THE RELATIONSHIP BETWEEN THE AGE-SEGREGATED HOUSING RANKING AND THE DISENGAGEMENT RANKING OF ELDERLY FEMALES

by

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I wish to acknowledge the invaluable assistance and moral support given me by the following individuals:

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CHAPTER 1
THE NATURE OF THE PROBLEM

INTRODUCTION

The intent of this study was to examine the relationship between degree of age segregation in the housing environment and social disengagement among the elderly.

The physical environment is increasingly thought to be of intrinsic importance in the behavioral system of man. Today, architects and planners are examining more closely the relationship between the physical environment they design and the behavior of its users. The reaction of special populations such as the elderly to designed spaces are a particular concern to some researchers and designers.

For example, a great many studies have compared those older people living in a "normal age-integrated" community to those living in planned environments for the elderly.

Irving Rosow (1967) studied 1,200 of Cleveland's older people residing in three types of housing, one with a mix of ages, one with quite a number of aged people, and one totally comprised of elderly residents. He studied the relation of each of these groups to social interaction. Rosow's findings concluded that most older people function perfectly well in ordinary housing without any special provisions. Most dissatisfaction, where indicated, was a result of low income. Although no distinctive complaints about housing were made apparent, those complaints that did exist primarily focused on the social environment and features of the neighborhood as opposed to complaints about the dwelling unit per se. Rosow consequently concluded that housing may represent some of the conditions, but not the
determinates of social life and personal fate.

This "conclusion" leaves us with a great many unanswered questions. Rosow's research did not indicate the strength of the conditions he refers to. While perhaps not a determinate, the effect of housing may be extremely strong. Rosow's notable findings showed that the life-satisfaction of socially oriented apartment dwellers was directly related to the concentration of age peers in their apartment buildings. It was also found that the degree of social interaction of the apartment dwellers was a function of the proportion of age peers in the respondent's social environment.

Likewise, Messer, (1967) reported that public housing tenants living in age-segregated settings were less dependent on social interaction to maintain morale.

In an attempt to expand on the research conducted in the above mentioned studies, this study examined whether age-segregated environments effect the disengagement of its inhabitants.

DEFINITION OF VARIABLES

In order to formulate a theoretical model of disengagement from which to work, Leon A. Pastalan's citing of two major and contrasting theories of successful aging was used. One of these theories, in Pastalan's article, "The Social Problem of Aging in American Society: A Three Stage Response", ¹ was referred to as the Activity Theory. This theory states that activities such as social participation, community work, hobbies, traveling, as well as other forms of expression, help reduce the stresses created by aging by substituting one meaningful role for another. In other words, the elderly individual diverts his energy away from "being old" to "being active".

A contrasting theory of disengagement, formulated by Cumming and
Henry, is defined as:

"...An inevitable process in which many of the relationships between a person and other members of society are severed, and those remaining are altered in quality."²

Simply put, this theory explains a mutual withdrawal resulting in a decreased amount of interaction between the aging person and others in the social system to which he belongs. This process may be initiated by the individual or by others in the situation.

Note that both of these theories are concerned with a successful mode of adaptation to aging and the problems that are associated with that process.

Reminiscent of the three levels of age-segregation studied by Rosow, the Kleemeir Descriptive model of special residential settings,³ contains a segregate, non-segregate continuum as one dimension, affecting life-style.

At the segregate end of the continuum, older persons may live exclusively among their age peers and have little contact with other age groups, while at the other end, are living arrangements which bring older people together daily with persons of all ages. Thus, living arrangements may be distributed along the segregate, non-segregate continuum in terms of the opportunities they provide for interaction with all age groups in the community.

The question examined herein, then, is whether an aged person living in an age-segregated or non age-segregated environment has any bearing on whether or not the individual is relatively disengaged or non-disengaged (active).

It is hypothesized that if one ranks high on the housing age-segregation scale, he will also rank high on the disengagement scale.
INVESTIGATION

This study examined a stratified, random sample of fifty Caucasian retired women, sixty-five years of age or older in the Manhattan, Kansas area. Fifty percent of those sampled were residing in high age-density housing and neighborhoods, and fifty percent were residing in low age-density housing and neighborhoods.
CHAPTER 2
PROCEDURES

OPERATIONAL DEFINITION OF AGE-DENSITY

High Age-Density. The high age-density area was a section of the original City of Manhattan, Kansas referred to as "Old Town". The area sampled comprised approximately a two square block section of "Old Town" which contained such services as the post office, a large chain grocery store, a grade school, as well as direct access to the downtown business area of Manhattan--located four blocks to the south. This section of "Old Town" was chosen for its high concentration of elderly living in housing types varying from a recently constructed elderly high-rise to single-family homes. A concerted effort was made to include in the sample, approximately equal proportions of residents representing each of the existing housing types.

Low Age-Density. Voting Ward 5, Precinct 6 and Ward 5, Precinct 7, located to the west of Highway 13 in Manhattan, Kansas, was chosen for its representativeness of low age-density housing. This area of town includes only a smattering of apartments intermixed with single-family residences.

DISENGAGEMENT RANKING

Responses to an oral questionnaire were then used to determine the placement of each respondent on the theory of aging scale. Cumming and Henry designed a series of interviews to determine disengagement by evaluating a respondent's changes of three major orders. The instrument used in this study was structured so as to reveal two of these three orders. (See Appendix I, page 31)
First, the instrument measured the changes in the number of people with whom the respondent habitually interacted or changes in the degree of interaction with them. At the same time, the questions were structured so as to reveal changes in the purposes of the interaction.

Secondly, the questionnaire was designed to reveal any qualitative changes in the patterns of interaction of each respondent. Particular attention was given to any revealed qualitative changes proportional to decreased involvement.

**OPERATIONAL DEFINITION OF DISENGAGEMENT**

A primary evaluation was made of each respondent's "change in the number of interactions" with "fewer than in the past" being evaluated as an indication of disengagement; while "same number of interactions as in the past" and "more interactions than in the past" respectively, being evaluated as activity.

Secondly, each respondent's "change in the purpose of interaction" was evaluated by comparing the responses of each respondent to the "present purpose of interaction" with the "past purpose of interaction". An evaluation was made based on the premise that response (2); "purpose to transact business" indicated involuntary or forced interaction as a result of necessity and thus disengagement, while responses (1); "purpose to socialize" and (3); "purpose of club and/or organizational meetings", indicated voluntary association or interaction and thus activity.

A crosstab was then used to combine the results of the "change in purpose" and the original "change in the number of interactions" results. All possible combinations were considered.
The final results indicated that a combination of scores showing a trend toward interaction on both rankings suggest a low degree of disengagement. A combination of responses showing disengagement and activity was judged to indicate a medium degree of disengagement; while trends toward disengagement on both rankings were called a high degree of disengagement.

RESEARCH DESIGN

The results of the combined scores were cross tabulated with the respondent's high or low age-density living situation. The high or low age-density living situation was used as the independent variable in the relationship.

The chi square technique was the most appropriate for the categorical data obtained from the instrument.

Each respondent's disengagement tendency was cross-controlled for each of the following variables:

1) Marital Status
2) Age
3) Urban/Rural Background
4) Income
5) Access to Transportation
6) Education, and
7) Physical ability to visit with others.

Each of these variables will be defined and explained for the purpose of this study as follows:

All fifty respondents were sixty-five years or older to insure that all respondents would be past the mandatory retirement age and not, in most cases, subject to influences caused by a job. Five year increments were used in each age category since census data follows this division.
URBAN/RURAL BACKGROUND

Each respondent's urban or rural background was discerned by her having lived the greatest portion of her life in:

1) open country
2) a smaller town than Manhattan
3) about the same size town as Manhattan
4) in a town of 30,000-100,000
5) in a town larger than 100,000.

The United States Bureau of Census delineates towns under 2,500 in population as being rural and those above this population as being urban in nature. Using this delineation, Manhattan, Kansas is an urban center. Therefore, responses 1 and 2 were designated as rural while responses 3, 4 and 5 were designated as urban.

INCOME

Each respondent's monthly income was approximated as being from:

1) $0-$50
2) $51-$120
3) $121-$200
4) $201-$300
5) $301-$400
6) $401 or more.

ACCESS TO TRANSPORTATION

Since the respondent's access to transportation is significant in this study only to the degree in which it affects her ability to visit with others or participate in voluntary organizations, it was evaluated as to whether it is:

1) always available
2) sometimes available
3) very seldom available
4) never available.

PHYSICAL ABILITY TO VISIT WITH OTHERS

Realizing that the number of visits one partakes in, or organizations one belongs to, depends upon physical ability to engage in such, each respondent was evaluated as to whether she is physically able to see others:

1) most of the time
2) some of the time
3) infrequently
4) never.

Each of the above listed control variables was dichotomized, with the mean being used in the age and education evaluations. Each was used as the predictor instead of the housing segregation ranking obtained. Each control was used singularly to see what difference was caused in the variance in the disengagement ranking.

It should be emphasized that no causal relationship between housing situation and disengagement ranking was possible, nor was inference of such made. The relationships discussed herein are viewed only as the beginning of inference. Although trends appear, the danger of over-generalization of concepts to all elderly populations should be observed. Therefore, the merit of the analysis that follows, is to raise questions upon which to base additional research.
Any response totals less than fifty, are due to a respondent choosing not to answer a specific question. A result of this choice, is the extremely incomplete income data. It should be noted that no pressure was exerted on any respondent to answer any question. In some instances, a response not forthcoming from a direct question could be answered
by a statement made by a respondent during general conversation. Such clean-cut responses were transferred by the investigator to the appropriate question.
CHAPTER 3
ANALYSIS OF DATA

GENERAL CHARACTERISTICS OF SAMPLE

AGE

Of the fifty respondents interviewed, nine reported being between the ages of 65-69; fifteen being between 70-74 years of age, making up the greatest percentage; with twelve being 75-79; six being 80-84; five reportedly being 85-89; and two being ninety or above.

MARITAL STATUS

The greatest number of women, twenty-eight, were widows, sixteen were presently married, two were single, and three had been divorced.

EDUCATION

Most of the respondents (twenty-eight) reported having finished high school; two had had no formal schooling; eleven had completed schooling up to or including grade eight; and nine had experienced a year or more of college. None of the respondents reported having a college or post graduate degree.

URBAN/RURAL BACKGROUND

Twenty-six of the fifty respondents reported having lived the greatest portion of their life in rural areas, while twenty-three had decidedly urban backgrounds.

THE EFFECT OF HEALTH ON VISITATION

The greatest number of respondents (thirty-one) reported being physically able to visit with others "most of the time"; seven reported "infrequently" being able to visit with others; and one re-
ported "never" being able to visit with others.

INCOME

Five respondents of the fifty reported the range of their monthly income. One reported an income ranging between $51-$120 per month; one reported an income of $121-$200 per month; two reported a $201-$300 monthly income, and one reported an income of $301-$400 per month.

AVAILABILITY OF TRANSPORTATION

Nineteen respondents stated that transportation to and from club and organizational meetings was "always" available to them; nine reported that such transportation was "sometimes" available; ten stated that transportation is "very seldom available"; while seven felt that such transportation is "never" available.

Numerical breakdowns of responses to the instrument can be found in Appendix I, (page 31)

STATISTICAL RESULTS

The expectation that if one ranks high on the housing age-segregation ranking, she will also rank high on the disengagement scale, was not supported by the data.

14.6% of the respondents were judged to have low association or to have disengaged. Of this percentage, 42.9% lived in the high age-density area. The greatest percentage of respondents in both the high age-density area as well as the low age-density area, fell into the medium disengagement cells. (Table I).
Table I: Association X Density

<table>
<thead>
<tr>
<th>Density</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5</td>
<td>15</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>2.00</td>
<td>5</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>31</td>
<td>7</td>
<td>48</td>
</tr>
</tbody>
</table>

Chi Square = 0.09194 with 2 degrees of freedom  Significance = 0.9551
Cramer's V = 0.04377
Contingency Coefficient = 0.04372
Kendall's TAU B = 0.03755  Significance = 0.3501
Kendall's TAU C = 0.03819  Significance = 0.3476
Gamma = 0.07383
Somer's D = 0.03685

Number of missing observations = 2

50% of the forty-nine who responded, reported having the same number of interactions as in the past, while 16.3% reported that they now enjoy more interactions than in the past.

Interestingly, 62.5% of those who reported having fewer interactions, resided in the high age-density area. However, the highest percentage of those who reported the number of their interactions to have increased, (75%), also resided in the high age-density area.

It should be noted further that when the change in the number of interactions was used as the sole determinate of disengagement, a significant relationship appeared between age-density and disengagement. (Table II)
Table II: Degree of change of interaction X density

<table>
<thead>
<tr>
<th>Count</th>
<th>Hi Density</th>
<th>Low Density</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Row Pct.</td>
<td>10</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Col. Pct.</td>
<td>62.5</td>
<td>37.5</td>
<td>32.7</td>
</tr>
<tr>
<td>Tot. Pct.</td>
<td>41.7</td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.4</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>(1) Fewer Interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Same # of Interactions</td>
<td>8</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>32.0</td>
<td>68.0</td>
<td>51.0</td>
</tr>
<tr>
<td></td>
<td>33.3</td>
<td>68.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.3</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>(3) More Interactions</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>75.0</td>
<td>25.0</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>25.0</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.2</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Column</td>
<td>24</td>
<td>25</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>49.0</td>
<td>51.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi Square = 6.22218 with 2 degrees of freedom
Significance = 0.0446
Contingency Coefficient = 0.33567
Gamma = 0.05102

1 Missing Observation

In fact, using only the change in the number of interactions, 62.5% of those who had disengaged resided in the high age-density area.
**Table III: Density X Change between Past and Present purpose of Interaction**

<table>
<thead>
<tr>
<th>Density</th>
<th>Non-Disengaged 1.00</th>
<th>Disengaged 2.00</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>16</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>69.6</td>
<td>30.4</td>
<td>47.9</td>
</tr>
<tr>
<td></td>
<td>44.4</td>
<td>58.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33.3</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>80.0</td>
<td>20.0</td>
<td>52.1</td>
</tr>
<tr>
<td></td>
<td>55.6</td>
<td>41.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41.7</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>Column</td>
<td>36</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>75.0</td>
<td>25.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Corrected Chi Square = 0.25043 with 1 degree of freedom  Significance = 0.6168  
Phi = 0.07223  
Contingency Coefficient = 0.07204  
Kendall's TAU B = -0.12039  Significance = 0.1085  
Kendall's TAU C = -0.10417  Significance = 0.1427  
Gamma = -0.27273  
Somer's D = -0.13889  

Number of Missing Observations = 2

As can be seen in Table III, a non-significant relationship again appeared when change in the purpose of the respondent's interactions was used as the sole determinate of disengagement.

These results seem to indicate that perhaps a change in number of interactions is a more precise indicator of disengagement than either change in purpose or a combination of change of number and purpose.

Obviously needed is research aimed at pinpointing the most reliable indicator of disengagement as well as an accurate measuring device of such.

When change of purpose and change in number were combined for a disengagement score, age of the respondent did not have any particular bearing on the relative disengagement of that respondent. However, of those who were disengaged, 85.7% were in the high age category or
above 79 years of age. As might be expected from the data previously discussed, there was a trend showing that as one's age increased, the percentage living in high age-density areas also increased.

The marital status of the respondents had no significant relation to their degree of disengagement. However, of the total who had disengaged, 71.4% were shown to be unmarried. Greater percentages of those single and widowed were shown to live in the high as opposed to the low age-density area.

Although as in the case of the previous variables discussed, no significant relationship between urban/rural background and disengagement appeared, some interesting data emerged. Of those who had disengaged, 57.1% were of a rural background. The data further showed that 59.3% of the respondents from a rural background lived in the high age-density area while 60.9% of those from an urban background resided in the low age-density area. When the change in the number of interactions was used as the only indicator of disengagement, 62.5% of those disengaged were from a rural background. The data seem to point toward evidence of there being a cultural shock of sorts for those moving from a rural area to a more urban one. Perhaps, as many researchers fear, this shock is more pronounced among the elderly.

The major determinant for present place of residence, (own choice, cost, others deciding for the respondent) was not of any significance with regard to disengagement. Worth noting, is the fact that 80% of those who said cost was the main reason for their housing type, lived in the high age-density area. Of those who had others decide where they should live, 100% resided in the high age-density area. Unfortunately, the income data was by far too incomplete to show any influence on the
respondent's ability or choice to live in the low age-density area as opposed to the high age-density area. However, of those respondents living in the low age-density area, 88% reported they lived there by choice, while only 39.1% of those living in the high age-density area reported living there as a result of their own choice.

Somewhat surprising, was the finding that one's physical ability to visit with others did not have a significant influence on degree of disengagement.

As in the findings regarding the health of the respondents, the availability of transportation to them showed no significant effect on disengagement. A small trend appears with reference to relative ease of access to transportation in relation to one reporting the "same" number of interactions as in the past. Interesting, is the polarized effect gained in the comparison of transportation availability and one having increased interaction. 83.3% of those having more interaction than in the past, stated that transportation was "always available", while the remaining 16.7% said that transportation was "very seldom available". 60.8% of those living in the low age-density area considered transportation easy enough to obtain to classify the access in one of the first two categories, ("always available" or "sometimes available"). These responses symbolized relatively easy access to transportation. In contrast to this, only 53.7% of the high age-density residents gave the same indication of relatively easy access.

As with the other variables discussed, education level did not prove to be statistically significant with regard to one's disengagement ranking.
CHAPTER 4

CONCLUSION

INTERPRETATION

The expectation that if one ranks high on the housing age-segregation ranking, she will also rank high on the disengagement scale, was not supported by the data.

None of the control variables were shown to have a significant effect on disengagement.

However, when change in number of interactions was used as the indicator of disengagement, a statistically significant relationship (Chi Square = 6.22218 with 2 degrees of freedom) did, in fact, appear.

Change in purpose as the indicator of disengagement was shown to have a closer relationship with density than did a combination score obtained from change in number and change in purpose.

The data indicates to this author that disengagement may not be contingent upon a change in purpose of interactions to any significant degree. Future research may perhaps be of more significance in the area of disengagement and change in one's number of interactions over a period of time.

A distinct profile emerged from those who were judged to have disengaged. The greatest portion of these were widowed, had completed high school, and had lived the greatest portion of their life in a rural area. The majority of these individuals were presently living in the high age-density area as a result of their own choice. Most claimed to be physically able to visit with others "most of the time", but to suffer from an extreme lack of access to transportation.
Several inferences can be made from this profile. The tendency for those who had disengaged to be widowed should be obvious. Divorced and single women did not show as great a trend toward disengagement. Therefore, one's lack of choice with regard to the missing of a mate had an apparent influence on isolation.

As was stated earlier, another important trend is for those who are disengaged to come from rural backgrounds. The data would definitely seem to suggest that respondents undergo a cultural shock when moving from a rural area to a more urban area. The reaction among older people to such a relocation may be to disengage.

It should be re-emphasized that no causal relationships were possible, or was inference of such made. The trends that did appear should be viewed only as the beginnings of inference. The danger of over-generalization of such trends to larger or populations of different characteristics, should be kept in mind.

The theoretical concepts employed herein are likewise, specific ones, and generalization should be avoided.

**RELIABILITY**

Without being reliable, a test cannot be interpreted. While not the most important aspect of measurement, reliability is essential to good scientific results.

The technique used in this study to measure disengagement does not lend itself to a statistical reliability check. It is difficult, therefore, to speculate as to the reason for the low correlation between disengagement and age-segregated housing.

However, the reliability of this study will be examined on two fronts. First, the study will be examined by asking the question, "If
the same set of objects were measured again with the same or a comparable measuring instrument, would similar or same results be obtained?" This question deals with reliability in terms of stability and predictability of terms used.

Secondly, the question, "Were the measures obtained from the measuring instrument the 'true' measures of the property measured?", will be examined. It is hoped that this question will lead to an accuracy definition of the instrument.

The instrument was designed to allow the investigator to have each respondent personally fill out the responses while the investigator waited. Many of the questions were structured with perhaps too fine a line between possible interpretations. It was hoped each respondent would lean toward the intended interpretation as a result of her reading each question for herself. However, since the sample was elderly, the overwhelming majority requested that the investigator read the questions to her. As a result, the instrument was not well-suited to an oral interview. Some respondents answered orally, while others did not.

The inexperience of the interviewer was a major drawback. The same investigator interviewed all fifty respondents. Some of the early interviews may have been hampered by her ineptness. Whether responses or interpretations were influenced by this awkwardness, can only be conjectural.

Admittedly, the measuring instrument was not consistently administered under standard, well-controlled or similar conditions. This, of course, allows for error variance to appear. Since it is a statistical goal to minimize error variance, efforts need to be focused on develop-
ing a reliable measurement technique of disengagement.

In several cases, respondents gave answers or opinions that were in direct conflict with attitudes or opinions expressed during general conversation. This particularly seemed to be the case while asking residents of the Manhattan high-rise their attitudes about their housing and preferences related thereto. Evaluation of this phenomenon could perhaps have been aided by the use of a recording device so that documented information not be limited to the measuring instrument.

Whenever dealing with subjective responses, one is faced with the problem of stability. Stability may be defined as the acquisition of the same or similar results if the same object is measured again and again\(^4\). Kerlinger\(^5\) argues that reliability and accuracy may be achieved by obtaining some rank-order of results if the test is given several times to the same respondents. Therefore, the measures of disengagement are as reliable as the technique will permit, but it is obvious that research is needed to develop more reliable techniques. It is quite possible that the stability of the administering techniques used would lead to differing rank-order of the respondents in subsequent interviews.

Were this study to be repeated, it is felt that the reliability of the instrument could be increased by:

1) eliminating ambiguous questions from the instrument;

2) adding more items of equal substance to serve as checks; and

3) making any instructions standard and easily understood.

VALIDITY

In the book, Foundations of Behavioral Research, Fred N. Kerlinger states that there are three types of validity: content, criterion-
related, and construct.

For a measuring instrument to have content validity, its content must be representative of a universe of content of the property being measured. The instrument used did not lack content validity. In fact, a number of questions included in the measuring instrument proved to be superfluous and not needed in addition to those reflecting the direct purpose of the study.

As stated previously, the instrument was designed to reveal both changes in the respondent's number of interactions as well as qualitative changes in those interactions. The resulting construct validity of the second aspect of the disengagement profile is very questionable. Though used in the Cumming and Henry study, no elaboration is made of the technique used to measure the quality of interactions. No sound theoretical model was available from which to structure reliable and valid questions. An operational definition of differing qualities of interaction were one available, would have led to a much more valid instrument.

Although a great deal of care was taken to follow a strict interpretation of Cumming and Henry's definition of disengagement (both theoretical and operational), their rather ambiguous concepts contributed to the lack of this study's validity. In their study of disengagement, the conclusions and derived models, though logical, were often not fully explained or operationally defined. Subsequent studies based on the findings reported by Cumming and Henry, as was this one, will be products of the researcher's conjecture and interpretation of their results.
GENERAL

Analysis problems were caused by the fact that the sample, due to time and financial limitations was so small. This resulted in many cells being too small for much inference about the relations in question. Since the sample-size was small, any unanswered questions made a considerable reduction of cell-size.

Were this study repeated, this author suggests the use of a structured, open-ended interview. Those sampled proved to be very eager for general conversation while reluctant to answer close-ended questions. A skilled interviewer could definitely be able to use this eagerness to talk to his advantage. Certainly, an open-ended discussion lends itself to more in-depth study as to the reasons behind particular responses.

Once again, it should be emphasized that the sample size was extremely small and did not facilitate reliable results.

More important to note, is the fact that more reliable measurement techniques of disengagement are absolutely essential to further study.

IMPLICATIONS

The implications of research of the type outlined here are extremely far-reaching. More and more emphasis is being placed upon the functional aspects of the environment. However, to deal successfully with function, we must know how our designs and plans effect the behavior of those functioning within them. Intuition and personal taste may supply guidelines for aesthetics but only scientific research will tell us how we are influencing behavior.

No definitive answers were provided by this study, however, the findings did suggest the need for transportation, opportunity for one to
choose his own living-arrangement, as well as the need for particular care to be taken when relocating rural people in a more urban environment.

This study also raises several questions needing further research. Though age-density residence does not seem to have any particular effect upon disengagement, a significant relationship may exist between disengagement and one's satisfaction with one's living arrangement. Such a study could lead to extensive studies of why or why not one may be satisfied with one's place of residence.

Though the research attempted by this author offered no solutions, it is hoped that those involved with relocation projects, building design, or land use plans will turn to research of this type and consider the ramifications of their solutions on man.
1 Proceedings From the Institute on Management of Public Housing for the Elderly. Leon A. Pastalan (ed.), National Association of Housing and Redevelopment Officials. February 6, 7, 8. University of Toledo, Secor Hotel, Jefferson at Superior, Toledo, Ohio 43605


5 Ibid. Page 444
BIBLIOGRAPHY


40) Windley, Paul G., "Measuring Environmental Dispositions of Elderly Females", Department of Architecture and Design, Kansas State University, Manhattan, Kansas.
APPENDIX
Name: ____________________________________  I. D. NUMBER: __________

Address: _____________________________________________________________

1) I am _______ years of age.
   (1) 65-69; (2) 70-74; (3) 75-79; (4) 80-84; (5) 85-89; (6) 90 or over
   *Response breakdown:
   (1) 9; (2) 15; (3) 12; (4) 6; (5) 5; (6) 2

2) I am presently:
   (1) Single; (2) Married; (3) Divorced; (4) Widowed
   Response breakdown:
   (1) 2; (2) 16; (3) 3; (4) 28

3) My education includes:
   (1) Schooling up to or including grade 8; (2) High school; (3) A year
   or more of college; (4) A college degree; (5) A post graduate degree
   Response breakdown:
   (1) 11; (2) 28; (3) 9, (4) 0; (5) 0. Note: 2 reported no formal edu-
   cation.

4) The greatest portion of my life, I have lived:
   (1) In open country; (2) In a smaller town than Manhattan; (3) In
   about the same size town as Manhattan; (4) In a town of 30,000-100,000;
   (5) In a town larger than 100,000
   Response breakdown:
   (1) and (2) 26; (3), (4) and (5) 23

5) If I had my way, I would rather:
   (1) Live in my own home; (2) Live in a rented house or apartment; (3)
   Live in a nursing home; (4) Life in the Manhattan hi-rise
   Response breakdown:
   (1) 30; (2) 10; (3) 10; (4) 0

6) Why?

7) The greatest number of people living nearby are:
   (1) Young; (2) Middle-aged; (3) Approximately my age; (4) Elderly
   Response breakdown:
   (1) 4; (2) 20; (3) 16; (4) 10

8) Most of my life, I have lived:
   (1) Among people of all ages; (2) Among people my own age
   Response breakdown:
   (1) 47; (2) 3

*This represents the numerical frequency of response.
9) If I had my choice, I would rather:
   (1) Live with people of all ages; (2) Among people my own age
   Response breakdown:
   (1) 44; (2) 4

10) My present place of residence is determined by:
    (1) My own choice; (2) Cost; (3) Other people
    Response breakdown:
    (1) 31; (2) 8; (3) 9; (4) (1 & 2) 1

11) I usually visit with approximately ____ different people per week:
    (1) 0-5; (2) 6-9; (3) 10-14; (4) 15-19; (5) 20-24; (6) 25 or more
    Response breakdown:
    (1) 15; (2) 15; (3) 10; (4) 3; (5) 2; (6) 2

12) This number is:
    (1) Fewer than the number I used to visit with in the past; (2) About the same number I used to visit with; (3) More than I used to visit with
    Response breakdown:
    (1) 16; (2) 25; (3) 8

13) If this number has changed, approximately how long ago did the change take place?

14) My health permits me to visit others:
    (1) Most of the time; (2) Some of the time; (3) Infrequently; (4) Never
    Response breakdown:
    (1) 31; (2) 10; (3) 7; (4) 1

15) When I visit with others:
    (1) I usually go to see them; (2) I usually run into them by accident;
    (3) Others come to see me
    Response breakdown:
    (1) 7; (2) 5; (3) 18; (4) (1 & 2) 2; (5) (2 & 3) 0; (6) (1 & 3) 12;
    (7) (1, 2 & 3) 3

16) In the past, the greatest number of visits was:
    (1) When I went to see someone; (2) When I ran into people by accident;
    (3) When others came to see me
    Response breakdown:
    (1) 11; (2) 1; (3) 8; (4) (1 & 2) 2; (5) (2 & 3) 0; (6) (1 & 3) 4;
    (7) (1, 2 & 3) 4

17) Most of my visits are with:
    (1) Relatives; (2) Friends who are neighbors; (3) Friends who are not neighbors; (4) Strangers
    Response breakdown:
    (1) 4; (2) 20; (3) 8; (40 1; (5) (1 & 2) 4; (6) (1 & 3) 3; (7) (1 & 4) 0;
    (8) (2 & 3) 6; (9) all 0; (10) (1, 2 & 3) 1; (11) (3 & 4) 1

18) In the past, the greatest number of visits I had was with:
(1) Relatives; (2) Friends who are neighbors; (3) Friends who are not neighbors; (4) Strangers
(1) 4; (2) 20; (3) 8; (4) 1; (5) (1 & 2) 4; (6) (1 & 3) 3; (7) (1 & 4) 0; (8) (2 & 3) 6; (1) all 0; (11) (1, 2 & 3) 1; (12) (3 & 4) 1

19) The purpose for most of my visits is:
(1) Mainly to socialize; (2) To transact business; (3) In connection with the organizations to which I belong
Response breakdown:
(1) 38; (2) 2; (3) 3; (4) (1 & 2) 2; (5) (2 & 3) 0; (6) (1 & 3) 5; (7) all 0

20) In the past, the purpose for most of my visits was:
(1) Mainly to socialize; (2) To transact business; (3) In connection with the organizations to which I belong

21) Do you belong to any clubs or civic organizations such as Masonic, P.T.A., American Legion, Church, organizations for retired couples; political organization.
(Note: if church organizations, we mean groups within the church, not merely membership in the church.)

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<tr>
<th>Name of Organization</th>
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22) The number of organizations I presently belong to:
(1) Is fewer than I used to belong to; (2) About the same as I used to belong to; (3) More than I used to belong to
Response breakdown:
(1) 21; (2) 22; (3) 5

23) How much of your time is free for you to do with as you please?
(1) All day long; (2) Half a day; (3) A few hours each day; (4) Almost none
Response breakdown:
(1) 35; (2) 8; (3) 3; (4) 2

24) Transportation to and from meetings, visits, and other activities is:
(1) Always available; (2) Sometimes available; (3) Very seldom available; (4) Never available
Response breakdown:
(1) 19; (2) 9; (3) 10; (4) 7

25) Approximately how much money do you earn per month?
(1) $0-$50; (2) $51-$120; (3) $121-$200; (4) $201-$300; (5) $301-$400; (6) $401 or more
Response breakdown:
(1) — (2) 1; (3) 1; (4) 2; (5) 1; (6)
THE RELATIONSHIP BETWEEN THE AGE-SEGREGATED HOUSING RANKING AND THE DISENGAGEMENT RANKING OF ELDERLY FEMALES

by

BARBARA KAY STRICKER

B. S., Kansas State University, 1972

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1974
The intent of this study was to examine the relationship between one's relative degree of housing segregation according to age and the same respondent's placement on a theory of aging scale, ranking individuals as to degree of disengagement from society.

It was hypothesized that if one ranked high on a housing segregation scale, he would also rank high on the disengagement scale.

This study examined a stratified, random sample of fifty retired women, sixty-five years of age or older in the Manhattan area. Fifty percent of those sampled were residing in high density age-segregated housing, and fifty percent were residing in low density age-segregated housing.

The high density age-segregated area involved, was the original city of Manhattan and is known as "Old Town".

Voting Ward 5, Precinct 6 and Ward 5, Precinct 7, located to the west of Highway 13 in Manhattan, was chosen to represent low density age-integrated housing.

Each respondent's housing situation was ranked as being "hi" or "low" in accordance with the relative age-density of her living situation.

Responses to an oral questionnaire were used to determine the placement of each respondent on the theory of aging scale.

The resulting data facilitated a dichotomous ranking only. Therefore, a "hi" or "low" disengagement ranking was assigned
each respondent in accordance with her responses.

The age-segregate non-segregate housing situation was used as the independent variable in the observed relationship between the housing situation and one's degree of disengagement.

Normal distribution of the data could not be assured for the purpose of a simple correlation. Therefore, the chi square technique was the most appropriate for the categorical data obtained from the instrument.

Each respondent's placement on the two scales was cross-controlled for each of the following variables:

1. Place of Residence
2. Marital Status
3. Age
4. Urban/Rural Background
5. Income
6. Access to Transportation
7. Education
8. Present place of residence determinant, and
9. Physical ability to visit with others.

Each of the above listed control variables was also used as the predictor instead of the housing segregation ranking obtained.

The majority of the respondents tended to be from 70-74 years of age, widowed, with a high school education. A majority reported being of a rural background. Most were physically able to visit with others "most of the time". The greatest number of respondents stated that transportation was "always available" to them.

The expectation that if one ranked high on the housing segregation ranking, she would also rank high on the disengagement scale, was not supported by the data.

However, while only 32.7% of the respondents were judged to have
disengaged, (67.3% had not), 62.5% of those who had disengaged resided in the high age-density area when change in the number of interactions was used as a sole determinate of disengagement. This was the only relationship in the study shown to be statistically significant.

50% of the respondents reported having the same number of interactions as in the past, while 16.3% reported that they now enjoy more interactions.

Of those who reported the number of interactions increasing, 75% resided in the high age-density area.

Of those respondents who had disengaged, the greatest portion of them were widowed, having a high school education, from a rural background, living in the high age-density area as a result of their own choice. She is physically able to visit others "most of the time", but experiences a lack of access to transportation.