not the questions and observations actually measure the idea in question, the Guttman scale allows us to rank the individual respondents with reference to one another. This allows us to determine, for example, how well-adjusted a given respondent is in comparison to the other respondents. This ranking is valid only if the coefficient of reproducibility indicates that the questions and observations are directly concerned with the concept.

c. The respondent's rank on the Guttman scale is directly related to the responses he made to specific items (with a margin of error). This makes it possible for us to assign an exact empirical meaning to each scale rank. Therefore, the Guttman scale is more useful than scales where a score represents an average of several answers. For instance, in other scales, a medium score could be comprised of all medium items, or of several high scores combined with several low scores. This does not happen in the Guttman scale.

4. Correlation Coefficients

Very often it is desirable to determine the relationship between questions on the different concepts. For example, it might be useful to find a relationship between

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the respondent's income and the type of housing desired. Correlation coefficients may be used to measure the extent to which the two factors are related to one another. 1

The range of the correlation coefficient is from -1.00 to +1.00. A correlation of 0.00 indicates that the two factors are not related. A correlation of +1.00 indicates that the two factors are directly related to one another and vary together. Individuals having high scores on one of the factors also have high scores on the other factor, and vice versa. A correlation of -1.00 indicates that the two factors are inversely related to one another. Individuals having high scores on one of the factors have low scores on the other, and vice versa.

In this study, a correlation of .13 or more (or -.13 or less) indicates that the chances are 19 to 1 that the two factors which are related in the sample tested are also related in the overall group being studied.

5. Statistical Significance Analysis

Most statements in this report of a descriptive nature, such as "29% of the sample have an income of less than $40 per week." However, we are usually far less interested in the particular sample studied than in the large group of individuals they represent—in this case, the non-institutionalized individuals aged 60 or over in the city of Decatur who were well enough to be interviewed. Having drawn a probability sample, we can say something about this much larger group even though a very small fraction of them have been interviewed.

Thus, instead of being limited to the statement, "29% of the sample have an income of less than $40 per week." we can make a set of statements about the population, 2 such as the following:

a. The chances are 19 to 1 that the percentage of the population with an income under $40 per week is between 22% and 36%. 3

b. The chances are 2 to 1 that the percentage of the population with an income under $40 per week is between 26% and 32%.

The statements which are not of a descriptive type illustrated above but have to do with relationships between phenomena are of two types: those having to do with percentage breakdowns and those for which correlation coefficients have been calculated. In both cases, statistical tests can indicate whether the relationship which occurs in the sample has a high probability of also occurring in the population.

1. The type of coefficient calculated is the Pearson Product Moment Correlation Coefficient.

2. In this report the word population is used in its statistical sense and means the total of the non-institutionalized individuals aged 60 or over in the city of Decatur who were well enough to be interviewed. It does not refer to the overall number of inhabitants of the city of Decatur.

3. In order to take into account the fact that approximately half of the respondents were located in clusters with other respondents, the standard errors of statistics utilized in this study are increased by 25%.
Before proceeding with the details of the interview-survey, we will present certain facts about the general population in Decatur and, in particular, the aged population. These facts, when combined with the details of the interview-survey, will give a more complete picture of the situation of the aged in Decatur.

A. GENERAL POPULATION PROJECTIONS

1. 1950-1960

Table 1 presents the data on the total population of Decatur and Macon County for 1950 and 1960. For the city of Decatur, this growth has occurred in the fringe areas as a result of the annexation of new territory. The 1960 census shows 14,026 persons now live in the area annexed to the city of Decatur between 1950 and 1960. This means the population in the area covered by the 1950 city limits is 2,291 less than it was in 1950.

**TABLE 1. POPULATION OF DECATUR AND MACON COUNTY, 1950 AND 1960**

<table>
<thead>
<tr>
<th>Area</th>
<th>1960 Census</th>
<th>1950 Census</th>
<th>Change 1950 to 1960</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macon County</td>
<td>118,257</td>
<td>98,853</td>
<td>19,404</td>
<td>19.6</td>
</tr>
<tr>
<td>Decatur</td>
<td>78,004</td>
<td>66,269</td>
<td>11,735</td>
<td>17.7</td>
</tr>
<tr>
<td>Decatur, urbanized</td>
<td>89,516</td>
<td>73,713</td>
<td>15,803</td>
<td>21.4</td>
</tr>
<tr>
<td>Remainder of county</td>
<td>28,741</td>
<td>25,140</td>
<td>3,601</td>
<td>14.3</td>
</tr>
</tbody>
</table>

2. Assumptions for Projections

The reader should be cautioned in general about the hazards of predicting population growth for a given city. These predictions should be regarded as extrapolations based on certain stated assumptions, other things being equal. This is far different from the kind of scientific prediction which is based on genuine understanding of all the major factors involved. Our projections take only a very few factors into account, whereas in the actual situation any one of a number of occurrences could alter the picture considerably. Consequently, the probability that these projections will be accurate is low.

a. Assume that migration into Decatur and Macon County continues during the next 20 years as in the decade 1950-1960. For the city of Decatur this was of minor importance, but for Macon County there were about 3,500 migrants during this period.

*In collaboration with Clinton L. Folse, Ph.D., Department of Agricultural Economics and Sociology, University of Illinois.*
b. For Series I projections, assume that the birth rate will average 10% above the 1955-57 level for the period 1960-1980. For Series II projections, assume that the birth rate will remain constant at the 1955-57 level throughout the projection period.

c. Note that Series III projections, which would assume the birth rate falling to the 1949-51 level, and Series IV projections, which would assume the 1940-42 level, have not been calculated. The possibility of the birth rate falling to these levels is considered remote.

d. Assume that the death rate per thousand inhabitants will remain constant during the next 20 years. Any actual change here would be slight, in all likelihood. The stable death rate allows for the predicted increase in life expectancy.

3. Projections

Birth and death data are available for the city of Decatur and for Macon County during each year of the decade 1950-1960. Using the registered births and deaths for 1955-57, average birth and death rates were computed by interpolation. The birth rates were 27.5 and 25.9 live births per thousand population for Decatur and Macon County, respectively. The death rate was 10.9 for Decatur and 9.4 for Macon County.


<table>
<thead>
<tr>
<th>Date</th>
<th>City of Decatur</th>
<th>Macon County</th>
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<tbody>
<tr>
<td></td>
<td>Series I</td>
<td>Series II</td>
</tr>
<tr>
<td>1960</td>
<td>78,004</td>
<td>78,004</td>
</tr>
<tr>
<td>1965</td>
<td>86,286</td>
<td>84,879</td>
</tr>
<tr>
<td>1970</td>
<td>95,295</td>
<td>92,324</td>
</tr>
<tr>
<td>1975</td>
<td>105,320</td>
<td>100,389</td>
</tr>
<tr>
<td>1980</td>
<td>116,366</td>
<td>109,119</td>
</tr>
</tbody>
</table>

Unfortunately, projections could not be made for the Decatur urbanized area because vital statistics are not available. However, it is believed that the Macon County population resembles the Decatur urbanized area more closely than does the central city of Decatur, as indicated by age and sex structure as well as birth and death rates.

death rates. If the 1950-60 change is any indication, then the rate of growth of the urban fringe will continue to be greater than that for any other area of Macon County, including the central city.

B. THE AGED POPULATION

1. 1950-1960

Since, at the time the calculations were made, age-specific population totals were not available for 1960, the number of individuals age 60 or over were estimated in two ways:

a. Using the 1950 Census figures, 9,659 of Decatur’s population of 66,269 were age 60 or over. Applying this same ratio to Decatur’s 1960 population of 78,004 we estimated a total of 11,369 age 60 or over. However, this probably underestimated the total number somewhat, since, for Illinois as a whole, statistics show that the proportion of individuals 65 or over increased in the period 1950-60 from 8.7% to 9.7%. This suggested a figure closer to 12,000, assuming the increase for Decatur is similar to that for Illinois as a whole. In actual fact, Macon County’s proportion of aged has generally paralleled the rest of the state in a continuing increase from decade to decade.

b. Using the results of the sample survey as a basis for estimation, we have a total sample of 413 with a sampling ratio of 1 in 26. The figure of 413 should be increased to 418 if more exact weighting is used to take into account the few situations where more than two individuals 60 or over reside in the same dwelling unit. The figure of 418 should be increased to 431 if we assume that the coverage of this study is 97% as complete, with respect to locating all places where individuals live, as that of census enumerators, i.e., ability to physically locate all places where individuals reside. Let us also assume the 97% rate with respect to ability to obtain information about all individuals age 60 or over. This is on the basis that census enumerators are more thoroughly trained and appear in a more official capacity. Thus, the total of 431 would rise to 444. Multiply by 26, the ratio of population to sample, and we find the total of non-institutionalized persons aged 60 or over residing in dwelling units to be 11,544. To this must be added the number of aged in nursing homes, homes for the aged, and sheltered care homes. The capacity of these institutions for the city of Decatur was 307 as of April, 1960. We can use this figure as an approximation, bringing the total to 11,851. Finally, those aged individuals residing in other non-dwelling units, for whom we have no estimate, should be added. The total would in all probability not be far from 12,000, a figure in agreement with the previous estimate.
c. After the above calculations were made, the 1960 U. S. Census figure for the number of individuals 60 or over in Decatur became available. The number, 12,327, is in agreement with the above two estimates of approximately 12,000. This agreement serves to verify the validity of the sample selected, since it has been possible to estimate the total number of the aged with a satisfactory degree of accuracy.

2. Assumptions for Projections

Since projections for the total population have been made, the only additional figure needed is the proportion of individuals of age 60 or over. On the one hand, this proportion has been steadily rising in the United States during this century, and Macon County has followed this rise. However, the situation for the next 20 years seems to be changing in certain respects:

a. The increased birth rate after the depression has resulted in an increased proportion of individuals 0-20 in the population.

b. Under Series I and II assumptions, the future birth rate will either continue at the 1955-57 level or increase 10%. Thus, the present group of individuals under 20 will swell the proportion in the 20-40 group, and the continuing high birth rate will result in a continuing high proportion of individuals in the 0-20 group.

c. Within the past 20 years, the increased proportion of individuals in the under-20 group has not served to prevent an increasing proportion of individuals in the over-60 group. Both the proportion of oldest and youngest individuals have increased.

d. Within the next 20 years the increased proportion of individuals under 40 will markedly affect the present trend of an increasing proportion of aged individuals in the population. Although it should not lead to a decrease from the present proportion of the aged, the trend of increases should be slowed down, stopped, or perhaps even reversed during this period.

e. Since the present proportion of aged is expected to at least be maintained, we will assume that the ratio of 12,327/78,004, i.e., 0.158, is maintained for the projection period.

f. We will assume that the net migration into Decatur remains negligible during the projection period.
3. Projections

TABLE 3. PROJECTIONS FOR THE AGED POPULATION (60 AND OVER) OF THE CITY OF DECATUR, 1960-1980*

<table>
<thead>
<tr>
<th>Date</th>
<th>Series I</th>
<th>Series II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>12,300</td>
<td>12,300</td>
</tr>
<tr>
<td>1965</td>
<td>13,600</td>
<td>13,400</td>
</tr>
<tr>
<td>1970</td>
<td>15,000</td>
<td>14,600</td>
</tr>
<tr>
<td>1975</td>
<td>16,600</td>
<td>15,900</td>
</tr>
<tr>
<td>1980</td>
<td>18,400</td>
<td>17,200</td>
</tr>
</tbody>
</table>

*All figures are rounded to 3 significant digits.

4. The Severely Ill

The proportion of individuals in the original sample who were too ill physically or mentally to respond to the regular 1 3/4 hour interview is 0.0775. Applying this proportion to the aged population as a whole for the 20-year projection period, we have the following results, as presented in Table 4.

TABLE 4. PROJECTIONS FOR THE SEVERELY ILL AGED POPULATION (60 AND OVER) OF THE CITY OF DECATUR, 1960-1980

<table>
<thead>
<tr>
<th>Date</th>
<th>Series I</th>
<th>Series II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>950</td>
<td>950</td>
</tr>
<tr>
<td>1965</td>
<td>1,050</td>
<td>1,040</td>
</tr>
<tr>
<td>1970</td>
<td>1,160</td>
<td>1,130</td>
</tr>
<tr>
<td>1975</td>
<td>1,290</td>
<td>1,230</td>
</tr>
<tr>
<td>1980</td>
<td>1,430</td>
<td>1,330</td>
</tr>
</tbody>
</table>

C. DWELLING UNITS OF THE AGED

1. Projections

The basic information was obtained from sampling results from the interview-survey. The 844 individuals age 60 or over who were located occupied 598 different dwelling
units. Thus, the conversion factor from population to dwelling units is 0.71, i.e., the average number of dwelling units for each individual is 0.71. Using this conversion factor we can see the effect of changes in the population of the aged on the number of dwelling units occupied, assuming the ratio of 0.71 remains constant during the projection period (Table 5).

TABLE 5. PROJECTION FOR THE NUMBER OF DWELLING UNITS OCCUPIED BY THE AGED POPULATION (60 AND OVER) OF DECATUR, 1960-1980*

<table>
<thead>
<tr>
<th>Date</th>
<th>Series I</th>
<th>Series II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>8,730</td>
<td>8,730</td>
</tr>
<tr>
<td>1965</td>
<td>9,640</td>
<td>9,500</td>
</tr>
<tr>
<td>1970</td>
<td>10,600</td>
<td>10,400</td>
</tr>
<tr>
<td>1975</td>
<td>11,800</td>
<td>11,300</td>
</tr>
<tr>
<td>1980</td>
<td>13,100</td>
<td>12,200</td>
</tr>
</tbody>
</table>

*All figures are rounded to 3 significant digits.

2. Substandard Housing and Vacancies

According to the 1960 Census of Housing, there are a total of 27,116 housing units in Decatur, 1,492 of which are vacant. Three thousand four hundred and ninety-six of the total number of housing units are substandard, including 491 of the vacant units. It should be noted that whereas 11.7% of all occupied units are substandard, 32.9% of all vacant units are substandard. Vacancies in 1950 and 1940 were 254 and 265, respectively.

D. CONCLUSIONS: POPULATION PROJECTIONS

1. Projections with reference to the general population of Decatur, the aged population, the severely ill segment of the aged population, and the number of dwelling units occupied by the aged population indicate a 40%-50% increase over the next two decades.

2. For five-year intervals, expected increases are generally 11%, 12%, 13% and 14% (Series I) or 9%, 10%, 10% and 11% (Series II).

3. In order to maintain present services to the aged population it will be necessary to expand them and/or their degree of utilization in the indicated ratios over the projection period.

4. With respect to the particular area of housing, substandard housing units exceed vacancies by 2,000 units. Objectively, based on the standards of the U. S. Census Bureau, present services are inadequate. Thus, an additional housing
expansion (and/or improvement of existing substandard units) of 7% (2000 units) is needed in order to meet the standards of adequate housing.

5. The above projections do not take into account any improvement in the quality or quantity of services for each aged individual. Thus, although population projections provide an important basis for planning, they may represent a totally inadequate conception as to the needs of the aged population.
III. HOUSING*

A. PRESENT HOUSING SITUATION

1. Description of Housing Unit
   a. Type of dwelling: 81% live in a one-family house, 6% in a 2-4 family house, 10% in an apartment, and 3% in other kinds of dwellings.
   b. Basement: 78% have a basement.
   c. Internal stairs: 63% have stairs within their living quarters. This 63% splits into finer divisions as follows (still with reference to the entire sample): 1/2 flight--4%, 2 half-flights--2%, 1 flight--36%, 1 1/2 flights--2%, 2 flights--17%, 2 1/4 or more flights--2%.
   d. Number of rooms: 1--1% 2---7% 3--7% 4--25% 5--34% 6--13% 7 or more--13%
   e. Rooms: (Total over 100% since the categories are not mutually exclusive):
      Separate bedrooms--92%
      Separate kitchen with dining space--19%
      Separate kitchen without dining space--19%
      All areas combined (living room, dressing closet, kitchenette, dining space)--7%
   f. Bathroom facilities: 76% have one private bathroom, 13% have more than one, 8% share a bathroom with others, and 3% have no indoor bathroom.
   g. Home appliances:
      Refrigerator--98% Air conditioner--20%
      Stove--98% Vacuum cleaner--84%
      Washing machine--78% Freezer--13%
      Clothes dryer--15% Radio--93%
      Dishwasher--4% Television set--89%

2. Location of Housing Unit

Respondents were asked: "How far is it from here to ________ ? Do you generally get there by walking, car, bus, or taxi?" Responses are:

<table>
<thead>
<tr>
<th>Distance (blocks)</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Walk</td>
</tr>
<tr>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>The downtown area</td>
<td>6%</td>
</tr>
<tr>
<td>Your doctor</td>
<td>7%</td>
</tr>
<tr>
<td>A place where you can eat</td>
<td>43%</td>
</tr>
<tr>
<td>Stores &amp; shopping facilities</td>
<td>40%</td>
</tr>
<tr>
<td>A place for social activities</td>
<td>23%</td>
</tr>
<tr>
<td>A bus stop</td>
<td>89%</td>
</tr>
<tr>
<td>A park</td>
<td>34%</td>
</tr>
<tr>
<td>Relatives or friends</td>
<td>38%</td>
</tr>
</tbody>
</table>

*Review, revision, and Section G by Rudard A. Jones, M.S., Director of the Small Homes Council-Building Research Council, University of Illinois.
3. **Condition of Housing Unit**

Condition of exterior and interior (interviewer's rating):

<table>
<thead>
<tr>
<th>Condition</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good condition, no need for any repairs</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>Minor repairs needed (repainting or refinishing)</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Major repairs needed</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Replacement or extensive major repairs needed</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

4. **Ownership and Occupancy**

a. **Home ownership:** 78% own their own homes, 16% pay rent, and 5% live rent-free.

b. **Present housing costs:** Note that for renters this includes rent, heat, utilities, and anything else paid. For owners this includes mortgage, taxes, insurance, heat, utilities, upkeep, and so on.

<table>
<thead>
<tr>
<th>Monthly Rent</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $25 per month</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>$25-39</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>40-54</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>55-69</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>70-84</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>85-99</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rent Range</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100-114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$115-134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$135-159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$160-199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 or more</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c. **Time at address:**

<table>
<thead>
<tr>
<th>Time at Address</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>7%</td>
<td>5-9 years-15%</td>
</tr>
<tr>
<td>1-2 years</td>
<td>8%</td>
<td>10 or more years-62%</td>
</tr>
<tr>
<td>3-4 years</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

d. **Living arrangements:** (Total over 100% since categories not mutually exclusive)

<table>
<thead>
<tr>
<th>Living Arrangements</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live alone</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>With spouse</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>With son, daughter, son or daughter-in-law</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>With other relatives</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

e. **Physical abilities:** (able to take care of following housework, or spouse)

<table>
<thead>
<tr>
<th>Physical Abilities</th>
<th>Exterior</th>
<th>Interior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Day to day cleaning, making up beds, etc.</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Weekly house cleaning, washing floors, windows, etc.</td>
<td>69%</td>
<td></td>
</tr>
</tbody>
</table>

5. **Summary:** **PRESENT HOUSING SITUATION**

The representative person lives alone or with spouse in his own home which is 10 or more blocks from the downtown center of Decatur and which has four or more rooms, a bathroom, a basement, and some internal stairs.
Most of the aged have a fair amount of space, with three-fifths having five or more rooms and one-quarter having four rooms. This space is typically shared only with a spouse, as less than one-third live with relatives. Four-fifths have a basement, and nine-tenths have one or more private bathrooms.

Almost two-thirds of the aged live in dwelling units with internal flights of stairs, with one flight being most typical and two flights being fairly common. One-third of the aged live in dwellings with external flights of stairs. Elevators are not present in these dwellings.

The furnishings of four-fifths of the sample were rated by interviewers as clean and in good repair. Appliances which were almost universal were refrigerators (98%), stoves (98%), radios (93%) and television sets (89%). Smaller proportions had vacuum cleaners (84%) and washing machines (78%), while one-fifth or fewer had air conditioners, clothes dryers, freezers or dishwashers.

The findings from the 1960 Census of Housing that 7% of dwelling units for the population as a whole are substandard also seems to hold for the aged population. Interviewers found that major repairs or replacement was needed in 9% of the exteriors and 7% of the interiors of dwelling units where interviews took place.

The aged are not given to moving frequently, with almost two-thirds having lived in their present quarters 10 or more years.

One-fifth of the aged live alone.

Although almost 9 out of every 10 respondents (or his spouse) is able to take care of cooking and day to day cleaning, only 7 out of 10 can manage the laundry or the heavier weekly housecleaning.

B. PRESENT SOCIO-ECONOMIC STATUS

1. Class Identification

"Which one of these groups would you say you belong to? Would you say you are in the upper class, middle class, working class, lower class?"

<table>
<thead>
<tr>
<th>Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>5%</td>
</tr>
<tr>
<td>Middle</td>
<td>49%</td>
</tr>
<tr>
<td>Working</td>
<td>41%</td>
</tr>
<tr>
<td>Lower</td>
<td>4%</td>
</tr>
</tbody>
</table>

2. Total Annual Income

This question was preceded by a query on all sources of income. In this question, respondents are asked to consider all their income, including spouse's income. These responses are presented graphically in Figure 1.

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1,000</td>
<td>13%</td>
</tr>
<tr>
<td>$1,000 - 1,999</td>
<td>16%</td>
</tr>
<tr>
<td>$2,000 - 2,999</td>
<td>14%</td>
</tr>
<tr>
<td>$3,000 - 3,999</td>
<td>11%</td>
</tr>
<tr>
<td>$4,000 - 4,999</td>
<td>13%</td>
</tr>
<tr>
<td>$5,000 - 5,999</td>
<td>8%</td>
</tr>
<tr>
<td>$6,000 - 7,999</td>
<td>7%</td>
</tr>
<tr>
<td>$8,000 - 9,999</td>
<td>4%</td>
</tr>
<tr>
<td>$10,000 - 14,999</td>
<td>5%</td>
</tr>
<tr>
<td>$15,000 - 24,999</td>
<td>3%</td>
</tr>
<tr>
<td>$25,000 - or more</td>
<td>6%</td>
</tr>
</tbody>
</table>
Figure 1. YEARLY TOTAL INCOME OF AGED RESPONDENTS (INCLUDING SPOUSE)

Percentage Who Obtain This Much Or More

- 18 -

Total Yearly Income (Log Scale)
3. **Amount Could Pay For Rent**

Note that this includes rent, heat, utilities, and anything else which would have to be paid.

<table>
<thead>
<tr>
<th>Less than $25 per month</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25-$39</td>
<td>27%</td>
</tr>
<tr>
<td>$40-$54</td>
<td>3%</td>
</tr>
</tbody>
</table>

4. **Amount Could Pay For a House**

"If you decided to buy a house, which letter on this card indicates how much you could afford to pay for it?"

<table>
<thead>
<tr>
<th>Under $8,000</th>
<th>43%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8,000-$9,999</td>
<td>18%</td>
</tr>
<tr>
<td>10,000-$11,999</td>
<td>14%</td>
</tr>
<tr>
<td>12,000-$13,999</td>
<td>6%</td>
</tr>
<tr>
<td>14,000-$15,999</td>
<td>6%</td>
</tr>
<tr>
<td>$16,000-$17,999</td>
<td>3%</td>
</tr>
<tr>
<td>$18,000-$19,999</td>
<td>2%</td>
</tr>
<tr>
<td>$20,000-$24,999</td>
<td>3%</td>
</tr>
<tr>
<td>$25,000-$29,999</td>
<td>1%</td>
</tr>
<tr>
<td>30,000 or more</td>
<td>3%</td>
</tr>
</tbody>
</table>

5. **Present Housing Costs**

(See Section A 4(b) of this chapter.)

6. **Summary: PRESENT SOCIO-ECONOMIC STATUS**

Present socio-economic situation: Housing costs, total income, and other measures of socio-economic status indicate a great deal of variation among the aged population.

Total income varies quite widely among the sample. Almost one-third have an income of less than $2,000 per year, one-quarter are in the $2,000-$4,000 bracket, one-fifth are in the $4,000-$6,000 range, while one-quarter have a $6,000 plus income.

It should be noted that our sample includes the group aged 60-65, and we may expect some decline of income within this group after retirement. The range in income is also reflected in the class identification of the sample, as approximately half identify as middle or upper class and half as working or lower class.

While only 3% of the sample indicated that they could pay more than $39 per month for rent, 80% are in fact presently paying more than this amount. In view of these conflicting results, and taking into account data on other aspects of socio-economic status as well, it would seem that present housing costs provide a more valid indicator of the amount that could be paid for rent than the more direct question on this subject. Present housing costs are widely dispersed, with a median cost of approximately $70 per month and a range from less than $25 per month to over $200. These relationships are shown in Figure 2. This range is also evident with respect to data on the amount of money respondents can afford to pay for a house: approximately one-tenth in the $18,000 plus bracket, one-tenth in the $14,000-$18,000 range, one-fifth $10,000-$14,000, one-fifth $8,000-$10,000, and two-fifths under $8,000. In this context, it should be noted that four-fifths of the sample are home owners.

C. **ATTITUDES TOWARD PRESENT HOUSING**

1. **Satisfaction with Housing**

"On the whole, how satisfied are you with your present housing?"

Not at all--3%; Somewhat--8%; A great deal--16%; Very--51%; Extremely--22%
Figure 2. MONTHLY RENTAL PAID BY AGED RESPONDENTS

Percentage Who Pay This Much Or More

amount they actually pay

amount they say they could pay for rent

Monthly Rental

$20 $30 $40 $50 $70 $100 $150 $200 $250
2. Reasons for Dissatisfaction

The question was asked, "If you are not very satisfied, why don't you move?" Of 37 persons answering this question, 12 indicated they could not move due to financial considerations and 5 didn't wish to leave the neighborhood because of friends or sentimental reasons. Other answers were varied, although 2 other persons listed location as the prime reason—one was close to work; the other near particular facilities desired.

3. Housing Aspects List: Non-locational

Respondents were asked this question: "I would like to get a picture of how you would rate different things about your present housing. Imagine you are rating it for a friend who is thinking about moving into exactly the same housing you are now occupying. How highly would you rate it: (1) Not at all good, (2) Somewhat good, (3) A great deal, (4) Very good, (5) Extremely good?" Replies may be conveniently summarized if we combine the two most negative categories, "not at all good" and "somewhat good," and list the proportion of respondents in this combined category. This will be done in order of decreasing proportions.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The amount of noise there is outside</td>
<td>38%</td>
</tr>
<tr>
<td>How much you have to climb stairs</td>
<td>35%</td>
</tr>
<tr>
<td>How much storage space there is</td>
<td>31%</td>
</tr>
<tr>
<td>The amount you pay for the place</td>
<td>23%</td>
</tr>
<tr>
<td>The outside appearance of the place</td>
<td>21%</td>
</tr>
<tr>
<td>The amount of room you have</td>
<td>18%</td>
</tr>
<tr>
<td>How easy it is to clean and take care of dwelling</td>
<td>17%</td>
</tr>
<tr>
<td>How well the neighborhood is kept up</td>
<td>16%</td>
</tr>
<tr>
<td>How pleasant and well-arranged the interior is</td>
<td>14%</td>
</tr>
<tr>
<td>How friendly the people in the neighborhood are</td>
<td>13%</td>
</tr>
<tr>
<td>The amount of privacy you have</td>
<td>9%</td>
</tr>
<tr>
<td>The amount of independence you have</td>
<td>5%</td>
</tr>
</tbody>
</table>

4. Housing Aspects List: Locational

Respondents were asked whether they were satisfied or dissatisfied with the location of their present residence with respect to each of the following:

<table>
<thead>
<tr>
<th>Location</th>
<th>Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>The downtown area</td>
<td>11%</td>
</tr>
<tr>
<td>Your doctor</td>
<td>9%</td>
</tr>
<tr>
<td>A place where you can eat</td>
<td>5%</td>
</tr>
<tr>
<td>A place for social activities</td>
<td>7%</td>
</tr>
<tr>
<td>Stores and shopping facilities</td>
<td>11%</td>
</tr>
<tr>
<td>A bus stop</td>
<td>5%</td>
</tr>
<tr>
<td>A park</td>
<td>5%</td>
</tr>
<tr>
<td>Relatives or friends</td>
<td>9%</td>
</tr>
</tbody>
</table>
5. **Summary: ATTITUDES TOWARD PRESENT HOUSING**

Concerning general satisfaction with present housing, three-quarters of the sample were very or extremely satisfied, while only about one-tenth were not at all or somewhat satisfied. However, it should be noted that the 11% dissatisfaction rate, when applied to the population of aged, represents 1,320 individuals. Also, an additional 16% are neither very nor extremely satisfied. Finally, this was the first question asked in the interview, and interviewers may not have yet had sufficient time to build up rapport and an atmosphere of freedom to express one's opinion. More specific questions about aspects of housing rated as not at all good or only somewhat good tended to evoke more dissatisfaction.

Those non-locational aspects of housing given low ratings by respondents are, from lowest to higher ratings: amount of noise, presence of stairs, amount of storage space, cost, outside appearance, and amount of room.

Nine-tenths of the sample expressed satisfaction with location with reference to a variety of services and facilities. This was in spite of the fact that four-fifths of the aged live one or more miles from the downtown area and their doctors, three-fifths of the aged live one or more miles from a place for social activities, two-fifths live one or more miles from relatives or friends, and almost one-third live one or more miles from a park, a place for eating, and stores and shopping facilities.

Almost one-fifth of the aged indicate some interest in moving. This is manifested either by a statement that there is at least a fifty-fifty chance of moving during the next two years or a preference for some hypothetical kind of housing over one's present housing.

**D. HOUSING VALUES AND PREFERENCES**

1. **Housing Aspects List: Non-locational**

Respondents were queried as follows: Let's go over a number of specific things about your ideal housing. How much do you want each of the following things: (1) Not at all, (2) Somewhat, (3) A great deal, (4) Very much, or (5) Extremely much?" This question was preceded by a question designed to have the respondent start thinking about his ideal housing. Replies to the present question may be conveniently summarized by listing in decreasing order the proportion of respondents in the category "extremely much."

It is recognized that this procedure differs from the one employed in the section on present housing situation, where the two extreme categories of the housing aspects list were combined. However, it is felt that this procedure is justified in view of an evident tendency to put responses in the more favorable end of the range more frequently than at the end expressing dissatisfaction. Thus, a fine distinction becomes necessary at the favorable end.
No stairs to climb 37%
A dwelling which is easy to clean and to take care of 27%
A place where the neighborhood is nicely kept up 27%
A place where people in the neighborhood are friendly 26%
A dwelling where I can feel independent 25%
Low payments for the housing 25%
A good deal of privacy 23%
A dwelling which has a pleasant appearance from the outside 20%
A dwelling where there is not much noise from outside 19%
A pleasant and well-arranged interior 19%
A large amount of storage space 14%
A large amount of room 4%

a. Stairs: The following open-end question was asked: "Suppose that some housing was designed especially to satisfy your own needs, that is, housing which would be ideal from your own point of view. Describe the most important things about this ideal housing." No more than two discreet values or desires were coded for each respondent. Of the total of 277 responses, which could be classified into a large number of categories, 43% were in the single category, "no stairs to climb." The remainder were diffused over a wide number of categories.

Additional information on respondents' desires with respect to climbing stairs is provided by response to the following two questions:

"How important is it to you to have your living unit all on the same floor?" 33% answered "extremely important."

"How important is it to you to be able to reach your living unit without climbing any stairs?" 34% answered "extremely important."

b. Space preferences: "How important is it to you to have more than one bedroom?" Absolutely necessary--31%; Important--42%; Not important--27%

"How much would you want more than a combination living-room-bedroom of reasonable size?" Absolutely necessary--32%; A good deal--37%; Not at all--30%

"Would you need a full kitchen, a small kitchenette, or no kitchen at all?" Full kitchen--65%; Kitchenette--33%; No kitchen at all--1%

c. Living arrangements: "Would you (and your husband-wife) rather live by yourself or with somebody else?" Independently--86%; With somebody else--14%. (Note that those who preferred living with somebody else chose children, relatives or friends almost exclusively in response to the question, "Who would you want to live with?")
"How about children—would you rather live where the children are close and can be seen and heard, where children are separated enough to keep out noises or where there are no children at all?" Close--48%; Separated--38%; No children--14%.

"If given a choice, which of the following would you choose:

<table>
<thead>
<tr>
<th>1st choice</th>
<th>2nd choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with children in the same building and using the same hall?</td>
<td>16%</td>
</tr>
<tr>
<td>Living with children in adjacent building, but with separate entrance?</td>
<td>42%</td>
</tr>
<tr>
<td>Living with no children in nearby dwellings?</td>
<td>20%</td>
</tr>
<tr>
<td>Living with only elderly persons in nearby dwellings?</td>
<td>23%</td>
</tr>
</tbody>
</table>

2. Housing Aspects List: Locational

<table>
<thead>
<tr>
<th>Extremely much</th>
</tr>
</thead>
<tbody>
<tr>
<td>A place close to a bus stop</td>
</tr>
<tr>
<td>A place close to the downtown area</td>
</tr>
<tr>
<td>A place close to stores and shopping facilities</td>
</tr>
<tr>
<td>A place close to relative or friends</td>
</tr>
<tr>
<td>A place close to your doctor</td>
</tr>
<tr>
<td>A place close to facilities for social activities</td>
</tr>
<tr>
<td>A place close to eating facilities</td>
</tr>
<tr>
<td>A place close to a park</td>
</tr>
</tbody>
</table>

3. Hypothetical Housing

"Suppose that you were considering moving from your present dwelling. How much would you like the idea of living in each of the following kinds of housing: Not at all, somewhat, a great deal, very much or extremely much?"

a. Living in specially constructed housing several stories high, with an elevator, designed for people of your age. The housing would have a central dining room, a recreation and hobby rooms, single rooms, and housekeeping services.

Not at all--71%; Somewhat--14%; A great deal--5%; Very much--8%; Extremely much--1%

b. Living in a specially constructed apartment house with an elevator, designed for people of your age, each apartment having its own kitchen
or kitchenette. Recreational and hobby facilities would be located in the same building.

Not at all--46%; Somewhat--26%; A great deal--10%; Very much--13%;
Extremely much--4%.

c. The same housing as the previous one except that all of the tenants would not necessarily be in your age group.

Not at all--51%; Somewhat--25%; A great deal--10%; Very much--12%;
Extremely much--2%.

d. Living in a newly constructed one-story house specially designed for people of your age. It would be one of a group of attached units, each with a separate entrance and backyard. Recreational and hobby facilities would be located nearby.

Not at all--28%; Somewhat--32%; A great deal--17%; Very much--16%;
Extremely much--3%.

Correlation coefficients among the five hypothetical housing choices range from 0.15 to 0.68. We can conclude that interest in any one of the hypothetical choices tends to be associated with each of the others.

4. Preference for Hypothetical Housing Over Present Housing

"Would you prefer to live in any of these types of housing (see above for the five hypothetical types of housing) over your present living quarters?" Yes--17%; No--83%.

5. Expectations of Moving

"As far as you can tell now, do you expect to stay here for the next two years, is there a fifty-fifty chance of your moving, or will you definitely move in that time?" Expect to stay--81%; Fifty-fifty--11%; Definitely move--8%.

6. Housing Aspects List

As another check on the relative importance of different features of desired housing, the difference scores of certain aspects were determined. In previous sections, housing values as well as ratings of present housing were presented with reference to the housing aspects list. As described in section D of Chapter 1, difference-scores were obtained with respect to housing.

The five possible responses with respect to housing values or ratings are given scores from 1 to 5. The maximum difference-score for any aspect of housing is thus the difference between 5 and 1, or 4, indicating a large gap between what was needed and what was available. Negative differences were scored as zero. With
respect to each value-rating pair, the total difference-score for the entire sample was obtained, weighting difference-scores of 4 four times as much as d-scores of 1, etc. These results are presented below.

<table>
<thead>
<tr>
<th>a. Non-locational</th>
<th>Sum of difference-scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>No stairs to climb</td>
<td>287</td>
</tr>
<tr>
<td>A dwelling where there is not much noise from outside</td>
<td>248</td>
</tr>
<tr>
<td>A dwelling which is easy to clean and to take care of</td>
<td>223</td>
</tr>
<tr>
<td>Low payments for the housing</td>
<td>217</td>
</tr>
<tr>
<td>A place where the neighborhood is nicely kept-up</td>
<td>215</td>
</tr>
<tr>
<td>A large amount of storage space</td>
<td>215</td>
</tr>
<tr>
<td>A dwelling which has a pleasant appearance from the outside</td>
<td>215</td>
</tr>
<tr>
<td>A place where the people in the neighborhood are friendly</td>
<td>157</td>
</tr>
<tr>
<td>A pleasant and well-arranged interior</td>
<td>155</td>
</tr>
<tr>
<td>A good deal of privacy</td>
<td>142</td>
</tr>
<tr>
<td>A dwelling where I can feel independent</td>
<td>121</td>
</tr>
<tr>
<td>A large amount of room</td>
<td>63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Locational</th>
<th>Sum of difference-scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>A place close to your doctor</td>
<td>138</td>
</tr>
<tr>
<td>A place close to the downtown area</td>
<td>126</td>
</tr>
<tr>
<td>A place close to stores and shopping facilities</td>
<td>121</td>
</tr>
<tr>
<td>A place close to relatives or friends</td>
<td>114</td>
</tr>
<tr>
<td>A place close to facilities for social activities</td>
<td>74</td>
</tr>
<tr>
<td>A place close to eating facilities</td>
<td>45</td>
</tr>
<tr>
<td>A place close to a park</td>
<td>37</td>
</tr>
<tr>
<td>A place close to a bus stop</td>
<td>27</td>
</tr>
</tbody>
</table>

7. **Summary**: HOUSING VALUES AND PREFERENCES

a. **Non-locational aspects**: Non-locational aspects of housing rated as extremely important are, in decreasing order of importance, no stairs, a dwelling easy to take care of, a nicely kept-up neighborhood, friendly neighbors, encouragement of feelings of independence, and low payments.

Those non-locational housing factors within the housing aspects list for which dissatisfaction was expressed most frequently (high difference scores) are, in descending order of dissatisfaction, stairs, noise from outside, ease of taking care of the unit, housing costs, how nicely kept-up the neighborhood is, the amount of storage space, and how pleasant the appearance of the unit is from the outside.
The desire for no stairs loomed large in questions other than the housing aspects list. In the open-end question having to do with ideal housing, for example, this was the category mentioned in almost half of the responses.

Concerning space preferences, only a tiny proportion (4%) were interested in a large amount of room, while almost one-third thought it not important to have more than one bedroom, or more than a combination living room-bedroom of reasonable size. However, two-thirds wanted a full kitchen and 99% wanted at least a kitchenette.

b. **Locational aspects**: None of the locational aspects of housing received as much emphasis as the non-locational aspects listed above. In fact, after the specification of interest in a place close to a bus stop, other locational factors received very little emphasis.

With respect to locational housing factors, dissatisfaction tended to be of a lower order than for non-locational factors. In descending order of dissatisfaction, we have dissatisfaction expressed (high difference-scores) for location with reference to one's doctor, the downtown area, stores and shopping facilities, and relatives and friends.

c. **Living arrangements**: Almost 9 out of 10 of the aged prefer to live independently rather than with others.

Preferences with respect to living near families with children vary greatly, with approximately one-fifth wanting to live in the same building, two-fifths preferring children in adjacent buildings, and two-fifths preferring no children in nearby dwellings. A sizeable segment, approximately one-quarter, prefer to live with only elderly persons in nearby dwellings.

d. **Hypothetical housing**: The kind of hypothetical housing least preferred is the apartment with central dining facilities. Next lowest in order of preference is the apartment with separate cooking facilities. One-story attached units are much preferred over apartment units.

There was a wide variation in preference for units with other age groups specifically excluded or included.

Preference for different kinds of hypothetical housing tends to be somewhat general in that people who like one kind of special housing also tend to like other kinds. This is distinct from the situation where desires expressed for various kinds of housing automatically exclude other types.

e. **Ideal housing**: Certain housing values seem to be particularly important to the aged. Most important seems to be a dwelling with no stairs to climb. Having a dwelling which is easy to take care of is also quite important. Almost none of the aged are interested in a large amount of room, as this is probably viewed as a burden, yet the amount of room which Decatur's aged presently have is considerable. Desires which are almost universal within the sample include living independently and having separate cooking facilities.
Preferences with respect to living near children, as well as living near other aged individuals vary considerably. Housing which would conform with the desires of the greatest proportion of the sample would not include children in the same building and would not be adjacent to dwellings where only aged individuals live.

E. SOME FACTORS RELATED TO HOUSING DECISIONS

Up to this point, the material presented has been descriptive, with percentage breakdowns of the sample provided for various aspects of present housing situation and socio-economic status, attitudes toward present housing, and housing values and preferences. In addition to this type of analysis, it is interesting from both a theoretical and an applied viewpoint to focus on relationships and, in particular, to focus on some of the factors leading to the decision to change residence.

There are three major aspects of the likelihood to change residence which have previously been considered in this chapter; satisfaction with housing, preference for hypothetical housing over present housing, and expectations of moving. These aspects vary in how much they influence the individual to make a definite decision to move. An individual may have an abstract preference for certain types of hypothetical housing, a preference which might have little effect on his behavior unless he were also somewhat dissatisfied with his present housing situation. Even if the individual has a preference for hypothetical housing and is also dissatisfied, he may not expect to move during the next two years.

The process whereby these aspects of the decision to change residence are affected, and, in turn, determine residential mobility, is highly complex. However, some insight into this process may be gained by examining the relationship between a number of key factors and each of these aspects of the decision to move.

One example of such a relationship is that between income group and hypothetical housing preference, as presented in Table 6.

TABLE 6. INCOME GROUP VS HYPOTHETICAL HOUSING PREFERENCES

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Total Number</th>
<th>Prefers Hypothetical Housing Number</th>
<th>Prefers Hypothetical Housing Percent</th>
<th>Does Not Prefer Hypothetical Housing Number</th>
<th>Does Not Prefer Hypothetical Housing Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1,000</td>
<td>43</td>
<td>12</td>
<td>28%</td>
<td>31</td>
<td>72%</td>
</tr>
<tr>
<td>$1,000 - 1,999</td>
<td>53</td>
<td>10</td>
<td>19%</td>
<td>43</td>
<td>81%</td>
</tr>
<tr>
<td>2,000 - 2,999</td>
<td>47</td>
<td>11</td>
<td>23%</td>
<td>36</td>
<td>77%</td>
</tr>
<tr>
<td>3,000 - 3,999</td>
<td>38</td>
<td>6</td>
<td>16%</td>
<td>32</td>
<td>84%</td>
</tr>
<tr>
<td>4,000 - 4,999</td>
<td>53</td>
<td>8</td>
<td>15%</td>
<td>45</td>
<td>85%</td>
</tr>
<tr>
<td>5,000 - 5,999</td>
<td>27</td>
<td>4</td>
<td>15%</td>
<td>23</td>
<td>85%</td>
</tr>
<tr>
<td>6,000 - 7,999</td>
<td>25</td>
<td>4</td>
<td>16%</td>
<td>21</td>
<td>84%</td>
</tr>
<tr>
<td>8,000 - 9,999</td>
<td>13</td>
<td>1</td>
<td>8%</td>
<td>12</td>
<td>92%</td>
</tr>
<tr>
<td>10,000 &amp; above</td>
<td>47</td>
<td>2</td>
<td>4%</td>
<td>45</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>346</td>
<td>58</td>
<td></td>
<td>288</td>
<td></td>
</tr>
</tbody>
</table>
As may be seen in Table 6, the lower income groups have somewhat stronger preferences for a change in housing than do the higher income groups. The degree of this relationship may be specified more accurately by a correlation coefficient, namely, \( r = 0.17 \).

An illustration of a relationship which does not exist is that between chronological age and hypothetical housing preference, as presented in Table 7.

TABLE 7. AGE GROUP VS HYPOTHETICAL HOUSING PREFERENCE

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Number</th>
<th>Prefers Hypothetical Housing</th>
<th>Does Not Prefer Hypothetical Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>No answer</td>
<td>6</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>60-64</td>
<td>87</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>65-69</td>
<td>99</td>
<td>21</td>
<td>21%</td>
</tr>
<tr>
<td>70-74</td>
<td>61</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>75-79</td>
<td>54</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>80-84</td>
<td>25</td>
<td>6</td>
<td>24%</td>
</tr>
<tr>
<td>85-89</td>
<td>10</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>90+</td>
<td>4</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>346</td>
<td>58</td>
<td></td>
</tr>
</tbody>
</table>

The lack of relationship in Table 7 is also shown by the corresponding correlation coefficient of 0.03. There is no relationship between chronological age and whether or not there is a preference for hypothetical housing.

In the foregoing examples, it may be seen that the correlation coefficients represent a satisfactory summary of the degree of relationship present between various factors, and the remaining relationships will be summarized in this manner. In addition to the factors of income and chronological age, the following variables seem worthy of exploration in investigating the processes influencing residential mobility:

a. Exterior repairs needed (interviewer's rating)
b. Interior repairs needed (interviewer's rating)
c. The sum of difference-scores having to do with the 8 locational aspects of the housing list. The higher the scores on this variable, the greater the difference between what is valued or desired and what is obtainable with respect to locational aspects of the respondents' present housing.
d. The sum of difference-scores having to do with the 12 non-locational aspects of the housing list.
e. The sum of difference-scores having to do with all of the 20 aspects of the housing list.
f. Limitations on physical abilities: the number of types of housework which the respondent, or his spouse, is not able to perform.

These six variables, as well as amount of income (from low to high) and the age of the respondent, are related to each of the three aspects of the decision to change residence in Table 8.
TABLE 8. CORRELATIONS AMONG SELECTED FACTORS AND ASPECTS OF THE DECISION TO CHANGE RESIDENCE*

<table>
<thead>
<tr>
<th>Selected Factors</th>
<th>Dissatisfaction with present housing</th>
<th>Preference for hypothetical housing</th>
<th>Expectations of moving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior repairs needed</td>
<td>0.27</td>
<td>0.17</td>
<td>0.21</td>
</tr>
<tr>
<td>Interior repairs needed</td>
<td>0.24</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>Sum of location difference-scores</td>
<td>-0.03</td>
<td>0.08</td>
<td>0.05</td>
</tr>
<tr>
<td>Sum of non-location difference-scores</td>
<td>0.12</td>
<td>0.15</td>
<td>0.24</td>
</tr>
<tr>
<td>Sum of all difference-scores</td>
<td>0.14</td>
<td>0.21</td>
<td>0.19</td>
</tr>
<tr>
<td>Physical limitations of respondent</td>
<td>0.05</td>
<td>0.16</td>
<td>0.03</td>
</tr>
<tr>
<td>Amount of income</td>
<td>-0.08</td>
<td>-0.17</td>
<td>0.01</td>
</tr>
<tr>
<td>Age of respondent</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

*A correlation coefficient of 0.13 or higher (or -0.13 or lower) indicates a degree of relationship between the factors being compared which is statistically significant at the .05 level as described on page 7. All other tables in this report are based on this level.

The distinction between the effect of non-locational as compared to locational difference-scores on the decision to move is quite clear-cut: it is only the non-locational factors which have a definite effect.

The physical condition of the respondent's present dwelling is also related to the decision to move. This is quite apparent with respect to the external condition of the dwelling and is somewhat less so where the interior condition is involved.

The age of the respondent is unrelated to all three aspects of the likelihood of changing residence. Thus, the different age groups from 60 on up do not vary in their willingness to change residence. There is also some basis for inferring that increasing age is not related to an increased dissatisfaction with present housing and an increased desire to move.

Amount of income is negatively related to preference for hypothetical housing; the higher the income group, the less the interest shown in any of the five hypothetical types of dwellings in comparison to their present housing.

Finally, physical limitations of the respondents are positively related to preference for hypothetical housing but to neither of the remaining two aspects of the decision to move. One distinction that was made is between an abstract desire for housing which is better fitted to one's needs (preference for hypothetical housing) and a realistic expectation of being able to move to such a residence (expectations of moving).

Summary: FACTORS AFFECTING HOUSING DECISIONS

Of the eight factors investigated by means of correlation coefficients, six are related to one or more of the three aspects of the decision to change residence: exterior
repairs needed, interior repairs needed, sum of non-locational difference-scores, sum of all difference-scores, physical limitations, and amount of income.

The two factors unrelated to any of the three aspects of the decision to move are sum of locational difference-scores and age of the respondent.

F. HOUSING FACTORS RELATED TO ADJUSTMENT

Most of the housing factors discussed in the previous section also are related to the well-being or personal adjustment of the senior citizens, although the relationships are generally not high. Of the first six "selected factors" in Table 8, five are related to one or more aspects of personal adjustment, with the sum of locational difference-scores being the exception. Thus, factors linked to the decision to change residence also have a definite relationship to personal adjustment. 1

G. HOUSING NEED AND MARKET

This section suggests certain inferences concerning needs for housing for the elderly in Decatur that may be drawn from the results of the survey given in the first part of this chapter.

Some of the key indicators of the need for housing are:

- Dissatisfaction (Not at all satisfied, Somewhat satisfied) 11%
- Definitely going to move 8%
- Exterior needs major repairs 10%
- Interior needs major repairs 7%
- No inside bath 3%
- Shared bath 8%
- Preference for hypothetical housing 17%

1. Housing Need

In Chapter 2, the 1960 population of persons 60 years and older is given as 12,300 individuals. Using this as a basis, the probable market for new housing for the aging may be estimated.

According to the survey sample (see Chapter 1) 32 persons out of 413 or 7.75% were too ill either physically or mentally to answer the questionnaire. Applied to the 12,300 population, the number of persons eligible for conventional housing; that is, non-institutional housing without care of any type, is reduced to 11,350 persons. This number is further reduced by the 14% that indicate they prefer to live with their family. This reduces the total market to 9,760 persons.

The number of persons eligible for new housing will be reduced drastically when the economic situation of the elderly is considered. If no subsidy is provided, the minimum monthly housing cost which seems feasible for new structures would appear to be approximately $60; actually, a more realistic figure would be $80.

If we consider valid the amount of rent that the individuals claim that they could afford, then none of the group can be provided with housing without subsidy.

1. See Appendix B, page 100 for detailed table summarized above.
This, of course, is not realistic in view of the reported incomes of some of the respondents. If 25% of income is devoted to housing costs, then it appears that an annual income of at least $3,000 is required to rent housing without subsidy. On this basis, only 56% of the sample could be accommodated. If the economic rate reaches $80, the number that can be served without subsidy is further reduced to 45%.

On this basis, from 4,390 to 5,470 persons are able to afford new housing. The conversion factor of 0.71 dwelling units per aged person (see Chapter 2) may be used to transfer the above figures into the terms of housing units that the elderly population of Decatur can afford. The range is between 3,120 and 3,880 units.

However, not all of the persons that are capable of acquiring new housing will acquire them. This is limited by a number of factors.

The market can be examined further in light of factors mentioned at the head of this section.

<table>
<thead>
<tr>
<th>Number of units</th>
<th>Income $4,000+</th>
<th>Income $3,000+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$80/mo. cost</td>
<td>$60/mo. cost</td>
</tr>
<tr>
<td>Basic requirement</td>
<td>3,120</td>
<td>3,880</td>
</tr>
<tr>
<td>Definitely going to move (8%)</td>
<td>250</td>
<td>310</td>
</tr>
<tr>
<td>Dissatisfied (11%)</td>
<td>340</td>
<td>425</td>
</tr>
<tr>
<td>Preference for hypothetical housing over present (12%)</td>
<td>375</td>
<td>465</td>
</tr>
</tbody>
</table>

Of the various indicators, the most conservative appraisal appears to indicate a market of 250 units; however, the type of unit desired modifies this picture somewhat.

2. Type of Housing

Of those indicating they were definitely going to move, 40% also indicated that they would prefer to live in one of the hypothetical housing units rather than their present accommodations. Accordingly, we may estimate the number of apartment and townhouse type of dwelling units that would be marketable is of the order of 100 to 125 units. It may be assumed that the remainder of the people want single-family detached houses.

A similar correlation between dissatisfaction with housing and preference for hypothetical housing is of the same order.

It would be a mistake to assume that all of these units could be identical. In the lower price bracket, the housing units would be limited to efficiency-type units, or perhaps to one-bedroom units. Those persons in higher income brackets would tend to expect more elaborate units.

1. Of the total sample, 17% preferred the hypothetical housing over their present housing, but only 12% of the income group above $3,000 indicated this choice.
Certain other factors might tend to change the market for housing units. Some persons that have expressed a preference for apartments or town (row) houses might prefer to remain in their large older house once they have seen the actual size of the new units available and the price of these units.

On the other hand, attractive units, along with associated recreational facilities, might create a greater market than indicated by the survey. If, for example, the units attracted all of those persons indicating a preference for apartments or row houses, then the market would expand to between 375 and 465 units. To achieve maximum marketability, it would be desirable to provide housekeeping services and central dining for a portion of the units constructed; however, such an arrangement might best be delayed to a second-stage development in order to take advantage of experiences gained from earlier housing programs.

The exact design of the unit cannot be stated with precision. A kitchen or kitchenette should be provided in all facilities. Apparently 30% would be satisfied with a single combination living room-bedroom-with kitchenette; another 31% state that more than one bedroom is an absolute necessity. How these demands are related to income level, age level, and among individuals and couples has not been correlated, but it can be assumed that individuals would require less space than couples.

3. Arrangements for Elderly Requiring Care

At the outset of this section, the persons too ill to answer the questionnaire were eliminated from the housing market. These 930 aged persons, along with the 13% (1,440) that indicate that they (or their spouse) are unable to take care of day to day cleaning, making up of beds, cooking, etc., represent a special market. Some of them can be taken care of by sheltered care or nursing homes; others, especially those who wish to live with someone else, might find some type of duplex arrangement of interest. Thus, there is a possible potential market for duplexes or houses with "mother-in-law" apartments for their group. Such designs, to be readily resaleable, should be suitable for quick conversion to standard duplex housing units. The determination of the number of units needed for this market would also be subject to the economic factors and other factors mentioned above.
IV. HEALTH*

A. HEALTH STATUS OF AGED RESPONDENTS

1. Chronic Illnesses or Disabilities

Figure 3 presents a graphic summary of the information received from the questionnaire. Of the respondents, 51% reported chronic illnesses or disabilities. Two or more such conditions were indicated by 22%. Illnesses or disabilities mentioned and the percentage of respondents who mentioned them first or second among their complaints are: Arthritis or rheumatism, 15%; miscellaneous diseases of internal organs (e.g., diabetes, ulcers, gallstones, liver disease, etc.), 15%; heart conditions, 11%; hypertension, hardening of arteries, or varicose veins, 8%; respiratory illnesses, 6%; physical defects, 3%; visual defects, 3%; nervous and mental disorders, 2%; hearing defects, 2%; and all other conditions, 8%.

Of those indicating chronic illnesses, 83% said that such illnesses had been taken care of by a doctor. Reasons why conditions had not been taken care of by a doctor among the remainder were given as:

Considered incurable (majority of responses):
- Arthritis, "...don't feel there is much to be done about it."
- Weak back, "...no treatment is beneficial."
- Multiple problems, "...tries to keep them under control, but they are not actually curable."

Miscellaneous:
- Multiple problems, "...can't afford."
- Stomach trouble, "...surgery is indicated, but because of my age it is impossible."
- Hernias, "...wait until it has to be taken care of."

2. Physician's Appraisal of Respondent's General Health

A one-page questionnaire was sent to the physician who each respondent used most regularly or by whom each respondent believed himself best known. Some named no physician, and some physicians did not return questionnaires despite follow-up. Physicians' evaluations were obtained for 194 of those interviewed, or 56%. Specific diagnoses were not sought. In this possibly biased subsample of respondents, 9% were considered by their physicians to have excellent, 44% good, 31% fair, 15% poor, and 1% very poor general health.

3. Respondent's Own Assessment of General Health

In the total group of respondents, 20% considered themselves in excellent, 40% good, 29% fair, 8% poor, and 3% very poor general health. This and certain other evaluations to be discussed are shown in Figure 4. Some 66% believed their health to be

*Review, revision, and diagrams by William R. Best, M.D., Chicago Professional Colleges, University of Illinois.
Figure 3. CHRONIC ILLNESS OR DISABILITY

A.

None 49%
One Disorder Mentioned 29%
Two Or More Mentioned 22%

B.

Arthritis, Rheumatism 15%
Misc. Diseases of Int. Organs (Diabetes, Ulcers, Liver, etc.) 15%
Heart Conditions 11%
Hypertension, vascular 8%
Respiratory 6%
Physical Defects 3%
Visual Defects 3%
Nervous and Mental 2%
Hearing Defects 2%
All Other Conditions 8%

Percentage Of All Respondents Who Mentioned Disorder (First Or Second Mention If Multiple Complaints)
Figure 4. SOME CHARACTERISTICS OF RESPONDENTS

Patient's Self-evaluations, N = 346

- Excellent: 20%
- Good: 40%
- Fair: 29%
- Poor: 8%
- Very Poor: 3%

Most of Time: 11%
- Sometimes: 36%
- Never: 55%

A. General Health Status

Physicians Evaluations, N = 194

- Alert, Sharp: 57%
- Slight Blunting: 29%
- Moderate Blunting: 10%
- Moderate Senility: 3%

Marked: 10%
- None: 36%
- Slight: 31%

B. Worry About Health

C. Tendency to Senility

D. Tendency to Neurotic Manifestations
better, 29% the same, and 6% worse than most people of their age, and 9% considered their health to have become better, 60% the same, and 31% worse during the prior five years.

4. **Respondent's Assessment of Vigor and Abilities**

Of the sample, 8% considered their physical vigor and vitality to be better, 56% the same, and 36% worse than five years previously. Regarding specific activities: 91% of women considered themselves healthy enough to do the ordinary work around the house; 86% of all respondents said they could walk up and down one flight of stairs; 84% could walk five blocks; and 53% could do heavy work around the house such as shoveling snow or washing walls.

5. **Worry About Health**

The amount of time a respondent's health worried him was stated as: never by 55%; sometimes by 36%; and most of the time by 8%; as seen in Figure 4-B. Among the limited sample of respondents for whom physician's questionnaires were returned, the physician believed the patient to worry about his own health as follows: never in 5%; rarely in 48%; often in 36%; and most of the time in 11%.

6. **Physician's Appraisal of Mental Adjustment**

Physicians were asked to rate the mental alertness or tendency to senility of respondents. As noted in Figure 4-C, ratings were: very alert, sharp, 57%; slight blunting of mental acuity, 29%; moderate blunting, 10%; and definite or marked senility, 3%. Propensity to neurotic manifestations was rated as: none, 36%; slight, 31%; moderate, 23%; and marked, 10% (see Figure 4-D). Physician's evaluation of how well satisfied with life a patient seemed to be was: not at all, 5%; somewhat, 30%; a great deal, 26%; very, 29%; and extremely, 10%. Fifty-five percent of physicians thought of these patients as middle-aged, 45% as old.

7. **Total Health-status of the Aged in Decatur**

It should be recalled that 7.8% of the aged approached for this questionnaire could not respond because of difficulties with physical or mental health. In addition, an unknown number were in hospitals or nursing homes who might otherwise have been interviewed. Taking into account the above 7.8%, one can estimate that in the aged population, about 55% had a chronic illness or disability as opposed to the 51% among the sample questioned.

8. **Summary: HEALTH STATUS OF AGED RESPONDENTS**

An estimated 55% of the total aged population, based on 51% of the actual respondents plus those who could not respond because of health, had some chronic illness or disability. The most frequent conditions were arthritis or rheumatism, miscellaneous diseases of internal organs such as diabetes or ulcers, heart conditions, hypertension or vascular disorders, and respiratory illnesses. Almost one-fifth have a chronic illness which has not been taken care of by a doctor. The reason most frequently given is that no treatment would be beneficial. Of the sample, 60% considered their health to be excellent or good, 66% saying it was better than most people of their age, and 69% saying it was the same or better than during the prior five years. Some 64% considered their vigor and vitality to be as good as or better
than during the prior five years, 86% stating that they could walk up and down a flight of stairs, and 53% that they could do heavy work such as shoveling snow. Their health causes no worry for 55%.

Physician's questionnaires were returned for 56% of respondents, and among this sample physicians considered 53% to be in excellent or good health, 86% to have little or no blunting of mental acuity, and 67% to have little or no tendency to neurotic manifestations. Only 55% were thought of as old rather than middle-aged by their physicians.

B. EXPERIENCES WITH HEALTH FACILITIES IN DECATUR

1. Physicians

A regular doctor who usually took care of family illnesses was claimed by 85% of respondents. Figure 5 shows in a cumulative, graphic manner how long those respondents who named a family doctor had used his services. By extrapolation it is seen that for 90% of the sample this exceeded 21 months; for half it exceeded 9 years.¹

The number of visits to the doctor during the preceding year made by those seeing a doctor for one or more years is shown in Figure 6. No visits were made by 34%. Half had seen their doctor two or more times. Ten percent had seen him fifteen or more times.²

There are 104 physicians and 48 dentists in Decatur. Of the physicians, 32% are general practitioners; 15% surgeons, 13% internists, and the remaining 40%, other specialists. There are apparently 26 other physicians in the county, about two-thirds of whom are general practitioners, making the percentage for the entire county about 41% general practitioners. Respondents identified their family physicians as general practitioners in 74% of the cases, as surgeons in 11%, as internists in 9%, and as miscellaneous specialists in 6% (see Figure 7-A).

Respondents estimated the age of family physicians as: under 40 years, 8%; 40-49 years, 36%; 50-59 years, 33%; and 60 years or over, 23%.

Figure 7-B illustrates the respondents' satisfaction with their physicians. Ratings were: extremely much, 22%; very much, 60%; a great deal, 13%; somewhat, 2%; and not at all, 3%. The 5% who were least satisfied gave various reasons, such as:

"They are too busy--they all give you the brush-off."
"He doesn't show the proper interest."
"I kind of get the impression that he is trying to regain the cost of his education too fast."
"For the simple reason if he knew what was wrong he didn't communicate his opinion to me."
"I don't think he set my broken leg right."

¹ Actual distribution was: less than 2 years, 12%; 2 or more but less than 5 years, 21%; 5 or more but less than 10 years, 19%; and 10 or more years, 49%.

² Actual distribution was: 0, 34%; 1, 15%; 2, 10%; 3-4, 8%; 5-6, 5%; 7-10, 5%; 11-20, 7%; 21-40, 4%; and over 40, 3%.
Figure 5. HOW LONG AGED RESPONDENTS WHO NAMED A DOCTOR HAD USED HIS SERVICES

Percentage Who Have Been With Doctor Longer (Probability Scale)

Years With Present Doctor (Log Scale)
Figure 6. FREQUENCY OF VISITS AMONG AGED RESPONDENTS WHO HAD SEEN A DOCTOR FOR AT LEAST A YEAR

Percentage Who Saw Doctor This Many Or More Times
(Probability Scale)

Number Of Visits In Prior Year
(Log Scale)
A. Regular Doctor, Type

- Other Spec: 6%
- Internist: 9%
- Surgeon: 11%
- General Practitioner: 74%

B. Satisfaction With Doctor

- Not at All: 3%
- Somewhat: 2%
- Great Deal: 13%
- Very Much: 60%
- Extreme: 22%

C. Experience With Health Facilities In Decatur

- Have a regular doctor: 85%
- Have been hospitalized: 77%
- Have health insurance: 68%
- Have visited a nursing home: 63%
- Have one or more health examinations per year: 53%
- Have used services of state chest survey bases: 52%
- Have used hospital emergency room services: 27%
- Have used T.B. sanitorium clinics: 17%
- Have needed medical or dental care which didn't get because of cost: 13%
As mentioned earlier in the report, 7% of respondents lived within four blocks of their physician; 10% would like extremely much to live close to him; 40% feel some deprivation with regard to the distance they live from him.

2. Hospitals

Decatur has three general hospitals with total bed capacity of 765, plus a tuberculosis sanitarium with 41 TB and 34 chronic-disease beds. A 300-bed mental hospital has been proposed for the area.

Recent statistics regarding the Decatur and Macon County Hospital, largest of the three general hospitals, indicates that 12,713 adults from Macon County were admitted in one year. No breakdown is available to indicate how many were 60 or over.

Of the respondents, 77% had been hospitalized in Decatur. Only 3% of these had experienced difficulty in being admitted. Based on personal experience or knowledge, 87% of all respondents were satisfied with the hospital facilities in Decatur. Three main areas were identified by those who were not satisfied:

a. Service:

"Service is poor. Don't approve of aides doing most of work. Slow in answering bell."
"Disliked nursing care. Not enough attention."
"Don't give enough care. Had to move myself. Might and might not get bed pan."

b. Cost:

"Try to rob poor people--don't give them a chance like they ought to."
"Cost entirely too high."

c. Physical facilities:

"Put me in hall. Complained, then put me in room with a man dying. Being a paying patient I didn't like it."
"Too crowded."
"They have no bathroom. Men and women have to use the same one. No accommodations for the money you pay."

3. Nursing Homes

There are 323 nursing-home and 98 sheltered-care beds in Decatur. It is likely that some respondents may have confused "nursing homes" with "homes for the aged."

At any rate, 40% claimed that they at some time had visited nursing homes in Decatur. Based on personal experience or knowledge, 63% of the 283 respondents who commented were satisfied with the nursing home facilities in Decatur. From the 37% who were not satisfied came many severe criticisms covering various aspects. For example:

a. Service:

"No understanding of patients, lack of love and kindness."
"The care is very poor. Much rudeness from attendants."
"Too mean and hateful and cross to people who can't help themselves. I worked in one."
"Many patients have bed sores; they are not clean."
"Some mistreat patients. Hired help isn't top-notch."
"X Nursing Home gives shots to knock old people out, slap patients' faces, in general treats patients rough."

b. Cost:
"I hate to think of being in one. They're awfully expensive."
"Price for best nursing home too high and medium-priced service is not adequate."

c. Physical facilities:
"Building old. Not enough facilities."
"Heard they were fire traps, had vermin, couldn't get help."
"Very depressing with so many ill in the same room."
"Crowded conditions and not enough staff members."
"Things were not kept clean. People were put in unironed dresses. Too crowded."
"I don't think they are fed enough in some homes."

d. Activities:
"Nothing to do all day long."
"Too much confinement for able-bodied persons staying in one little room; even if you are able to be up and around they take your clothes away from you."

e. Miscellaneous:
"No opportunity for personal freedom and proper food."
"Need better supervision and better nurses."
"No privacy."
"I'd like to see one for Negroes in Decatur instead of going to Springfield."
"Didn't let patient's family bring her food--and didn't call family when patient was dying."

4. Emergency Medical Care

When asked what they would do if unable to contact their regular physicians in an emergency, 49% of respondents said they would call any other doctor; 17% would call physicians' exchange; 16% would call a hospital; 7% would call an ambulance, 8% would call a relative or neighbor; and 3% would take other actions. While living in Decatur 27% had experienced such an emergency in which they needed help quickly. Of these, 89% were able to obtain help quickly, almost all within half an hour. A few did not get help quickly because they persisted in trying to reach a particular doctor who could not be located or because no one at the scene tried very hard to get help. However, a few disgruntled citizens seemed to have legitimate complaints:
"Acute indigestion; couldn't reach anyone through doctor's exchange—operator insistant I name a doctor; help didn't come."
"We never reached any doctor—called three—that would come to the house. We had to do without."
"My mother-in-law was very sick. I reached the police department and another doctor at the same time. This was after calling seven doctors that refused to come. It took three hours to get help."

During a recent year the Decatur and Macon County Hospital treated 13,872 emergency patients.

5. Other Community Health Facilities

Respondents were asked how familiar they were with various specific community services in Decatur. These are listed in Table 8 according to percentage of respondents who were familiar with the functions of each, in diminishing order.

<table>
<thead>
<tr>
<th>Service</th>
<th>Have Used</th>
<th>Familiar with Functions</th>
<th>Heard of it</th>
<th>Know Nothing About it</th>
</tr>
</thead>
<tbody>
<tr>
<td>State chest survey buses</td>
<td>52%</td>
<td>11%</td>
<td>23%</td>
<td>13%</td>
</tr>
<tr>
<td>Hospital emergency-room services</td>
<td>24%</td>
<td>14%</td>
<td>39%</td>
<td>22%</td>
</tr>
<tr>
<td>Tuberculosis sanitarium clinics</td>
<td>17%</td>
<td>20%</td>
<td>55%</td>
<td>7%</td>
</tr>
<tr>
<td>Red Cross services</td>
<td>3%</td>
<td>28%</td>
<td>57%</td>
<td>11%</td>
</tr>
<tr>
<td>Visiting Nurses Association</td>
<td>9%</td>
<td>14%</td>
<td>49%</td>
<td>28%</td>
</tr>
<tr>
<td>Cancer Society</td>
<td>1%</td>
<td>16%</td>
<td>68%</td>
<td>15%</td>
</tr>
<tr>
<td>Decatur Public Health Department</td>
<td>1%</td>
<td>15%</td>
<td>52%</td>
<td>32%</td>
</tr>
<tr>
<td>Heart Association</td>
<td>1%</td>
<td>13%</td>
<td>72%</td>
<td>13%</td>
</tr>
<tr>
<td>Township Relief Office services</td>
<td>6%</td>
<td>8%</td>
<td>49%</td>
<td>37%</td>
</tr>
<tr>
<td>Hospital physical medicine services*</td>
<td>7%</td>
<td>6%</td>
<td>23%</td>
<td>64%</td>
</tr>
<tr>
<td>Illinois Public Aid Commission</td>
<td>3%</td>
<td>7%</td>
<td>45%</td>
<td>44%</td>
</tr>
<tr>
<td>Community Mental Health Clinic</td>
<td>&lt;1%</td>
<td>10%</td>
<td>51%</td>
<td>39%</td>
</tr>
<tr>
<td>Illinois Division of Vocational Rehabilitation</td>
<td>2%</td>
<td>6%</td>
<td>39%</td>
<td>52%</td>
</tr>
<tr>
<td>Community clinics and indigent clinics</td>
<td>3%</td>
<td>4%</td>
<td>37%</td>
<td>55%</td>
</tr>
</tbody>
</table>

*It is possible that many respondents may not have understood what was meant by "Hospital physical medicine services." If this is so, however, it indicates a need for better publicity. The Decatur and Macon County Hospital gave 22,030 physical therapy treatments in a recent year, but statistics on how many of these were concerned with outpatients are not available. St. Mary's Hospital had over 19,000 outpatient visits for various purposes, including emergency care and physical therapy.

As noted in the following section, 13% of respondents indicated that during the year 1960 they needed medical or dental services which they did not get because of the cost. Only 8% of this small group tried to make use of established community services or other sources of help. Some of these received the aid they sought; others did not. Among those who did not seek the help of community services, "too much pride to ask," was a typical explanation.
Summary information is presented in Figure 7-C. Experiences in Decatur claimed by two-thirds or more of respondents include: have regular doctor, have been in hospital, and currently have health insurance; by one-half to two-thirds include: have visited nursing home, have one or more health examinations per year, and have used state chest survey bases; by one-tenth to one-third include: have used hospital emergency room, have used T.B. clinics, and have needed care which didn't receive because of cost.

Of the 85% who had a family doctor, half had used him for nine or more years, half had seen him two or more times during the preceding year, three-fourths identified him as a general practitioner, and four-fifths were "very much" to "extremely" satisfied with him. Among the few who were dissatisfied, inadequacies in human relations aspects were generally at fault.

Three-fourths of the sample had been hospitalized in Decatur, and seven-eights of these were satisfied with the hospital facilities. Principal complaints among the dissatisfied one-eighth were inadequate service, excessive cost, and crowded or inadequate facilities.

Two-fifths had visited nursing homes, and about two-thirds were satisfied with them. Some severe criticisms were given by the remainder, including poor service, excessive cost, inadequate facilities, and lack of activities programs.

Most respondents knew how to obtain help in an emergency. About a quarter had experienced emergencies, and 90% of these were able to get help in a hurry. Poor service in relation to emergency situations had been experienced by a few.

From less than 1% to over half of respondents had used other medical services available in the community. From 7% to 64% knew nothing about specific services. Only 8% of those who needed medical or dental care and didn't get it because of cost had attempted to get aid from public agencies. "Too much pride to ask," was a typical reason that others did not do so.

C. COST OF MEDICAL CARE

1. Experiences, Prior Year

Total medical cost for each respondent plus spouse (if living) during 1960 are shown cumulatively in Figure 8. Of the respondents, 90% spent $25 or more, 50% spent $130 or more, and 10% spent $750 or more.1

2. Curtailment of Medical Care Because of Cost

Referring to 1960, 13% of respondents said that they needed medical or dental services which they did not get because of cost. Of those who said they did not get services they needed, 68% mentioned dental work, particularly dentures and extractions. The mean estimate of cost of these services being about $250 and ranging

1. Actual distribution was: less than $50, 24%; $50-$99, 16%; $100-$149, 12%; $150-$199, 8%; $200-$299, 10%; $300-$499, 14%; $500-$799, 7%; and $800 or more, 9%.
Figure 8. COST OF MEDICAL CARE FOR THE AGED INDIVIDUAL OR COUPLE

Percentage Who Pay This Much Or More (Probability Scale)

Yearly Cost (Log Scale)

$20 $30 $50 $100 $200 $300 $500 $1000
from $100 to $500. The care of a physician for various reasons was mentioned by 32%, with costs being estimated as $5 to $1,100. Eyeglasses were mentioned by 8%.

Of all respondents, 26% said that they would see their doctor or dentist or use other health services more frequently if they had more money.

3. Individual Approach to Meeting Unexpected Medical Costs

When asked what financial arrangements they would try to make if faced with the necessity of going to a hospital or nursing home at a cost of $500 more than they could afford to pay, 48% of respondents indicated they would seek credit or loan arrangements, 14% would turn to family or friends, 14% would attempt to get free public assistance, 13% didn't know what they would do, and 12% refused to accept the situation or give an answer. The 48% who would seek credit or loan arrangements included 11% who would borrow on specified collateral such as life insurance, home, etc., 23% who would borrow but did not specify collateral, and 11% who would seek credit from the hospital or nursing home. It should be pointed out that this is a hypothetical question and not realistic for the sizeable percentage who are able to pay for unexpected medical costs.

When asked what they would do if they needed, but could not afford to pay for, the services of a physician, 25% of respondents stated they would seek public assistance, 21% would attempt to work out some arrangement with the physician (delayed or installment payments), 16% would attempt to borrow the money (collateral specified in 5%, unspecified in 11%), 13% would turn to family or friends, 6% would do without medical care, 3% would seek help and worry about paying later, 10% didn't know what they would do, and 6% refused to accept the situation or give an answer.

4. Summary: COST OF MEDICAL CARE

Half of the respondents spent $130 or more per year for their own and their spouse's medical care; 10% spent $750 or more. One-eighth stated they did not get some needed medical or dental care during 1960 because of cost. Dentures or extractions, at an average estimated cost of $250, accounted for two-thirds of such instances. One-third mentioned medical care, and 8% mentioned eyeglasses. Some 26% said they would see their doctor or dentist more frequently if they had more money.

Half would seek loan or credit arrangements if faced with a hospital bill of $500 which they could not afford; a quarter would seek such arrangements if they needed a doctor's care which they could not afford.

D. HEALTH INSURANCE

1. Present Coverage

As noted in Figure 9-A, 68% of respondents had some type of health insurance at time of interview; 13% had been covered previously; 19% had never been covered. Figure 10

1. Adds up to greater than 100% because of multiple responses.
Figure 9. HEALTH INSURANCE

A. Percent Coverage

- Never Covered 17%
- Now Covered 68%
- Formerly Covered 13%

B. Reasons Others Not Covered

- Miscellaneous 17%
- Don't Know How To Get 3%
- Don't Want Or Need 13%
- Don't Qualify 17%
- Cost 50%

C. What Covered By Present Insurance

- Hospitalization
- Surgery
- Major Cost Of Long Illness
- Doctors Home Or Office Call

D. Type of Insurance Preferred

- High Premium Comprehensive 44%
- Low Premium $500 Deduct 16%
- Moderate Premium 70-80% Coverage 41%

Percent Of Those With Insurance
Figure 10. DURATION OF COVERAGE AMONG AGED RESPONDENTS WITH MEDICAL INSURANCE

Percentage Who Have Held Insurance This Long Or Longer

Years (Log Scale)
Figure 11. MONTHLY PREMIUM OF AGED RESPONDENTS WITH MEDICAL INSURANCE
shows the duration of coverage for those presently or previously insured. Of these, 90% had carried insurance for 4 1/2 years or longer; 50% for 18 years or longer.\footnote{Actual distribution: 3 years or less, 9%; 4-5 years, 6%; 6-10 years, 15%; 11-20 years, 28%; and over 20 years, 42%.}

Insurance premiums are shown cumulatively in Figure 11. The total health insurance premium paid by 90% of the respondents was $45/year or more (about $3.80/month); 50% paid $95/year or more (about $7.80/month); 10% paid $185/year or more (about $15.50/month).\footnote{Actual distribution: Less than $4.00 per month, 15%; $4.00-$5.99, 16%; $6.00-$7.99, 20%; $8.00-$9.99, 18%; $10.00-$12.99, 15%; and $13.00 or more, 16%.}

For those presently or previously insured, hospital costs were covered in 99% of the cases, surgical costs in 93%, major medical costs for unusually long illnesses in 56%, and physician's home calls or office visits in 34% (Figure 9-C).

2. Reason Why Some Respondents Not Insured
Those not presently covered gave reasons which could be classified as follows (Figure 9-B):

- Too costly or expensive: 50%
- Can't qualify (too old or poor health): 17%
- Doesn't need it, doesn't want it: 13%
- Doesn't know much about it, how to go about getting it: 3%
- Miscellaneous: 17%

Some of these reasons may not be valid for individual cases who expressed them. In such instances the need for better education on this topic is evident.

3. Preferences Regarding Type of Policy
All respondents were asked which of the following types of health insurance they would purchase if they were about to purchase such insurance and these three options were available. A preference was given by 81% of the respondents. Options, together with percentages of those who did indicate a preference, are illustrated in Figure 9-D, and below:

- Complete coverage of hospital, surgical, and physician expenses that has a higher-priced premium: 44%
- Coverage which provides for 70-80% of hospital, surgical, and physician expense that has a medium-priced premium: 41%
- Coverage which provides for medical expenses in excess of $500 that has a lower-priced premium: 16%

4. Summary: HEALTH INSURANCE
Two-thirds of the respondents are presently covered by health insurance, median cost being about $95/year (10% indicated less than half and 10% more than twice that
cost). Hospital and surgical costs were covered by almost all policies; major cost of long illness by half, and home or office visits by one-third. Half of respondents had held their insurance for 18 or more years.

Half of those without health insurance cited cost as the reason they did not have any. To a hypothetical question, only 16% preferred a low-premium, $500 deductible medical insurance to moderate- or high-premium insurance providing moderately or completely comprehensive coverage of medical cares. The latter alternatives were about equally preferred.

E. ATTITUDES AND INFORMATION ON PERSONAL HEALTH CARE

1. Conditions For Seeing a Physician

Respondents were queried on the likelihood that they would see a physician under each of the following circumstances, and whether they thought their doctor would want them to see him for each. The results are shown in Table 9.

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Believes Doctor Would Visit</th>
<th>Respondent Believes He Would Visit Doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>If found blood in stools</td>
<td>94%</td>
<td>73%</td>
</tr>
<tr>
<td>If had a sore which did not heal for weeks</td>
<td>93%</td>
<td>76%</td>
</tr>
<tr>
<td>If ran a temperature for two days</td>
<td>88%</td>
<td>47%</td>
</tr>
<tr>
<td>If were so tense and nervous</td>
<td>84%</td>
<td>51%</td>
</tr>
<tr>
<td>If had a severe headache for three days</td>
<td>84%</td>
<td>35%</td>
</tr>
<tr>
<td>If had not seen a physician for one year and presently had no discomfort</td>
<td>72%</td>
<td>23%</td>
</tr>
</tbody>
</table>

2. Periodic Physical Examination

A periodic, complete physical examination by a doctor, even if nothing is wrong, was considered to be a good idea by 73% of respondents.

The 27% who did not consider the periodic examination to be a good idea gave various reasons (most frequent types listed first):

- 52 -
a. No necessity:
"Because you should have some symptoms before going."
"Foolish to go to a doctor if you are not sick."
"Why go when you know you feel all right. It isn't necessary."

b. Cost:
"I stay away from the doctor all I can. They cost you money."
"I just don't because of expense."

c. Lack of faith in doctors:
"I don't believe much in doctors. They make you sick."
"I've had awful good luck staying away from doctors. I use my own judgment and ideas."

d. Fear of being considered a complainer
"People depend too much on going to a doctor and then imagine they are sick."
"Don't want to complain."
"I don't believe in running to a doctor with every pain. Most people go more than they need to go."

The frequency of periodic physical examinations among respondents was:
never, 30%; less than once a year, 17%; once a year, 35%; and more than once a year, 17%.

Figure 12 shows the duration of such an examination as remembered or estimated by respondents. About 90% estimated the duration as 25 or more minutes; 50% as 55 or more minutes. The estimated cost of such an examination is shown in Figure 13. Over 90% estimated it at $5 or more; 50% at $14 or more; and over 10% at $40 or more.

Accordingly, 90% of the respondents estimated the physician's gross pay for such an examination was at least $12.25 per hour, and 50% estimated at least $15.50 per hour.

3. Sources of Health Information
Respondents were asked how much medical information they had gained from various sources. The results are listed in Table 10.

---
1. Actual distribution: less than 20 minutes, 5%; 20-29 minutes, 8%; 30-44 minutes, 27%; 45-59 minutes, 15%; and 60 or more minutes, 45%.

2. Actual distribution: less than $3.00, 3%; $3.00-$4.99, 4%; $5.00-$6.99, 12%; $7.00-$10.99, 25%; $11.00-$15.99, 17%; $16.00-$24.99, 11%; $25.00-$49.99, 19%; and $50.00 or more, 10%.
Figure 12. DURATION OF PERIODIC PHYSICAL EXAMINATION AS ESTIMATED BY AGED RESPONDENTS

Percentage Who Estimated This Duration Or Longer (Probability Scale)

Estimated Duration In Minutes (Log Scale)
Figure 13. COST OF PERIODIC PHYSICAL EXAMINATION AS ESTIMATED BY AGED RESPONDENTS

Percentage Who Estimated This Cost Or More (Probability Scale)

Estimated Cost (Log Scale)
TABLE 10. SOURCES OF HEALTH INFORMATION

<table>
<thead>
<tr>
<th>Sources</th>
<th>Extremely much, Very much, or A great deal</th>
<th>Somewhat</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health columns in newspapers</td>
<td>22%</td>
<td>31%</td>
<td>46%</td>
</tr>
<tr>
<td>Magazines</td>
<td>21%</td>
<td>31%</td>
<td>47%</td>
</tr>
<tr>
<td>Books</td>
<td>17%</td>
<td>26%</td>
<td>47%</td>
</tr>
<tr>
<td>Television</td>
<td>15%</td>
<td>38%</td>
<td>46%</td>
</tr>
<tr>
<td>Radio</td>
<td>15%</td>
<td>29%</td>
<td>56%</td>
</tr>
<tr>
<td>Organizational meetings</td>
<td>8%</td>
<td>5%</td>
<td>87%*</td>
</tr>
</tbody>
</table>

*Includes 50% who gave no response

Some 9% of respondents said that information thus obtained had prompted them to see a doctor at some time. Only 1% said that such information had prompted them to avoid seeing a doctor when they might otherwise have done so.

4. Summary: ATTITUDES AND INFORMATION ON PERSONAL HEALTH CARE

Almost all respondents believed their physicians would recommend a visit if they had blood in the stools or a sore which did not heal for weeks, and about three-fourths would always visit him under these circumstances. About 85% believed he would recommend a visit for a two-day fever, prolonged tension and nervousness, or a three-day headache, but only one-third to one-half would always visit him under these circumstances.

Three-fourths of the respondents favored and believed their doctor would recommend a yearly check-up, and one-fourth claimed that they would arrange for one. In actual fact, 50% have had check-ups one or more times a year; 30% have never had one. Those who do not favor such examinations give as reasons: lack of necessity; high cost; lack of faith in doctors; and fear of being considered a complainer.

About 90% estimated the duration of such an examination as at least 25 minutes, and the cost as $5 or more. One-half estimated duration as 55 or more minutes and cost as $15 or more. Some 10% estimated the cost as $40 or more.

Less than one-fourth of the respondents believe they have obtained a great deal or more medical information from each of various popular information sources. These sources, in decreasing order of effectiveness, are: newspapers, magazines, books, television, radio, and organizational meetings. About 10% of respondents had been prompted to see a doctor because of such information; 1% had not seen a doctor when they otherwise might have.

F. SOME ASPECTS OF THE PATIENT-DOCTOR RELATIONSHIP

1. Introduction

Several members of the committee which designed this study are interested in the various factors involved in the establishment of a successful patient-doctor relationship. This is not an exclusive problem of the aged, and there was no particular
reason to single out Decatur for such study. However, since the mechanics of this study were being developed in part by these members, it appeared appropriate to investigate such factors at the same time. Knowledge of any general relationships which might be established could well be useful to individual physicians in improving the effectiveness of their relationships with patients.

2. **Assessment of Specific Aspects From Patient's Point of View**

A number of Guttman scales showing satisfactory coefficients of reproducibility (a measure of the validity of the questions asked to determine a factor) were developed. This type of scale was explained in Chapter I. The general categories, coefficients of reproducibility (C.R.), and specific questions asked of aged respondents are as follows:

a. **Patient's cooperation with physician**: (C.R. = 0.92)

1. How often do you follow the treatment advised by your doctor if you think it involves a great deal of difficulty and strain for you?
2. When your doctor asks you to return for a check-up at some future time, how often do you actually return as early as he suggests?
3. How often do you do something which your doctor thinks is not good for your health?
4. How closely would you say you follow your physician's advice?
5. How cooperative would you say you generally are as a patient?
6. If your doctor ever advises you to completely change your diet, cutting out the foods you like most, how closely do you think you would follow his advice?

b. **Patient's conditions for seeing a physician**: (C.R. = 0.94)

For each of the following circumstances, state whether you would never, sometimes, most of the time, almost always, or always see a physician:

1. If you ran a temperature for two days?
2. If you found blood in your stools?
3. If you had not seen a physician for one year and presently had no discomfort?
4. If you had a severe headache for three days?
5. If you had a sore which did not heal for weeks?
6. If you were so tense and nervous that you couldn't even relax during a 3-day period?

c. **Patient's communication to physician**: (C.R. = 0.90)

1. How often do you feel you give your doctor a very complete picture of what your difficulties are?
2. How often do you feel you are misunderstood when you try to explain your difficulties to your doctor?
3. How free have you felt about talking to your doctor about medical costs?
4. About how much would you say you ask your doctor for information about your condition when you see him?
5. When you see your doctor, how much information do you volunteer yourself as distinct from answering questions when he asks?

d. **Physician’s communication to patient:** (C.R. = 0.93)
   1. How often would you say you receive basic instructions about how to take care of your condition?
   2. How often would you say you understand exactly what your doctor wants you to do?
   3. How often would you say your doctor goes into the medical details of your condition?
   4. How often does your doctor tell you what you want to know about your condition?
   5. How much encouragement to ask questions about your condition do you receive from your doctor?
   6. How much do you feel your doctor encourages you to fully explain your difficulties?

It is well to remember that the ability of a physician to communicate with the patient is related to the attitudes and abilities of both physician and patient. Adequate communication with a senile patient may prove difficult or impossible.

e. **Patient’s image of physician’s effectiveness:** (C.R. = 0.92)
   1. How often would you say your doctor is able to relieve your worries about your health?
   2. How often after leaving your doctor have you felt that he has done everything you could have expected him to do?
   3. How often would you say your doctor is able to permanently cure your ailments?
   4. How effective would you say that today’s medical knowledge is for curing illness in general?
   5. How much would you say your doctor generally is able to help you in the relief of pain and discomfort?
   6. How much are you generally comforted and reassured by your doctor?

f. **Patient’s folk medicine beliefs:** (C.R. = 0.90)
   1. When you are ill, how often do you try to cure yourself?
   2. How good do you think home remedies generally are for curing illness?
   3. How much would you say illness is caused by sinning?
   4. How much do you believe that prayer can substitute for medical attention by a doctor?
   5. How much do you believe in faith-healing?
g. Difference between what patient desires from and what he obtains from his physician: This uses a "difference-score," as described in Chapter I, rather than a Guttman scale. Respondents were asked the following questions:

In your relationship with your doctor, how much do you want each of the following things:

1. How much do you want to feel free to talk with him about your problems?
2. How much do you want your doctor to talk to you about your condition and how to take care of it?
3. How much do you want your doctor to be willing to accept payments in installments?
4. How much do you want to be able to have complete confidence in your doctor?
5. How much do you want your doctor to treat you as a friend as well as a patient?

h. What the patient obtains from his physician: Following the above items, an additional five questions were focused on what patients actually obtained from their physicians, as distinct from their desires or values:

Now, how much of each of these things do you actually receive in your relationship with your doctor?

1. A feeling of freedom to talk about your problems?
2. Information about your condition and how to take care of it?
3. Your doctor's willingness to accept payment in installments?
4. Complete confidence in your doctor?
5. Being treated as a friend as well as a patient?

Difference-scores between corresponding items were computed for each individual, and the summed difference-scores were also obtained for each individual, as previously described. These sums provide an index to the difference between what is wanted and what is actually obtained in the doctor-patient relationship.

3. Assessment of Specific Aspects From Physician's Point of View

The questionnaire mailed to physicians was of necessity too short to allow for the development of multiple-item scales, but each of the scales in the prior section was represented by one or two items, with the exception of "Patient's conditions for seeing a physician."

4. Factors Related to a Patient's Willingness to Seek Medical Care When Required

Section E-1 of this chapter presented data showing that many respondents would not see their doctors under certain conditions for which they believed their doctor would recommend visits. It is apparent that this attitude is related in part to the patient's fears about the possible seriousness of particular symptoms. Many would fear cancer if they found blood in the stools or a sore that would not heal. They would be less concerned with headaches, nervousness, and the need for routine check-ups.
The scale, "patient's conditions for seeing a physician," was correlated with other aspects of the patient-doctor relationship, as well as with the scales on adjustment and health presented in Chapter I. Correlation coefficients were calculated for various apparently logical relationships. Many correlations were statistically significant, but none was large enough to permit predictions of one scale from another with any consistency in individual cases. The best of these crude correlations, together with $r$ values are:

- Patient's cooperation with physician $0.31$
- Patient's satisfaction with physician $0.27$
- Patient's communication to physician $0.23$
- Physician's communication to patient $0.21$
- Patient's image of physician's effectiveness $0.20$

Many of these correlate with one another more closely than with "patient's conditions for seeing a physician" (e.g., for "patient's communication to physician" and "physician's communication to patient," $r = 0.50$; for "physician's communication to patient" and "patient's image of physician's effectiveness," $r = 0.47$). Analysis for partial correlation coefficients would have been more precise, allowing us to evaluate the relationships with each scale independent of the others. The additional computation which would have been required did not seem necessary, as an adequate general interpretation may be made on the basis of the present analysis. It is apparent that the better the working relationship between patient and physician in terms of cooperation, confidence, and communication, the more likely the patient is to visit the doctor when he believes medical care is needed. The relatively low order of observed correlations, however, indicates that other factors not directly tested are of equal or greater importance in the patient's decision to visit the doctor.

5. Factors Are Related to a Patient's Cooperation With the Doctor

Most of the comments of sub-section 4 above are appropriate here and in the sections to follow. The best of the crude (but statistically significant) correlations with this scale, together with $r$ values are:

- Patient's communication to physician $0.39$
- Physician's communication to patient $0.35$
- Patient's conditions for seeing a physician $0.31$
- Patient's image of physician's effectiveness $0.30$

It appears that patients tend to cooperate more if communication and confidence are at a high level, but again, other factors which have not been tested are of at least as great an influence on cooperation.

A similar pattern is evident from questionnaires returned by physicians. In this instance, responses regarding each aspect are divided into "high" and "low" tendencies.

1. All correlations not shown here are either considered not pertinent to questions asked, or else have values of $r$ less than 0.20. An $r$ value less than 0.20 is not considered useful in this sampling.
and the percentage of each sub-group showing a marked high or low tendency towards cooperation with the doctor is noted.

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician's communication to patient</td>
<td>78%</td>
<td>29%</td>
</tr>
<tr>
<td>Patient's communication to physician</td>
<td>65%</td>
<td>11%</td>
</tr>
<tr>
<td>Patient's folk-medicine beliefs</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td>Physician's appraisal of his effectiveness in treating corresponding respondent</td>
<td>56%</td>
<td>25%</td>
</tr>
</tbody>
</table>

It appears that strong folk-medicine beliefs may be more harmful to patient cooperation than failure of the doctor to obtain good therapeutic results.

6. Factors Are Related to Patient's Satisfaction With His Doctor

Correlations with the single question, "How satisfied are you with your doctor?", are:

- Patient's conditions for seeing a physician: 0.27
- Patient's image of physician's effectiveness: 0.25
- Patient's communication to physician: 0.23
- Physician's communication to patient: 0.21

An independent measure of satisfaction would appear to be the difference between what the patient desires from and what he obtains from his physician, the "difference-score" (see last item of sub-section 2). The largest correlations with this score, statistically significant but crude, are:

- Patient's image of physician's effectiveness: 0.29
- Physician's communication to patient: 0.25

"Nothing succeeds like success." Good results tend to lead to patient satisfaction, but so does effective communication. As before, the low order of correlations suggest that other, unmeasured values are also very important.

7. Factors Related to the Patient's Image of the Physician's Effectiveness

Larger correlations are:

- Physician's communication to patient: 0.47
- Patient's communication to physician: 0.39
- Patient's cooperation with physician: 0.38
- Patient's satisfaction with life: 0.25
- Patient's freedom from chronic illnesses: 0.22
- Patient's image of self as in good health: 0.21
- Patient's feeling of independence: 0.21

For some of these, as well as prior correlations, one may wonder which is cause and which effect; or might some relationships be even more distant? Again, communication seems to be important. In addition, the healthy, happy patient tends to believe his doctor is doing an effective job. Other, unmeasured factors are also important.
8. Aspects of the Patient-Doctor Relationship Related to the Patient's Overall Adjustment

Correlations of a number of aspects of the patient–doctor relationship with a scale of "satisfaction with life" reached the level of statistical significance, although they were relatively low. The only relationship with an $r$ of 0.20 or greater is that with patient's image of physician effectiveness ($r = 0.25$). Other aspects of the patient–doctor relationship which have a statistically significant relationship with the patient's satisfaction with life are:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician's communication to patient</td>
<td>0.18</td>
</tr>
<tr>
<td>Patient's communication to physician</td>
<td>0.16</td>
</tr>
<tr>
<td>Patient's satisfaction with physician</td>
<td>0.16</td>
</tr>
<tr>
<td>Patient's conditions for seeing a physician</td>
<td>0.13</td>
</tr>
</tbody>
</table>

The patient's image of physician effectiveness was found to be related to two additional scales of adjustment at a statistically significant level. These scales were anomie (the feeling of being outside the social group, alone and friendless) and fantasy behavior. However, none of the other aspects of the patient–physician relationship was found to be significantly related to either of these two additional measures of adjustment.1

9. Summary: SOME ASPECTS OF THE PATIENT-DOCTOR RELATIONSHIP

This survey of the aged appeared to be an appropriate vehicle to study various factors as related to achievement of a satisfactory patient-doctor relationship.

A patient's willingness to seek medical care is related to how seriously ill he believes himself to be, as well as to how good a working relationship he has established with his doctor in terms of cooperation, communication, and confidence. Possible costs are also important, as noted in prior sections.

How well a patient cooperates with his doctor is related to a number of things, only some of which have been studied here. Among the latter are: ability of patient to communicate with the doctor; ability of the doctor to communicate with the patient; and the patient's overall confidence in the abilities of the doctor. A patient's strong folk-medical beliefs tend to reduce cooperation.

A patient's satisfaction with his doctor is related to various things. Of those studied, successful treatment seems the strongest. Effective communication is also important.

The patient's image of how effective a physician is in treatment is related to degree of cooperation and communication, as noted previously, but, in addition, there is a correlation with patient's general satisfaction with life and feeling of independence as well as with his state of general health.

The only aspect of the patient–doctor relationship which consistently relates to three different measures of adjustment is the patient's image of the physician's effectiveness.

Some other aspects of the patient–doctor relationship are being examined further on the basis of this study and will be reported elsewhere.

1. See Appendix B, page 100.
G. CONCLUSIONS: HEALTH

There is good reason to believe that the statistical measures developed for this section are quite valid ones.

1. Personal Health

Although only one-sixth of the sample are in poor general health, as rated by physicians, one-third of the sample have at least moderate tendencies to neurotic manifestations, over one-tenth have moderate blunting of mental acuity or definite senility, one-half have one or more chronic illnesses or disabilities, and one-half are not able to do heavy work around the house.

2. Physicians

There is generally high satisfaction with personal physicians, and this is further indicated by the length of time respondents have been going to the same physician. Whatever dissatisfaction exists seems to be due primarily to what is seen as indifference on the part of the physician towards the patient.

3. Hospitals

Although almost nine-tenths of the sample is satisfied with the hospital facilities, a minority expressed dissatisfaction, singling out personal services (nurses and attendants) as the greatest problem area. This was usually based on personal experience.

4. Nursing Homes

A very sizeable proportion of the sample were extremely dissatisfied with the nursing homes in Decatur. A substantial minority of these were able to tell first-hand experiences, while most of the remainder gave detailed second-hand experiences. The situation seems to be such that these homes would be used only as a very last resort by a sizeable proportion of the sample. A few respondents differentiated between good and bad nursing homes.

Improvements have recently been made in the nursing home situation of Decatur, and the present status should be reviewed to determine how valid these criticisms now appear. If they are valid, further improvements are certainly in order. If they are not, then the need for reeducation of the public with regard to nursing homes is necessary.

5. Emergencies

Continued education regarding methods for obtaining medical help in emergencies is necessary. Agencies involved should make periodic reassessments of their role to be certain that the public is being given the type of service intended.

6. Health Services

Since only a small proportion of respondents were familiar with the function of health services offered by various organizations in Decatur, an educational program seems to be in order. Such a program should recognize the fact that many possible
users of these services consider that there is a stigma attached to such use, and should, therefore, try to minimize this attitude. This is shown by the small proportion of those who curtailed medical care because of inadequate funds who sought help from community sources.

7. Finances

For a minority of the sample, medical costs constituted a very heavy financial burden, so much as to prevent obtaining health services. By far the most frequent health service curtailed was dental care. Very few individuals sought financial help from established community sources. Many others did not because of pride.

8. Health Insurance

Among the respondents who do not have health insurance, it seems to be due more to cost factors or lack of ability to qualify than to not being interested in having health insurance. This is further indicated by the fact that over four-fifths of the sample prefer the non-deductible kind of insurance with its higher premium.

9. Periodic Health Examinations

A program to increase the proportion of individuals who have periodic check-ups at least once a year might well use these facts:

a. Only half of the aged actually have such check-ups.
b. There is a great variation in estimates of time and cost involved--a specific type of routine check-up at a standard cost might well be publicized in such a program.
c. Those who do not go in for check-ups generally do not know of any health reasons for doing so.

Such a program might also note that one-tenth of the sample did not recognize the importance of seeing a physician in the event of possible symptoms of cancer.

10. Doctor-Patient Relationships

Adequate communication from physician to patient and patient to physician seems to be a vital factor affecting patient satisfaction with physicians, patient cooperation with physicians, the willingness of a patient to see his physician under various situations, and physician effectiveness. It should be noted that physician effectiveness is defined not only in terms of relief of pain and discomfort or establishment of permanent cures, but also in terms of comforting and reassuring the patient and relieving him of his worries about health.

The patient's image of the physician's effectiveness seems to have implications outside of the health area to that of general adjustment. Although the relationship is not large, it is consistent for three separate measures of adjustment. Several other aspects of the patient-doctor relationship appear to have a slight relationship with one of the measures of general adjustment.
V. ACTIVITIES: RECREATIONAL, SOCIAL, EMPLOYMENT, RELIGIOUS, POLITICAL

A. RECREATION

1. Time Available for Recreation

Respondents were asked: "On the average, how much free time do you have each day?"

Responses were:

<table>
<thead>
<tr>
<th>Time Available</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>13%</td>
</tr>
<tr>
<td>1 hour or less</td>
<td>4%</td>
</tr>
<tr>
<td>2 hours</td>
<td>9%</td>
</tr>
<tr>
<td>3 - 4 hours</td>
<td>24%</td>
</tr>
<tr>
<td>5 - 6 hours</td>
<td>13%</td>
</tr>
<tr>
<td>More than 6 hours</td>
<td>37%</td>
</tr>
</tbody>
</table>

Expressed differently, these responses indicate that:
- 83% have 2 hours or more free time each day
- 74% have 3 hours or more free time each day
- 50% have 5 hours or more free time each day
- 37% have more than 6 hours free time each day
- 4% have only one hour or less each day
- 13% have no free time

2. Awareness of Existing Recreational Activities

The respondents were asked how much they knew about activities conducted by certain agencies and organizations. Their responses are classified and tabulated below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all</th>
<th>Someewhat</th>
<th>A great deal, Very much, or Extremely much</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Senior Citizens' Resources Center</td>
<td>85%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>The Golden Age Club of the Salvation Army</td>
<td>80%</td>
<td>17%</td>
<td>4%</td>
</tr>
<tr>
<td>Adult education classes held by the Decatur Public Schools</td>
<td>66%</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>Adult education classes held by Millikin University</td>
<td>72%</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>The Decatur Public Library</td>
<td>44%</td>
<td>32%</td>
<td>23%</td>
</tr>
<tr>
<td>The Decatur Playground and Recreation Department</td>
<td>50%</td>
<td>33%</td>
<td>17%</td>
</tr>
<tr>
<td>The Decatur Park Board</td>
<td>44%</td>
<td>36%</td>
<td>20%</td>
</tr>
<tr>
<td>The YMCA or YWCA</td>
<td>12%</td>
<td>27%</td>
<td>60%</td>
</tr>
<tr>
<td>Church or religious organizations</td>
<td>12%</td>
<td>27%</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Review and revision by Edward H. Storey, M.S., Department of Recreation, University of Illinois.

1. Scale of knowledge of activities: Responses to all of these questions were combined into a single scale of measurement. A high score on this scale indicates that the respondent has at least some knowledge of a number of different activities. This scale will be related to the personal adjustment of respondents. See page 100.
3. Clubs or Organizations

a. Membership in clubs or organizations: The respondents were asked if they belonged to any clubs or organizations.

- 51% did not belong to any club or organization
- 23% belonged to one
- 10% belonged to two
- 8% belonged to three
- 7% belonged to four or more

b. Type of organization: The respondents were asked the names of the clubs and organizations to which they belonged. The 49% who are members break down as follows:

- Church (educated clergy, formal religious leadership) 20%
- Religious-oriented organizations but not a formal religious hierarchy; laymen are leaders (Masonic Lodge, Knights of Columbus, Eastern Star, Shrine, YMCA, YWCA) 17%
- Occupational and professional organizations and their accompanying auxiliaries 9%
- American Legion, American Veterans, Veterans of Foreign Wars, and their accompanying women's auxiliaries 87%
- Cultural organizations (art, literature, music, and lecture clubs) 1%
- Service clubs (Rotary, Kiwanis, Lions, etc.) 6%
- Women's clubs (cards, sewing, social, etc.) 4%
- Garden club, flower club 1%
- Other recreational organizations which do not include above-mentioned ones (bowling leagues, golf clubs, table-game clubs) 3%
- Hospital auxiliaries, Red Cross 2%

c. Frequency of attendance: The frequency of attendance among 49% who belong to one or more clubs or organization is as follows:

- 26% attend most of the time
- 11% attend only sometimes
- 12% hardly ever attend

d. Reasons for non-attendance:

- 16% stated that they do not attend more often because they are physically unable to do so
- 17% stated that they do not attend more often because other obligations, duties, or interests interfere with their attendance
- 9% gave lack of transportation as their reason for non-attendance
- 6% gave lack of interest as their reason for non-attendance

1. Scale of number of organizational memberships: The number of organizations mentioned by respondents formed a single measure or scale which will be related to personal adjustment. See page 100.

2. Total is greater than 49% because of multiple responses.
4. Present and Past Leisure Activities

Respondents were asked to indicate their participation or non-participation in a number of activities. They were also asked to indicate whether they participated less in these activities than they had at age 50. The resulting activities profile, as listed below, shows emphasis in such activities as reading, listening to the radio or watching television, working around the house, visiting with relatives, taking walks or rides, visiting with friends or neighbors, and church or religious activities. A decline in participation since the age of 50 was indicated in every activity mentioned, but the decline was more predominant in such activities as going to the movies, shopping, taking walks or rides, attending sporting events, participating in organizations, and visiting with friends or neighbors.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Regularly now</th>
<th>Less now than at 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read newspapers, magazines or books</td>
<td>90%</td>
<td>28%</td>
</tr>
<tr>
<td>Spend time in the library</td>
<td>6%</td>
<td>37%</td>
</tr>
<tr>
<td>Listen to the radio or watch television</td>
<td>90%</td>
<td>17%</td>
</tr>
<tr>
<td>Visit with friends or neighbors</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Take walks or rides</td>
<td>69%</td>
<td>47%</td>
</tr>
<tr>
<td>Play cards, checkers, chess or other games</td>
<td>30%</td>
<td>42%</td>
</tr>
<tr>
<td>Go shopping, go downtown</td>
<td>59%</td>
<td>52%</td>
</tr>
<tr>
<td>Go to the movies</td>
<td>6%</td>
<td>62%</td>
</tr>
<tr>
<td>Visit with relatives, (children)</td>
<td>77%</td>
<td>39%</td>
</tr>
<tr>
<td>Go to a tavern</td>
<td>6%</td>
<td>22%</td>
</tr>
<tr>
<td>Go to ball games, sporting events</td>
<td>20%</td>
<td>49%</td>
</tr>
<tr>
<td>Go to parks, sit around outdoors</td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td>Go to church, religious activities</td>
<td>66%</td>
<td>38%</td>
</tr>
<tr>
<td>Work around the house</td>
<td>88%</td>
<td>40%</td>
</tr>
<tr>
<td>Work in the garden</td>
<td>58%</td>
<td>41%</td>
</tr>
<tr>
<td>Participate in meetings, clubs, organizations</td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td>Work on hobbies</td>
<td>34%</td>
<td>38%</td>
</tr>
<tr>
<td>Attend adult education courses</td>
<td>2%</td>
<td>25%</td>
</tr>
<tr>
<td>Participate in sports like fishing, hunting, golf or roque</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Participate in community, state or national affairs</td>
<td>18%</td>
<td>31%</td>
</tr>
</tbody>
</table>

1. Scale of number of activities: For all of these activities, responses indicating whether or not there is regular participation were combined for each individual. The resulting scale provides a measure of the number of activities in which the individual regularly participates. (Footnote continued on page 68)
5. Transportation and Activities

About 12% of the respondents stated that lack of transportation prevented their participation in activities that they would like. Activities wanted by these were as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church activities</td>
<td>5%</td>
</tr>
<tr>
<td>Clubs and other organizations</td>
<td>2%</td>
</tr>
<tr>
<td>Social activities</td>
<td>2%</td>
</tr>
<tr>
<td>Going to parks, picnicking</td>
<td>1%</td>
</tr>
<tr>
<td>Fishing, boating, and the like</td>
<td>1%</td>
</tr>
<tr>
<td>Spectator sports, library, shopping, etc.</td>
<td>1%</td>
</tr>
</tbody>
</table>

6. Health and Activities

Some 29% of the respondents indicated that they would like to do certain activities but could not because their health does not allow them to travel readily. These activities are as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travelling to visit relatives and see places</td>
<td>10%</td>
</tr>
<tr>
<td>Spectator sports</td>
<td>5%</td>
</tr>
<tr>
<td>Church activities</td>
<td>5%</td>
</tr>
<tr>
<td>Participant sports</td>
<td>3%</td>
</tr>
<tr>
<td>Participation in clubs and organizations</td>
<td>2%</td>
</tr>
<tr>
<td>Shopping, downtown visits</td>
<td>2%</td>
</tr>
<tr>
<td>Cultural activities</td>
<td>1%</td>
</tr>
<tr>
<td>Visiting friends, social activities</td>
<td>1%</td>
</tr>
<tr>
<td>Visiting sick, helping people</td>
<td>1%</td>
</tr>
<tr>
<td>Miscellaneous activities</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Total is greater than 29% because of multiple responses.

1. (Cont'd. from page 67) Scales of reduction in activities, general, social, non-social:

Responses indicating whether or not there is less participation now than at age 50 were combined into three separate scales. The scale of reduction in general activities has to do with all of the twenty activities, with a high score indicating a great reduction. The scale of reduction in social activities has to do with the six items which have to do with social activities (visit with friends or neighbors; play cards, checkers, chess or other games; visit with relatives; go to a tavern; go to church, religious activities; participate in meetings, clubs, organizations). The scale of reduction in non-social activities is based on the remaining 14 questions, which have to do with relatively non-social activities.

The scale of number of activities, as well as the scales of reduction in activities, will be related to the personal adjustment of respondents on page 100.
7. **Finances and Activities**

About 30% of the respondents stated that there were activities they would like to do, but could not because the activities were too expensive. These activities were as follows:

- Travel: 14%
- Spectator activities: 3%
- Participant sports and dancing: 2%
- Club and organizational activities: 2%
- Hobbies: 2%
- Church activities: 1%
- Miscellaneous activities: 6%

At the same time, 59% of the respondents indicated a willingness to pay a small fee to participate in their favorite recreational activity.

8. **Preparation for Retirement**

Only 1% of the respondents stated that they had received help in preparing for participation in recreational activities after retirement.

9. **Desire for Recreational Facilities**

   a. **Specific recreational facilities**: The respondents were asked to indicate the extent of their desire for eight specific recreation facilities. Their responses were as follows:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Not at all</th>
<th>Some-what</th>
<th>A great deal, very much, extremely much</th>
</tr>
</thead>
<tbody>
<tr>
<td>More shuffleboard courts</td>
<td>79%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>More roque courts</td>
<td>81%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>More access to the lake for fishing</td>
<td>63%</td>
<td>12%</td>
<td>25%</td>
</tr>
<tr>
<td>An easy nine-hole golf course</td>
<td>87%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Craft or hobby rooms</td>
<td>66%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Game rooms for cards, chess, checkers, pool, and the like</td>
<td>69%</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>More reading rooms</td>
<td>64%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Television rooms</td>
<td>62%</td>
<td>15%</td>
<td>23%</td>
</tr>
</tbody>
</table>

1. **Scale of desire for recreational facilities**: Responses to all of these questions were combined into a single scale. A high score on this scale indicates that the respondent has at least some desire for the establishment of a number of different recreational facilities. This scale will be related to the personal adjustment of respondents on page 100.
b. Other facilities: The respondents were asked what recreational facilities, other than the eight previously mentioned, they would be interested in having provided for their use in Decatur. Of the total sample, 13% indicated some type of recreational facility, while 87% indicated no need for any other facilities. These 13% break down as follows:

- Activities center: 4%
- Physical activity and sports facilities: 4%
- Spectator sports and cultural activities center: 1%
- Miscellaneous: 4%

It should be noted that a substantial proportion of the replies to this latter question duplicate some of the activities listed previously.

10. New Recreation Buildings

a. Programs and services: The respondents were asked to indicate what programs and services they would like to have provided if new recreation buildings are constructed in Decatur. Of the total sample, 29% made some suggestion, and these break down as follows:1

- Cultural activities (drama, music, TV, movies): 6%
- Games (cards, table games, pool, billiards, etc.): 5%
- Hobby rooms (handcraft, sewing, etc.): 5%
- Social activities (clubs, parties, get-togethers): 5%
- Physical activities (swimming and other sports): 4%
- Reading rooms: 3%
- Educational activities (travel lectures, adult education classes): 2%
- Church-related activities: 2%
- Dancing: 2%

b. Special facilities: The respondents were asked what special facilities they would like to see included in such recreation buildings. The distribution of answers was quite similar to those described above. Some specific answers, as quoted below, help to lend insight to the responses to these two questions.

- "Anything to promote good fellowship, such as room for basket dinners and such."
- "An area for refreshment, a social gathering place, seems to be most important to me."
- "Elevator, snack bar, other modern facilities especially water, restrooms, lounge."
- "Upholstery shop with a teacher."

1. Total is greater than 29% because of multiple responses.
"Sewing machines."
"Game rooms, warm and well-lighted."
"Large enough stage in auditorium for ballet so be able to accomodate enough people so they can be musically inclined."
"A place for religious worship -Church and Sunday school."
"A place where Senior Citizens who desire can have a square dance."
"Reading rooms, TV rooms, etc."
"A gym in which to watch track, basketball, gymnastics and the like."
"Calisthenics."
"Weaving facilities, art materials."
"Swimming pool, indoor volleyball, and badminton courts."
"Bowling alley."

11. Recreational Factors and Personal Adjustment

As in the case of housing and health factors, there are definite relationships between recreational factors and the well-being or personal adjustment of the aged sample. Each of the scales described in the foregoing sections of this chapter was tested to determine whether or not there was a valid relationship to each of three aspects of adjustment.

The scales involved are:

<table>
<thead>
<tr>
<th>Knowledge of activities</th>
<th>Number of organizational memberships</th>
<th>Number of activities</th>
<th>Desire for recreational activities</th>
<th>Reduction in general activities</th>
<th>Reduction in social activities</th>
<th>Reduction in non-social activities</th>
</tr>
</thead>
</table>

(Three scales of adjustment)

The results of these tests indicate that persons who have much of each of the first four items (knowledge of activities, organizational memberships, activities, desire for recreational activities) tend to be better adjusted than those with little of these factors. Also, those for whom general, social or non-social activities have been reduced tend to be less well-adjusted than those for whom levels of activity have been maintained or have increased.

12. Summary: RECREATION

a. The study indicates that the great majority of older individuals in Decatur have substantial daily periods of free time.

b. The respondents have only limited knowledge of the recreational opportunities that are now available to them through the various recreational, education, and service organizations in Decatur.

1. Cause and effect relationships should not be inferred from these correlations. Degree of activity and degree of well-being are related, but it is not known which is cause and which is effect. See Appendix B, p.100, for the table on which this summary is based.
c. Over half of the older individuals represented in the sample did not belong to any clubs or organizations, indicating a general lack of participation by older citizens in organized social service and special interest groups. Of those who do belong to such groups, one-half attend regularly, one-fourth attend only "sometimes," while the remaining one-fourth hardly ever attend. Reasons for non-attendance are other interests interfering, physical inability, lack of transportation, and lack of interest.

d. The activities pursued most regularly by the majority of the senior citizens in the sample indicates highest participation in quiet activities around the home; visiting with relatives, friends, and neighbors; taking walks or rides; and going to church and religious activities. Substantial decline was noted in all areas of activity since the age of 50, but particularly in outdoor activities, including attendance at spectator events, shopping, visiting, and taking walks or rides.

e. Among the activities which one-eighth of the sample are prevented from participating in due to lack of transportation, almost one-half are church activities.

f. Almost one-third of the sample are prevented from participating in certain activities because they are unable to travel readily, with visiting relatives and sightseeing constituting the major activity affected.

g. Almost one-third of the sample are prevented from participating in certain activities because of the expense, and the most common of these activities is traveling.

h. Virtually no one in the sample had any special assistance in preparing for recreational activities after retirement.

i. Between 75% and 93% of respondents were relatively uninterested, with respect to their own possible use, in certain specific recreational facilities which might be provided. Greatest interest was shown in increased access to the lake for fishing, where 19% were interested very much or a great deal and 6% were extremely interested.

j. Concerning specific suggestions for programs, services, and facilities in possible new recreation buildings, one-third of the sample volunteered suggestions. These covered a wide range of types of activities and facilities, with no one type of suggestion attaining predominance.

k. A number of recreational factors were found to be related to one or more aspects of maladjustment or lack of well-being. These include a reduction in activities, a low activity level, lack of membership in organizations, and little knowledge of available activities.
B. SOCIAL

1. Marital Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married and living with spouse</td>
<td>60%</td>
</tr>
<tr>
<td>Single</td>
<td>6%</td>
</tr>
<tr>
<td>Divorced</td>
<td>3%</td>
</tr>
<tr>
<td>Widowed</td>
<td>30%</td>
</tr>
<tr>
<td>Separated</td>
<td>1%</td>
</tr>
</tbody>
</table>

(All except single): Do you have any living children?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76%</td>
<td>19%</td>
</tr>
</tbody>
</table>

2. Relations With Children

All respondents who had living children. (The following percentages are based on 263 replies):

a. Duties of children and actual performance: Do you feel that your children should do the following things...? Now, which of these things do your children actually do, or would they do if the need arose?

<table>
<thead>
<tr>
<th>Duties of Children</th>
<th>Should Yes</th>
<th>Actually Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take care of you when you get sick, even if it is not convenient?</td>
<td>28%</td>
<td>84%</td>
</tr>
<tr>
<td>Take you along sometimes when they go out with their own friends?</td>
<td>24%</td>
<td>77%</td>
</tr>
<tr>
<td>Live near enough so that you can see them, even if it means giving up a better job somewhere else?</td>
<td>14%</td>
<td>47%</td>
</tr>
<tr>
<td>Help you with money when you need it, even if they cannot spare much?</td>
<td>20%</td>
<td>74%</td>
</tr>
<tr>
<td>Take you into their own home if you need a place to live?</td>
<td>38%</td>
<td>65%</td>
</tr>
</tbody>
</table>

b. Satisfaction with children: How satisfied are you with the way you are treated by your children?

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>3%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>2%</td>
</tr>
<tr>
<td>A great deal</td>
<td>7%</td>
</tr>
<tr>
<td>Very</td>
<td>39%</td>
</tr>
<tr>
<td>Extremely</td>
<td>49%</td>
</tr>
</tbody>
</table>

c. Seeing children; enjoyment: Which of these statements fits you best?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy seeing my children more than almost anything else</td>
<td>83%</td>
</tr>
<tr>
<td>I like to see my children, but if I don't see them for a time,</td>
<td>83%</td>
</tr>
<tr>
<td>I don't miss it too much</td>
<td>14%</td>
</tr>
</tbody>
</table>
Visits with my children can be a strain, and I am often glad when it is time to leave-- 3%

d. Seeing children; frequency: How often do you get to see any of your children?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a week</td>
<td>43%</td>
</tr>
<tr>
<td>Weekly</td>
<td>25%</td>
</tr>
<tr>
<td>Couple of times a month</td>
<td>7%</td>
</tr>
<tr>
<td>Monthly</td>
<td>5%</td>
</tr>
<tr>
<td>Holidays, occasionally, but at least once a year</td>
<td>17%</td>
</tr>
<tr>
<td>Less than annually</td>
<td>3%</td>
</tr>
</tbody>
</table>

e. Seeing children; desires: How often would you like to see them?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a week</td>
<td>53%</td>
</tr>
<tr>
<td>Weekly</td>
<td>30%</td>
</tr>
<tr>
<td>Couple of times a month</td>
<td>5%</td>
</tr>
<tr>
<td>Monthly</td>
<td>7%</td>
</tr>
<tr>
<td>Holidays, occasionally, but at least once a year</td>
<td>5%</td>
</tr>
<tr>
<td>Less than annually</td>
<td>0%</td>
</tr>
</tbody>
</table>

f. Seeing children; changes: Do you see less of your children now compared with age 50, about the same, or more now?

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less now</td>
<td>43%</td>
</tr>
<tr>
<td>Same</td>
<td>42%</td>
</tr>
<tr>
<td>More now</td>
<td>15%</td>
</tr>
</tbody>
</table>

3. Relation With Friends

All respondents. The following percentages are based on 346 replies.

a. Seeing friends; frequency: How about your close friends, how often do you get to see any of them?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a week</td>
<td>26%</td>
</tr>
<tr>
<td>Weekly</td>
<td>35%</td>
</tr>
<tr>
<td>Couple of times a month</td>
<td>15%</td>
</tr>
<tr>
<td>Monthly</td>
<td>12%</td>
</tr>
<tr>
<td>Holidays, occasionally, but at least once a year</td>
<td>8%</td>
</tr>
<tr>
<td>Less than annually</td>
<td>4%</td>
</tr>
</tbody>
</table>

b. Seeing friends; desires: How often would you like to see them?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a week</td>
<td>32%</td>
</tr>
<tr>
<td>Weekly</td>
<td>38%</td>
</tr>
<tr>
<td>Couple of times a month</td>
<td>13%</td>
</tr>
<tr>
<td>Monthly</td>
<td>11%</td>
</tr>
<tr>
<td>Holidays, occasionally, but at least once a year</td>
<td>4%</td>
</tr>
<tr>
<td>Less than annually</td>
<td>2%</td>
</tr>
</tbody>
</table>
c. Seeing friends; changes: Do you see less of your very close friends now compared with age 50, about the same, or more now?

| Less now | 46% |
| Same    | 46% |
| More now|  7% |

d. Changes in respect: In comparison to when you were 50 years of age, do you feel that at the present time you are treated with less respect, about the same, or more respect than you were then by each of the following:

<table>
<thead>
<tr>
<th></th>
<th>Less Now</th>
<th>Same</th>
<th>More Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your family</td>
<td>3%</td>
<td>76%</td>
<td>20%</td>
</tr>
<tr>
<td>Your very close friends</td>
<td>2%</td>
<td>84%</td>
<td>14%</td>
</tr>
<tr>
<td>Your acquaintances</td>
<td>4%</td>
<td>84%</td>
<td>12%</td>
</tr>
<tr>
<td>People in general</td>
<td>4%</td>
<td>81%</td>
<td>15%</td>
</tr>
</tbody>
</table>

4. Summary: SOCIAL

a. Over three-fourths of the entire sample have living children. In comparing what respondents expect of their children with the actual performance of the children (as perceived by respondents), children tend to over-fulfill the expectations of their aged parents. In other words, they tend to do far more than their aged parents expect them to do. Parents are either a great deal, very, or extremely satisfied with their children in 95% of the cases, while 83% enjoy seeing their children more than almost anything else. Almost half of the sample presently see their children less than at age 50, although most of the sample still see their children rather frequently.

b. With respect to close friends, almost half of the sample see them less now than at age 50. There is general accord between the frequency with which friends are seen and the frequency desired by respondents. With respect to family, friends, acquaintances, and people in general, the respondents feel that they are presently accorded at least the same amount of respect as at age 50.

C. EMPLOYMENT

1. Present Employment Situation

   Employed (during past year) 33%
   Fully retired 26%
   Partly retired 1%
   Looking for full-time work 1%
   Looking for part-time work 2%
   Housewife 36%

2. Work Situation

   Employed only. (The following percentages are based on 114 replies):

   a. Hours: On the average, about how many hours a week did you work during the past year?
Less than 11 hours 13%
11 - 20 hours 10%
21 - 30 hours 6%
31 - 40 hours 44%
41 - 50 hours 16%
Over 50 hours 12%

b. Change of occupation: During the past year, have you been working at your regular adult occupation, that is, the one you had during your 30's and 40's?

Yes 58%
No 37%
Did not have regular occupation 5%

c. Partial retirement: Do you consider yourself to be partly retired?

Yes 37%
No 63%

d. Job attitude: How much do you like your present job?

Not at all 39%
Somewhat 22%
A great deal 12%
Very much 21%
Extremely much 6%

3. Retirement Situation

Fully or partly retired only. (The following percentages are based on 101 replies):

a. Retirement: Did you stop working all at once, or gradually by working fewer and fewer hours?

Stopped at once 78%
Gradually 22%

b. Re-employment: If there were more opportunity for part-time work, would you go back to work?

Yes 21%
No 65%
Depends 14%

c. Satisfaction with retirement: How satisfied are you with being retired?

Not at all 16%
Somewhat 17%
A great deal 15%
Very much 35%
Extremely much 17%
d. **Leisure**: How much would you say you keep occupied now as compared to when you were working?

- Not at all: 22%
- Somewhat: 34%
- A great deal: 24%
- Very much: 14%
- Extremely much: 5%

Fully or partly retired or looking for work. (The following percentages are based on 110 replies):

e. **Time of last employment**: How long has it been since you stopped working?

- 1 year or less: 18%
- 2 years: 13%
- 3 - 5 years: 16%
- 6 - 10 years: 28%
- 11 - 20 years: 21%
- Over 20 years: 4%

f. **Satisfaction**: In general, how satisfied were you with your job?

- Not at all: 1%
- Somewhat: 4%
- A great deal: 12%
- Very much: 55%
- Extremely much: 28%

g. **Pre-retirement attitude**: As you think back, how much have you looked forward to retirement?

- Not at all: 45%
- Somewhat: 24%
- A great deal: 9%
- Very much: 16%
- Extremely much: 7%

h. **Income change**: How much would you say your total income has been reduced since you stopped working?

- Not at all: 7%
- Somewhat: 19%
- A great deal: 36%
- Very much: 21%
- Extremely much: 17%

4. **Values and Fulfillment**

All respondents except housewives. (The following percentages are based on 213 replies):
a. Occupational values: Most people have some idea of the kinds of things that are important to them about working, things they want to obtain from their work. How important (is) (was) each of these things to you: Not at all important, somewhat important, a great deal of importance, very important, or extremely important?

**Occupational Values**

- Friendship with others in the work situation: 6%
- The feeling of doing useful work: 4%
- The money you receive: 12%
- The respect from others you get from the job: 8%
- The opportunity to make use of your abilities and skills: 8%
- The feeling of independence you get: 4%
- Doing the actual work itself (the things specifically involved in the work as distinct from money, friendships, etc.): 6%

b. Value fulfillment: If employed—how much of each of these things do you actually get? Or if non-employed—did you actually get? Not at all, somewhat, a great deal, very much, or extremely much?

**Values**

- Friendships with others in the work situation: 6%
- The feeling of doing useful work: 5%
- A comfortable income: 24%
- Respect from others for working on the job: 9%
- Opportunities to make use of your abilities and skills: 11%
- A feeling of independence: 7%
- Being able to do the kind of work which was, in itself, enjoyable: 7%

c. Value fulfillment (in retirement): (Fully or partly retired, or those who consider themselves partly retired). Now that you are (retired) (partly retired), how much of each of these things do you feel you get? (The following percentages are based on 143 replies):

**Values**

- Friendships with others: 22%
- The feeling of doing useful things: 33%
- A comfortable income: 63%
- Respect from others for the things you do: 19%
- Opportunities to make use of your abilities and skills: 55%
- A feeling of independence: 28%
- Being able to do the kinds of things which are, in themselves, enjoyable: 30%
5. **Summary: EMPLOYMENT**

a. One-third of the sample had done work for an income during the past year, with one-fourth of these working less than 21 hours per week and one-third of these considering themselves to be in partial retirement.

b. Over one-third of the employed presently are not working at their regular adult occupation, and almost two-thirds are either not at all or only somewhat satisfied with their present jobs.

c. Of all those not presently working for an income, over one-half are housewives and almost everyone else is retired.

d. One-third of the retired are not at all or somewhat satisfied with being retired. One-third would go back to work, either definitely or under certain conditions, if there were more opportunity for part-time work.

e. With respect to retired respondents as well as the small proportion of the sample presently looking for work, 95% were either a great deal, very much, or extremely satisfied with their last job, and almost two-thirds generally did not look forward to retirement. For three-fourths of all these individuals, total income has been reduced either a great deal, very much, or extremely much since stopping work.

f. With respect to occupational values and degree of value fulfillment, sizeable gaps tended to exist between these variables, indicating lack of value fulfillment, for the retired as well as those employed individuals who consider themselves partially retired. The most noticeable gaps have to do with having a comfortable income, having opportunities to make use of one's abilities and skills, and the feeling of doing useful things.

D. **RELIGIOUS**

1. **Participation in Religious Services**

a. Attendance: Respondents were asked how often they attend religious services.

Responses are:

- At least once a week: 44%
- 2 - 3 times a month: 10%
- At least once a month: 11%
- At least twice a year: 8%
- At least once a year: 6%
- Less than once a year: 20%
b. Previous attendance: Responses to the question, "About how often did you attend religious services when you were 50 years of age?" are:

- At least once a week 57%
- 2 - 3 times a month 11%
- At least once a month 9%
- At least twice a year 7%
- At least once a year 3%
- Less than once a year 13%

2. Summary: RELIGIOUS

About two-thirds of respondents presently attend religious services at least once a month, as compared to three-fourths who attended at least once a month at age 50.

E. POLITICAL

1. Interest in the 1960 Presidential Election

Proportions who voted in this election:

- Yes 87%
- No 13%

Degree of interest in the election that had previously been expressed:

- Very interested 70%
- Fairly interested 24%
- Not interested 6%

2. Interest in Political Affairs

Respondents, when asked to compare their present interest with their interest at age 50, answered:

- More interested now 28%
- Less now 10%
- Same 62%

Responses to the question, "Do you feel that there's no sense in your being interested in politics because there's not much you can do about it?" are:

- Yes 27%
- No 73%

3. Summary: POLITICAL

Nearly nine-tenths of respondents claimed to have voted in the 1960 presidential election, with this same proportion having been at least fairly interested in the election. According to respondents, present degree of political interest is greater than at age 50, while one-fourth feel apathetic about being able to accomplish anything through an interest in politics.
F. CONCLUSIONS: ACTIVITIES

1. Recreation

a. As in the health area, there is a need for more effective communication about present recreational and educational activities and facilities.

b. Taking into account the amount of free time of the sample, as well as the number of organizational memberships, definite possibilities exist for greater activity on the part of the senior citizens, to the extent that they become aware of the existence of activities of interest to them. Although we should not assume that an increased amount of activity invariably has a beneficial effect on the participant, definite relationships do exist between amount of activity (especially social activity) and general well-being.

c. It would seem that priority should be given to working toward more effective communication about present activities and facilities in preference to setting up new activities and facilities. An overall coordinating community organization might be effective in facilitating this task. However, the present level of interest expressed in new facilities, while indicated by only a small proportion of the sample, nevertheless represents a fairly wide potential market in terms of the number of individuals involved. For example, 15% of the sample represents a total of approximately 1800 individuals in the city of Decatur. Furthermore, the present level of interest in activities and facilities should not be taken as an unalterable fact of life, since one of the accomplishments of effective recreational programs is to increase the level of interest in them on the part of the population.

d. In view of the recommendation made in Chapter II for newly constructed housing for the aged, consideration should be given to the provision of recreational facilities in conjunction with this housing. For example, recreational rooms built with a high-rise dwelling would have several advantages:

   1. They would be quite economical in comparison to building a separate center.

   2. They would be conveniently located for those individuals living in the dwelling. This is very important for about one-third of the aged sample.

   3. They would increase the attractiveness of the housing built.

e. Lack of available transportation facilities and/or a state of health insufficient to utilize existing transportation facilities seems to be a major problem blocking recreational activities for a sizeable number of aged individuals. For 12% of the sample (representing approximately 1400 individuals), there are recreational activities they would like to do but can't because they lack transportation. A much larger proportion, 29%, state that there are activities they would like to do but can't because they are unable to travel readily. We may assume that an increase in the availability of transportation facilities will not only aid the 12% who state directly a need for such facilities, but will also aid a proportion of the 29% who are unable to travel readily (in terms of the existing facilities).
However, genuine aid for a sizeable proportion in this latter category of individuals probably would require special transportation facilities other than the standard public transportation systems.

f. The virtual lack of assistance in preparation for recreational activities after retirement points up a difficult problem area. While we may assume that development of recreational interests prior to retirement will facilitate the adjustment of the retiree, there may be a good deal of resistance to employer programs because of attempts to avoid thinking about having to retire. Furthermore, programs can be relatively superficial. Unless the recreational interests developed are genuine and important to the individual, they will be of little value. The problems here are great, and responsibility for them should rest not only with employers but also with the aged themselves as well, and with the various organizations in which they participate.

2. Social:

A problem area emerging from the study seems to be the general trend toward declining contact with family and friends as people get older. Since apparently nothing can be done to remedy this situation, the existence of recreational opportunities with possibilities for socializing can do much to make up for it.

3. Employment:

a. One-third of the retired would be interested in opportunities for part-time work if they could be provided, while the same proportion are relatively dissatisfied with being retired.

b. Certain major gaps between occupational goals and present degree of fulfillment of these goals have been demonstrated for retired individuals. These gaps stand in marked contrast to the situation of the employed or the former situation of these retired individuals.

c. The major lacks have to do with income, opportunities to make use of abilities and skills, and the feeling of doing useful things, although a number of other factors are also involved. Although re-employment might provide for most of these needs, consideration should also be given to providing activities outside of the employment area which could provide for some or all of these needs.

4. Religious:

Although there tends to be some decline in attendance at religious services among the sample, in comparison with attendance at age 50, the level of attendance is still quite high. In addition to this, one should note that membership in religious-oriented organizations are twice as great as memberships in any other type of organization. Thus, churches and religious-oriented organizations have a very important effect on the activities of older individuals in Decatur. The role of these organizations can be increased, as is shown by the fact that 5% of the sample (representing 600 individuals) stated that lack of transportation prevents their participation in church activities that they would otherwise like to do.
5. Political:

According to statements of respondents, present level of political interest is quite high, according to several different indicators. This level of interest should be taken into account in the planning of activities for these individuals.
VI. THE ROLE OF THE AGED

A. INTRODUCTION

In discussing the particular areas of population studies, housing, health, and activities, the emphasis has been on each area as a distinct unit. It now remains to discuss some aspects of the general role of the aged; factors which do not fit easily into any one particular area.

In section B of this chapter, respondents' priorities with respect to five areas of life (housing, health, recreation, relations with family and friends, and employment), relative to one another, will be discussed. Section C will take up two examples of the standards the aged think are expected of them. In section D, respondents' attitudes about how favorable or unfavorable the situation of the aged is in general will be presented. Section E has to do with how old the respondents feel, without regard to their actual age; section F discusses some of the factors relating to how old the aged feel they are, in order to help understand its causes and effects.

B. PRIORITIES

1. First Choice

"We've talked about five different areas of life: housing, recreation, employment, relationships with family and friends, and health. If you had to choose, would you tell me which of these is most important to you?"

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>6%</td>
</tr>
<tr>
<td>Recreation</td>
<td>1%</td>
</tr>
<tr>
<td>Employment</td>
<td>2%</td>
</tr>
<tr>
<td>Relationships with family and friends</td>
<td>28%</td>
</tr>
<tr>
<td>Health</td>
<td>62%</td>
</tr>
</tbody>
</table>

2. Second Choice

"Which is second in importance?"

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>19%</td>
</tr>
<tr>
<td>Recreation</td>
<td>3%</td>
</tr>
<tr>
<td>Employment</td>
<td>14%</td>
</tr>
<tr>
<td>Relationships with family and friends</td>
<td>40%</td>
</tr>
<tr>
<td>Health</td>
<td>23%</td>
</tr>
</tbody>
</table>

3. Third Choice

"Which is third in importance?"

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>43%</td>
</tr>
<tr>
<td>Recreation</td>
<td>8%</td>
</tr>
<tr>
<td>Employment</td>
<td>20%</td>
</tr>
<tr>
<td>Relationships with family and friends</td>
<td>22%</td>
</tr>
<tr>
<td>Health</td>
<td>7%</td>
</tr>
</tbody>
</table>
C. EXPECTED STANDARDS

Some examples

1. Manner of Dress

"Older people are expected to dress more conservatively than younger people."

   Agree  62%  Disagree  38%

2. Friendships

"Older people are expected to go around with friends their own age rather than with younger people."

   Agree  55%  Disagree  45%

3. Attitude About Acting One's Age

The above two findings refer to how the respondents feel as to what is generally expected of older people. The degree to which these feelings affect the aged person probably depends on his own acceptance of and agreement with them. One aspect of such acceptance, or lack of it, is measured by: "How important is . . . being free to act as young as you please without having to act your age?"

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat</th>
<th>A great deal</th>
<th>Very</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>9%</td>
<td>20%</td>
<td>22%</td>
<td>37%</td>
<td>11%</td>
</tr>
</tbody>
</table>

4. Summary

With respect to two possible standards which might exist for the aged in general, respondents disagreed to a great degree as to whether any standards existed at all. Respondents agreed to a greater extent with respect to an attitude about not having to "act your age," an attitude which might conflict with certain expected standards.

D. THE SITUATION OF THE AGED

1. Responses

How do respondents evaluate the situation of aged people in general—positively or negatively? It is presumed that the extent to which the role of the aged is viewed favorably will, in conjunction with other factors, have an influence on adjustment
or well-being. The following statements were evaluated by respondents:

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. &quot;In some ways, old age is the best time of life.&quot;</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>b. &quot;When you get old, your life isn't very useful.&quot;</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>c. &quot;In later years people have more chances to do some of the things they've always wanted to do but couldn't.&quot;</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>d. &quot;When a person gets old, it becomes very difficult for him to have a happy life.&quot;</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>e. &quot;You've got to expect lots of aches and pains when you get older.&quot;</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>f. &quot;The increased amount of leisure time is one of the best things in the life of an older person.&quot;</td>
<td>61%</td>
<td>39%</td>
</tr>
</tbody>
</table>

2. Scale: Evaluation of the Aged Status

The six foregoing items were combined in a single Guttman scale (C.R. = 0.91), with item e dropping out. The scale measures the degree to which respondents accept an unfavorable evaluation of the aged status. It will be utilized in section E.

3. Summary

In evaluating the situation of the aged, respondents generally indicated a balanced viewpoint, seeing some positive factors and some negative factors. It was possible to rank individuals on a Guttman scale with respect to degree of acceptance of an unfavorable evaluation of the aged status.

E. SUBJECTIVE OR FELT AGE

1. Self-ratings

Respondents evaluated their attitudes with respect to these questions:

a. "How do you think of yourself as far as age goes--do you think of yourself as middle-aged, elderly, old, or what?"

Middle-aged--61%; Elderly--18%; Old--15%; Other--6%

b. "Would you say that other people generally think of you as middle-aged or old?"

Middle-aged--67%; Old--23%; Other--9%

c. "Would you say that you feel older or younger than most people your age?"

Older than others--4%; Younger than others--62%; Same--35%
d. "If you were to think of how old you feel as distinct from how old you actually are, how many years old would you say you feel?"

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
<th>Age Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 years or younger</td>
<td>10%</td>
<td>70-74</td>
<td>7%</td>
</tr>
<tr>
<td>50-59</td>
<td>32%</td>
<td>75-79</td>
<td>7%</td>
</tr>
<tr>
<td>60-64</td>
<td>21%</td>
<td>80-84</td>
<td>4%</td>
</tr>
<tr>
<td>65-69</td>
<td>10%</td>
<td>85- or over</td>
<td>2%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

A high proportion of individuals felt younger than their chronological age, as well as younger than other individuals their own age. Two-thirds of respondents felt that others think of them as middle-aged.

F. FACTORS RELATING TO SUBJECTIVE AGE AND EVALUATION OF THE AGED STATUS

1. Adjustment

There are three aspects of adjustment which may be differentiated for present purposes: dissatisfaction with life, fantasy behavior, and anomie (a feeling that one is not an accepted member of the group). Each of these is correlated with the various aspects of subjective age and evaluation of the aged status as follows: (The words in parentheses indicate the direction of the scale. Thus, the higher the scale value, the greater the identification as old, older, etc. Consequently, for example, a subjective age as "old" is positively related to "dissatisfaction with life.")

<table>
<thead>
<tr>
<th></th>
<th>Dissatisfaction with life</th>
<th>Fantasy behavior</th>
<th>Anomie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age identification (old)</td>
<td>0.27*</td>
<td>0.10</td>
<td>0.18*</td>
</tr>
<tr>
<td>Felt age in years (old)</td>
<td>0.24*</td>
<td>0.23*</td>
<td>0.22*</td>
</tr>
<tr>
<td>Comparative age-identification (older)</td>
<td>0.25*</td>
<td>0.29*</td>
<td>0.09</td>
</tr>
<tr>
<td>Valuation of aged status (negative)</td>
<td>0.34*</td>
<td>0.17*</td>
<td>0.33*</td>
</tr>
</tbody>
</table>

*Statistically significant (see p. 7.)

2. Origins of Subjective Age

Respondents were queried directly about the circumstances surrounding their age-identification.

a. (If respondent identifies as elderly or old) "About how old were you when you first began to think of yourself as (elderly) (old)?"

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
<th>Age Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 or younger</td>
<td>1%</td>
<td>70-74</td>
<td>6%</td>
</tr>
<tr>
<td>50-59</td>
<td>6%</td>
<td>75-79</td>
<td>5%</td>
</tr>
<tr>
<td>60-64</td>
<td>7%</td>
<td>80-89</td>
<td>1%</td>
</tr>
<tr>
<td>65-69</td>
<td>5%</td>
<td>Don't know</td>
<td>2%</td>
</tr>
<tr>
<td>Question does not apply (no identification as elderly or old)</td>
<td>67%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 87 -
b. (If respondent identifies as elderly or old) "What happened that made you feel that way?"

The answers, in sentence and paragraph form, were coded into the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health factors</td>
<td>58%</td>
</tr>
<tr>
<td>Employment-related factors</td>
<td>10%</td>
</tr>
<tr>
<td>Family, friends</td>
<td>7%</td>
</tr>
<tr>
<td>Actual chronological age</td>
<td>7%</td>
</tr>
<tr>
<td>Don't know</td>
<td>18%</td>
</tr>
</tbody>
</table>

Each of these types of answers may be illustrated as follows:

**Health:**
- "I can't do the things I once did."
- "I began to slow up and I could not do hard work like I used to do."
- "Nothing in particular. I just felt tired out."
- "Stroke 14 years ago."
- "Arthritis crippled me up."

**Employment:**
- "Began to turn me down on jobs when I was 45."
- "Being retired."

**Family, friends:**
- "When the children said 'Let me do it, Dad'."
- "Loss of my parents."

**Chronological age:**
- "Had a birthday."
- "I had worked longer than either of my parents (they died in their sixties) and I felt old when I reached 70."

**Don't know:**
- "I don't have the least idea. I don't think anything in particular happened."
- "Nothing specific."

### 3. Other Factors Relating to Subjective Age and Evaluation of the Aged Status

In addition to the factor of adjustment, a variety of other factors were found to be related to subjective age and evaluation of the aged status. These are grouped into the categories of housing, health, and recreation, as follows:

**a. Housing:** Neither present condition of housing (exterior or interior repairs needed) nor degree of satisfaction with present housing is related to subjective age or evaluation of the aged status. With respect to the summed difference-scores (gaps between what the respondent has and what he wants), it is only the summed non-locational difference-scores which is related to some of the measures under discussion. Finally, the scale of physical abilities to take care of housework (see Chapter 3, p.16) also has some relationships. Results for non-locational difference-scores
and the scale of physical abilities are:

<table>
<thead>
<tr>
<th>Age identification (old)</th>
<th>Sum of Difference-scores (non-locational)</th>
<th>Physical abilities for housework (low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt age in years (old)</td>
<td>0.03</td>
<td>0.40*</td>
</tr>
<tr>
<td>Comparative age-identification (older)</td>
<td>-0.04</td>
<td>-0.10</td>
</tr>
<tr>
<td>Evaluation of aged status (negative)</td>
<td>0.18*</td>
<td>0.23*</td>
</tr>
</tbody>
</table>

*Statistically significant (see p. 7.)

b. Health: Age-identification and evaluation of the aged status were the two scales explored in this area. Of all the aspects of the physician-patient relationship considered (patient's cooperation with physician, patient's conditions for seeing a physician, patient's communication to physician, physician's communication to patient, patient's image of physician's effectiveness, patient's folk-medicine beliefs, difference between what patient desires and what he obtains from his physician, and patient's satisfaction with his physician), none of them are related to either age-identification or valuation of the aged status.

In addition to exploring aspects of the physician-patient relationship, a number of aspects of the health of respondents were explored. These are:

1. General health: "Generally speaking, how good would you say your health is at the present time?"

2. Chronic illness: "Do you have any chronic illnesses or disabilities, things that you have had for some time?"

3. Possible psychosomatic symptoms (Guttman scale, C.R. = 0.91): "How often are you troubled by the following: Upset stomach? Cold sweats of hands or forehead? Headaches? Not being able to sleep? Nervousness?"

4. Comparative health: "Do you think your health is better or worse than that of most people your own age?"

5. Change in health: "Has your health become any better or worse in the last five years, or is it about the same?"

6. Change in vitality: "Would you say that your physical vigor and vitality is better or worse than it was five years ago, or is it about the same?"
Relationships of each of the above factors to age-identification and evaluation of the aged status are:

<table>
<thead>
<tr>
<th></th>
<th>Age-identification</th>
<th>Evaluation of the aged status</th>
</tr>
</thead>
<tbody>
<tr>
<td>General health (poor)</td>
<td>0.14*</td>
<td>0.30*</td>
</tr>
<tr>
<td>Chronic illness</td>
<td>0.08</td>
<td>0.20*</td>
</tr>
<tr>
<td>Possible psychosomatic symptoms</td>
<td>-0.07</td>
<td>0.14*</td>
</tr>
<tr>
<td>Comparative health (worse than others)</td>
<td>0.03</td>
<td>0.19*</td>
</tr>
<tr>
<td>Change in health (worse)</td>
<td>0.17*</td>
<td>0.21*</td>
</tr>
<tr>
<td>Change in vitality (worse)</td>
<td>0.12</td>
<td>0.18*</td>
</tr>
</tbody>
</table>

*Statistically significant (see p. 7.)

c. Recreation: All of the recreational scales 1 developed were tested for relationships with aspects of subjective age and evaluation of the aged status. Results are:

<table>
<thead>
<tr>
<th>Age identification (old)</th>
<th>Felt age in yrs. (old)</th>
<th>Comp. Valuation of aged status (neg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of activities (low)</td>
<td>0.14*</td>
<td>0.22*</td>
</tr>
<tr>
<td>Number of organizational memberships (few)</td>
<td>0.10</td>
<td>0.12</td>
</tr>
<tr>
<td>Number of activities (few)</td>
<td>0.27*</td>
<td>0.28*</td>
</tr>
<tr>
<td>Desire for recreational activities (low)</td>
<td>0.16*</td>
<td>0.19*</td>
</tr>
<tr>
<td>Reduction in general activities</td>
<td>0.25*</td>
<td>0.31*</td>
</tr>
<tr>
<td>Reduction in social activities</td>
<td>0.29*</td>
<td>0.27*</td>
</tr>
<tr>
<td>Reduction in non-social activities</td>
<td>0.15*</td>
<td>0.23*</td>
</tr>
</tbody>
</table>

*Statistically significant (see p. 7.)

4. Summary

a. Aspects of subjective age and evaluation of the aged status are found to have statistically significant relationships to three distinct aspects of adjustment.

b. Respondents who feel elderly or old came to do so at no uniform period of life.

1. See Chapter V for a complete description of these scales.
c. Factors relating to physical health were the major ones involved in respondents' starting to feel elderly or old. Other factors involved are employment-related factors, family and friends, and actual chronological age.

d. Two housing factors, sum of non-locational difference-scores and physical abilities for housework, were found to be related to some aspects of subjective age and evaluation of the aged status.

e. None of the aspects of the physician-patient relationship was found to be related to age-identification or evaluation of the aged status. However, with respect to six measures of respondents' health based on self-ratings, evaluation of the aged status was related to all of them, and age-identification was related to two at a statistically significant level.

f. Six recreational scales were tested for relationships with aspects of subjective age and evaluation of the aged status. Of the 24 relationships considered, 19 were statistically significant.

G. CONCLUSIONS

1. Priorities

Health and relationships with family and friends proved to be the two most important "areas of life" for the sample, with housing, employment, and recreation following in that order. This order of priority might be taken into account both in theoretical investigations of the situation of the aged and in applied programs.

2. Expected Standards

For the two items investigated, no indication of a definite standard was found. It might well be difficult to determine the dimensions of the "role of the aged," and the expected standards embodied within it might prove to be extremely vague. A knowledge of standards of behavior expected of the aged, as well as the corresponding attitudes of the aged themselves, is important for understanding both processes of adjustment and age-identification.

3. Situation of the Aged

It is possible to form a Guttman scale of "evaluation of the aged status." Thus, there is evidence that older individuals tend to have a general opinion as to whether the aged status is good or bad, an opinion which applies to a variety of specific situations.

4. Subjective Age

There is a widespread tendency to identify as middle-aged, as younger than one's chronological age, and as younger than others of the same chronological age. There is also a tendency among the aged to think that others consider them as middle-aged
rather than old. Thus, the aged draw a definite distinction between chronological age and subjective age. From the fact that the subjective age of the sample is generally lower than their chronological age, one may infer that there are certain undesirable aspects of the role of the aged, at least in comparison to the role of the middle-aged adult. Further evidence for this interpretation is found in the fact that identification as old is not associated with good adjustment, as one might suspect on the basis of the realistic acceptance of the true situation. Rather, definite relationships to maladjustment emerged.

Thus, the sample is divided between the majority who tend to exaggerate their youth, and the minority, who feel as old as they actually are. The former group tends to be better adjusted than the latter, however. We may interpret this phenomenon as the result of the degree to which the role of the aged—which has various undesirable aspects—is accepted by the individual.

Once a role is accepted, one tends to go along with the standards expected of the group. In the case at hand, the aged individual who considers himself old will accept the stereotypes about the unfavorable situation of the aged. This is reinforced by the fact that evaluation of the aged status correlates with each of the three measures of subjective age at 0.22 or better. Thus, a tendency to identify as old is associated with a tendency to have an unfavorable evaluation of the aged status.

5. Factors Relating to Subjective Age and Evaluation of the Aged Status

Although state of physical health is the major factor in coming to feel elderly or old for those who so identify, it is not the only one. There are other reasons why a person may feel old, reasons which may have nothing to do with state of health. These may include employment-related factors and behavior of family and friends.

If this is the case for identification as old, the reverse of these factors are probably involved in continuing to feel middle-aged; physical health being important in most cases, but with other controlling factors in some cases.

However, since physical health is such a large component in the process of maintaining a comparatively youthful self-image, it is difficult for the individual whose physical health is slipping to continue to identify himself as middle-aged. For these individuals, at least two solutions at the cultural level are possible: (1) a redefinition of the role of the aged so as to de-emphasize the physical aspects. Thus, although the role would still have undesirable characteristics, it would be easier for individuals to continue to feel middle-aged and avoid identifying as old. (2) A redefinition of the role of the aged so as to increase emphasis on its desirable aspects. Thus, although physical factors might still be crucial and lead to large numbers of individuals identifying as old, the depressing effect of this type of identification on the individual would be reduced or eliminated.

It should be noted that the processes leading to a given subjective age, and the processes whereby a given subjective age has an effect on the aged individual are complex, and only a few of the factors involved have been explored in this report. Even with respect to those factors considered, e.g., participation in recreational activities, we are unsure whether they cause or are an effect of the aspects of subjective age, or whether they operate as both cause and effect.
The rapid development of sampling theory and techniques has enabled students of our older age groups to conduct excellent field studies on the older people residing in neighborhoods, cities, states, or the nation. Unfortunately, the publications describing the findings of such field studies almost always fail to describe, in detail, their sampling techniques, manpower requirements, and field costs.

The opportunity to design a sample of the aged residing in Decatur, Illinois, in the Spring of 1961 permitted the keeping of detailed records of sample design techniques, manpower requirements, and field costs. The sample design also used the city-directory sampling procedures recently developed by the Sampling Section of the Survey Research Center and utilized a screening phase to locate eligible respondents. This sample design is presented here in the hope that its procedures may prove of value in community studies of the aged or other residentially scattered social groups.

A. SAMPLE DESIGN

The population sampled was defined as all persons 60 years of age or older residing in private dwelling units within the 1959 boundaries of Decatur, Illinois, or living in built-up areas immediately adjacent to the Decatur city limits.

The sudden decision to undertake the study made it difficult to obtain the information needed in deriving an accurate over-all survey sampling fraction. Rigid time limits made it impossible to contact the United States Bureau of the Census for advance 1960 census data. Therefore, local governmental and private agency figures were employed as the best available data. The following assumptions resulted in an over-all sampling fraction of one in 13:

*The author wants to thank crew chief Eugene Wenninger and statistical clerks Aaron Bindman, Stanley Dubinsky, Thomas Duggan, and Clotilde Phelps for their aid in drawing the Decatur, Illinois, sample of the aged. Martin Lubin and James Harris helped with the sampling error calculations.

1 For a partial listing of such sample surveys see (1, 2, 3, 8, 9, 10), Page 98

2 For a thorough presentation of sampling from city directories as developed and presently employed by the Sampling Section of the Survey Research Center of the University of Michigan, refer to (4, 6), Page 98

3 All persons 60 years of age or older who resided in institutional facilities, such as nursing homes or homes for the aged, were excluded from the study.
a) estimated number of occupied dwelling units in the survey boundaries 28,000

b) percent of occupied dwelling units with one or more eligible respondents 21%

c) coverage rate (assumes interviewers will not find all of the sampled dwelling units) 98%

d) response rate (considers inability to ascertain eligibility, refusals, and not-at-homes) 85%

e) desired number of respondents 370

The field force was instructed to visit each sampled dwelling unit and to list all persons residing therein who were 58 years old or older together with their sex, age, date of birth, and relationship to the head of the household. Then, the cover sheets containing this information were returned to the sampling staff. Each respondent's age was checked against his date of birth, and all persons not at least 60 years old as of January 1, 1961, were eliminated from the study.

The decision to interview only one eligible respondent per dwelling unit introduced a probability complication arising out of their varying numbers per dwelling unit. One way of solving this problem with just one visit to sample dwelling units has been described by Kish (5)*. However, the inexperienced field force employed for the Decatur survey, the complications of several "within dwelling unit" selection tables, and the large number of dwelling units that had to be rapidly screened for eligibility, made it difficult to follow Kish's technique.

Instead, the eligible dwelling units were classified by the number of eligible respondents they contained. Then, one-half of the dwelling units with one eligible respondent was subsampled, and one respondent per dwelling unit was selected from those units which had two or more eligible respondents. Therefore, the interviews from dwelling units with one and two eligible respondents had over-all probabilities

1 This eligibility rate was derived from 1950 census figures on the Decatur population 21 years old or older and 60 years old or older.

2 An age of 58 was used as a cut-off on the cover sheets to insure the inclusion of persons 60 years old or over and to minimize losses due to misrepresentation of age. As a last resort, screening personnel were permitted to ask neighbors if a sample dwelling unit contained anyone 58 years old or older.

3 The city-directory sample yielded 362 dwellings with one eligible respondent, 227 with two, 8 with three, and 1 with four eligible respondents.

*Numbers in parenthesis refer to entries in the Reference on page 98.
of selection of 1 in 26, and the interviews with the nine persons who lived in dwelling units with three or four eligible respondents were duplicated on IBM cards to weigh their probabilities of selection to 1 in 26.¹

After this, the cover sheets with their designated respondents were returned to the field. This permitted a second group of more highly trained field workers to concentrate their efforts upon the interviewing without concerning themselves with respondent selection problems.

The actual sample of dwelling units was selected from the most recent Decatur City Directory; then a block sample was drawn to supplement the city directory selections. Specifically, city directory address lines were systematically sampled at a rate of 1 in 91, and clusters of seven lines were selected at each interval point. To check the completeness of the Decatur City Directory, the city blocks within the survey boundaries were sampled at a rate of 1 in 52. The selected blocks were then checked for dwelling units not listed in the city directory. Such "missed" dwelling units were also screened for eligible respondents.²

The sampling, screening, and interviewing processes yielded the following results after three call backs:

1. Selected city directory addresses expected to be dwelling units 2,153

2. Actual number of dwelling units obtained from city directory addresses by screening phase 2,183

¹One respondent was selected at random from the first cover sheet for those dwelling units having two eligible respondents. This was the second listed person. On the next cover sheet, the first listed person was selected, then the second on the third cover sheet, the first on the next cover sheet, etc. An identical procedure was followed for the dwelling units with three eligible respondents. To guarantee the success of this technique, all listings on cover sheets were in order of relationship to family head. A slight departure from the prescribed weighting scheme for respondents living in dwelling units with three or four eligible respondents is described in footnote 1, page 2.

²A total of 32 sample blocks were selected for the block supplement. On these sample blocks, 36 "missed" dwelling units were discovered, 4 of which contained eligible respondents. The small number of eligible respondents expected from this group permitted sampling supplementary blocks at four times the over-all study rate. Interviews from this source were weighted to 1 in 26.
a) Number of dwelling units yielding eligible respondents  598
b) Number of dwelling units with no eligible respondent  1,375
c) Screening refusals  11
d) No one at home (and insufficient information available from neighbors)  75
e) Vacant dwelling units  124

3. Number of addresses not dwelling units  127

4. Number of addresses outside survey boundaries  45

5. Number of dwelling units with eligible respondents left after subsampling for interviewing  417
   a) Number of respondent interviews obtained  346
   b) Someone else in family interviewed where respondent was too mentally or physically ill to be interviewed  32
c) Interview refusals  22
d) Respondent not at home after required number of call-backs  15
e) Found to be under 60 years at time of interview (contrary to screening phase information)  2

6. Number of interviews from block supplement  4

B. FIELD FORCE

The lack of experienced survey interviewers in the field force, coupled with a very large number of dwelling units to be screened for eligibility, complicated the survey tasks. The field supervisor decided to train screeners to check for eligible dwelling units and to use the screening period to train more thoroughly another group for the actual interviewing. Such a "two-platoon" system can be employed for field forces whenever the number of eligible respondents are in a small and scattered fraction of the number of dwelling units to be visited. It also permits greater sampling control over the entire field process by giving the sampling statistician an opportunity to observe the results of the screening phase.
C. MANPOWER AND COSTS

The sample selection and check procedures took about six weeks; the field operations about eight weeks. Four sampling clerks and one clerical supervisor were employed for a total of 223 hours at a cost of $312.75. 1 Professional supervision of the sampling process required 42 hours but was free of charge.

There were 27 screening interviewers employed at a cost of $836, plus seven cents per mile for automobile expenses. A Decatur resident supervisor received $140; the field director received $1,350. The 28 final-phase interviewers received $6 for each completed interview.

D. SAMPLING ERRORS

Where one interview per dwelling unit is taken, a city directory sample can be designed to yield sampling errors very near the level of simple random sampling. Primarily, this is done by taking clusters of just a few addresses, for example, three, and averaging one interview per cluster after the various non-response factors are encountered.

Similarly, if scattered respondents average one interview per city directory cluster, a simple random-sample level of variance can be reached, and the more complicated cluster-sampling variance formulas need not be used or considered in analysis. If the scattered respondents occur in clusters, in spite of their relative scarcity in the population, the cluster-sampling variance formulas must be used.

In this survey, 198 interviews were clustered and 148 were not. In order to determine the degree of departure from simple random sampling, cluster sampling errors were calculated by the Kish - Hess method (7).

These calculations revealed a patterning of responses that resulted in about a 10% increase in sampling error over simple random-sampling. This added clustering increase must be included in all sampling-error estimates and significance tests utilizing information from the Decatur sample.

E. FINAL COMMENTS

This description of the sample design and field force for a survey of the aged points up the feasibility of utilizing the simplicity of a city directory and block supplement sample with a two-phase field operation to locate widely scattered potential respondents. Letting one field group screen and the more competent field group interview permits more flexible control of the sample size and utilization of information gathered by the screening activities. Thus, community studies of all types of social groups can be readily undertaken by academic or governmental agencies. With proper design considerations, cluster-sampling variances only slightly greater than those with simple random-sampling can be obtained.

1The sampling clerks received $1.25 per hour, and the clerical supervisor received $1.75 per hour.
A word of caution: these survey procedures must have (1) the services of a competent sampling statistician familiar with the city directory technique; (2) an experienced field supervisor; and (3) a survey analyst who can design questionnaires and schedules. Fortunately, the sample design need not be done in the community, and field supervisors can be brought in to train interviewers. Nevertheless, this is not a "do-it-yourself" job for inexperienced people.

REFERENCES


APPENDIX B: HOUSING, HEALTH, AND ACTIVITY FACTORS RELATED TO ADJUSTMENT

In order to make any inferences about the factors which affect the adjustment or well-being of the aged, it is necessary to obtain valid and reliable measures of adjustment. Although this may seem simple, the measurement of a complex concept is actually one of the most difficult aspects of social-science research. Adjustment is not simply indexed by the amount of activity in which a person engages or the number of close friends he has or his state of physical health, although these are often related to personal adjustment. As conceived here, adjustment is more subjective in nature and has various aspects. Three of them were utilized in this report: dissatisfaction with life, fantasy behavior, and anomie. Guttman scales developed for each of these are described below:

1. Dissatisfaction with Life

This represents an attempt to learn the respondents' directly conscious feelings of satisfaction and dissatisfaction with respect to their present general life-situation. C.R. = 0.93. Items used were:

- a. How often do you feel that there's just no point in living?
- b. When you get up in the morning, how much do you generally look forward to the day's activities?
- c. As you get older, would you say things seem to be better or worse than you thought they would be?
- d. All in all, how much unhappiness would you say you find in life today?
- e. On the whole, how much are you satisfied with your way of life today?

2. Fantasy Behavior

This variable measures amount of behavior not directly concerned with solving day-to-day problems. The assumption is that the greater degree of fantasy behavior, the less the time and energy devoted to adjusting to one's present situation. C.R. = 0.91. Items are:

- How often do you find yourself doing each of the following things. . .
  - a. Postponing things that have to be done?
  - b. Worrying about things?
  - c. Having thoughts of death?
  - d. Day-dreaming about the past?
  - e. Being absent-minded?

3. Anomie

This concept has to do with general attitudes showing degree of optimism. The items are phrased in terms of "the average man" rather than being personalized and have to do with prospects for future life more than present satisfactions. In these respects
it differs from the scale of dissatisfaction with life. The scale was developed by Leo Srole\(^1\). C.R. = 0.90. The items, to which respondents agreed or disagreed, are:

a. It's hardly fair to bring children into the world with the way things look for the future.

b. In spite of what some people say, the lot of the average man is getting worse, not better.

c. There's little use writing to public officials because often they aren't really interested in the problems of the average man.

d. These days a person doesn't really know whom he can count on.

e. Nowadays a person has to live pretty much for today and let tomorrow take care of itself.

### Table 9. Correlations Between Housing, Health, and Activity Factors and Aspects of Adjustment\(^*\)

<table>
<thead>
<tr>
<th>Selected Factors</th>
<th>Aspects of Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dissatisfaction</td>
</tr>
<tr>
<td></td>
<td>with life</td>
</tr>
<tr>
<td></td>
<td>Fantasy behavior</td>
</tr>
<tr>
<td></td>
<td>Anomie</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td></td>
</tr>
<tr>
<td>Exterior repairs needed</td>
<td>0.16</td>
</tr>
<tr>
<td>Interior repairs needed</td>
<td>0.15</td>
</tr>
<tr>
<td>Sum of location difference-scores</td>
<td>0.00</td>
</tr>
<tr>
<td>Sum of non-location difference-scores</td>
<td>0.04</td>
</tr>
<tr>
<td>Sum of all difference-scores</td>
<td>0.03</td>
</tr>
<tr>
<td>Physical limitations of respondent</td>
<td>0.13</td>
</tr>
<tr>
<td><strong>Physician-Patient Relationships</strong></td>
<td></td>
</tr>
<tr>
<td>Physician's communication to patient (low)</td>
<td>0.18</td>
</tr>
<tr>
<td>Patient's communication to physician (low)</td>
<td>0.16</td>
</tr>
<tr>
<td>Patient's image of physician's effectiveness</td>
<td>0.25</td>
</tr>
<tr>
<td>(poor)</td>
<td>0.16</td>
</tr>
<tr>
<td>Patient's cooperation with physician (low)</td>
<td>0.10</td>
</tr>
<tr>
<td>Patient's satisfaction with physician (low)</td>
<td>0.14</td>
</tr>
<tr>
<td>Patient's conditions for seeing a physician</td>
<td>0.13</td>
</tr>
<tr>
<td>(few)</td>
<td>-0.02</td>
</tr>
<tr>
<td>Patient's folk medicine beliefs</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge of activities (low)</td>
<td>0.20</td>
</tr>
<tr>
<td>Number of organizational memberships (low)</td>
<td>0.17</td>
</tr>
<tr>
<td>Number of activities (low)</td>
<td>0.31</td>
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<tr>
<td>Desire for recreational activities (low)</td>
<td>0.11</td>
</tr>
<tr>
<td>Reduction in general activities</td>
<td>0.15</td>
</tr>
<tr>
<td>Reduction in social activities</td>
<td>0.20</td>
</tr>
<tr>
<td>Reduction in non-social activities</td>
<td>0.04</td>
</tr>
</tbody>
</table>


*A correlation coefficient of 0.13 or higher (or -0.13 or lower) indicates a degree of relationship which is statistically significant at the level described on page 7.*
4. **Relationships between Factors**

Chapters III, IV, and V each include sections on the relationships between various factors and aspects of adjustment. The detailed correlations which form the basis for these sections are found in Table 9.