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Relocation and Health Effects on the Elderly
A Commented Research Review¹

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This paper summarizes and comments on the research on the relationship between relocation and morbidity/mortality among the elderly. In the present state of research there are not sufficient grounds for the drawing of general conclusions. On the other hand there is good reason for assuming that relocation under certain circumstances and for certain groups does lead to ill-health and to an increase in mortality. There is a lack of studies devoted to systematic investigation of the influence of such conditions. Various designs and methods have been used, and this reduces comparability. There is also a lack of theoretically guided empirical investigations. Research on relocation among the elderly needs to include recognition of the importance of the meaning of home for the elderly, and of the concept of control.

Elderly people and relocation is a significant research field due to some important trends in many countries.

Demographic development in Sweden, as in many other countries (for example the United States), is such that the proportion of the elderly is constantly increasing. In 1984 almost 1.5 million (17%) of the Swedes were more than 64 years old. The number of persons over 80 will rise from 300,000 (1984) to 440,000 by the end of the century — a rise approaching 50%. For some time deinstitutionalization of the care of the aged has been in progress in Sweden. Briefly, the number of places at institutions has not risen since the mid-70s. The degree of coverage for those who are 65 or over has now gone down to the 1965 level. This deinstitutionalization is planned to proceed with increasing rapidity. There are also good reasons for assuming that the aged

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are going to become less adequately equipped for coping with extensive intrusion into their immediate environment — because, for instance, the number of single persons without children is increasing rapidly. The often important social network formed by relatives can become weaker in the future. Furthermore, moving can cause deterioration in another type of social network — the local one formed by neighbours.

To these trends should be added the fact that towns are developed and renewed — and sometimes at a high tempo. New buildings go up, old ones are modernized or are torn down to make room for thoroughfares and office blocks and so on — and these changes involve the constant relocation of human beings. Sweden is just one among a number of West European countries that have had a drop in housing production since the beginning of the 70s. Sweden has therefore oriented its housing policy towards a renovation programme. At the end of 1983 the Swedish parliament approved a 10-year programme with the aim of stimulating housing modernization. The effect of this has been a rapid increase in the number of improved dwellings (about 30,000 per year). The modernization process usually has the consequence that tenants have to move. Their relocation is sometimes voluntary but is most often forced. For a few it is a question of a shorter or longer period away, but as a rule there is no going back to the original flat. However, at the end of 1988 the state loan conditions for modernization became less advantageous, and there is an expectation of a decline in modernization activity in favour of new construction. Elderly people also move from home to home in order to adjust their housing to new life conditions. Moving to institutions, or from one institution to another, because of changes in health or in environment is also common. For some people the move is welcome, but for others it represents a forcible separation from a well-developed and effective social network, and from memories and personal history.

This article summarizes and comments on the research on the relationship between relocation and morbidity/mortality among the elderly. We present a number of studies divided into three categories according to type of relocation involved: (a) inter- and intranstitutional, (b) from home to institution, and (c)
from home to home. (By home is here meant housing to which no social and medical service is connected.) This is followed by a discussion of the main direction of research. We stress the importance of the development of theory, and the importance of studies rooted in theory, and we devote the last parts of the paper to two concepts that we consider important with regard to the desired development of theory: the meaning of home and control.

Research on the relationship between relocation and the health of the aged started in 1945 with a study presented by Camargo and Preston. Their findings indicated that relocation to an institution led to an increase in mortality among the aged, and this was supported by Josephy (1949) and Whittier & Williams (1956). These three studies were the first in an American research tradition in this field. Since then, to the best of the authors' knowledge, at least about 50 studies have been presented, and they have been covered in a number of surveys (see e.g., Blenker, 1967; Borup, Gallego, & Heffernan, 1979; Borup, 1983; Bourestom, 1984; Coffman, 1981; Kasl, 1972; Lawton, 1977; Pastalan, 1983; Rowland, 1977; Schooler, 1976). Some of the conclusions are in conflict with one another. Despite the very large body of empirical evidence, no consensus has been reached as to whether relocation causes an increase in morbidity and mortality. The disagreement is illustrated by the debate which took place in The Gerontologist at the beginning of the 80s. From a research overview Borup et al. (1979) draw the conclusion that "the data overwhelmingly support the premise that relocation does not influence mortality" (p. 139). One practical implication, according to Borup, is that relocation programmes should not be based on the false assumption that relocation leads to an increase in mortality. This position was attacked by researchers in a number of articles. Bourestom and Pastalan (1981), for instance, write: "We regard these recommendations as dangerously irresponsible and intend to show how the conclusions upon which they are based are naive and fallacious" (p. 4).

Inter- and Intraintitutional Relocation

Research in this field has been dominated by quantitative studies and by analyses of the statistical correlation between (on
the one hand) inter- and intrainstitutional relocation and (on the other) mortality/morbidity. There are two principal designs for such investigations: (a) baseline, in which the movers are followed over time and compared before and after the relocation, and (b) experimental, in which the movers are compared with a matched control group. With the latter design there is in general a greater possibility of drawing causal conclusions. In Table 1 are shown 33 studies of the correlation between relocation and mortality, with one or the other of the two designs.

Table 1

<table>
<thead>
<tr>
<th>Study</th>
<th>Type of relocation</th>
<th>Size of group</th>
<th>Design</th>
<th>Increased mortality?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aleksandrowicz (1961)</td>
<td>Interinst.</td>
<td>40</td>
<td>Baseline</td>
<td>Yes (^a)</td>
</tr>
<tr>
<td>Aldrich &amp; Mendkoff (1963)</td>
<td>Interinst.</td>
<td>121</td>
<td>Baseline</td>
<td>Yes</td>
</tr>
<tr>
<td>Pihkanen &amp; Landenpera (1963)</td>
<td>Interinst.</td>
<td>108</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Miller &amp; Lieberman (1965)</td>
<td>Interinst.</td>
<td>45</td>
<td>Baseline</td>
<td>No (^b)</td>
</tr>
<tr>
<td>Jasnau (1967)</td>
<td>Interinst.</td>
<td>247</td>
<td>Baseline</td>
<td>Yes</td>
</tr>
<tr>
<td>Novick (1967)</td>
<td>Interinst.</td>
<td>125</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Stotsky (1967)</td>
<td>Interinst.</td>
<td>141+65</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Killian (1970)</td>
<td>Interinst.</td>
<td>79+65</td>
<td>Experimental</td>
<td>Yes</td>
</tr>
<tr>
<td>Markus et al. (1971)</td>
<td>Interinst.</td>
<td>199+167</td>
<td>Baseline</td>
<td>Yes/No (^c)</td>
</tr>
</tbody>
</table>

2. Like Borup et al. (1979), we include studies with different designs under the heading Baseline studies. Most of them are real baseline comparisons, but there are a few with a similar design, e.g., comparisons with a known mortality rate for a larger population of which the relocated persons were a sample, or with a relocated group during a single premove time span equal to the postmove study period (for further details, see Coffman, 1981).
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample Size</th>
<th>Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lieberman et al. (1971), in borup, 1983 and Schultz &amp; Brenner, 1977</td>
<td>Interinst.</td>
<td>93</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Ogren &amp; Linn (1971)</td>
<td>Interinst.</td>
<td>30</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Goldfarb et al. (1972)</td>
<td>Interinst.</td>
<td>70</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Markson &amp; Cumming (1974)</td>
<td>Interinst.</td>
<td>494</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Bourestom &amp; Pastalan (1975, in Coffman, 1981)</td>
<td>Interinst.</td>
<td>61+53+38+34</td>
<td>Experimental</td>
<td>Yes/No&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Pastorello (1975)</td>
<td>Interinst.</td>
<td>200</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Zweig &amp; Csank (1976)</td>
<td>Interinst.</td>
<td>347</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Gutman &amp; Herbert (1976)</td>
<td>Interinst.</td>
<td>81</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Watson &amp; Buerkle (1976)</td>
<td>Intrainst.</td>
<td>71</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Pablo (1977)</td>
<td>Intrainst.</td>
<td>52</td>
<td>Experimental</td>
<td>Yes</td>
</tr>
<tr>
<td>Raasoch et al. (1977, in borup, 1983)</td>
<td>Intrainst.</td>
<td>ni</td>
<td>ni</td>
<td>No</td>
</tr>
<tr>
<td>Pino et al. (1978)</td>
<td>Intrainst.</td>
<td>25+25</td>
<td>Experimental</td>
<td>No</td>
</tr>
<tr>
<td>Kowalski (1978)</td>
<td>Interinst.</td>
<td>157</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Silberstein (1979, in Coffman, 1981)</td>
<td>Interinst.</td>
<td>137</td>
<td>Baseline</td>
<td>No</td>
</tr>
<tr>
<td>Borup et al. (1979)</td>
<td>Interinst.</td>
<td>326</td>
<td>Experimental</td>
<td>No</td>
</tr>
</tbody>
</table>
a) Aleksandrowicz (1961) indicates that there is a positive correlation between relocation and mortality, but the population studied was too small for this conclusion to be reliable. However, Borup (1983) and Coffman (1981) stress that the study does not show an increase in mortality, while Lawton & Nahemow (1973) and Pastalan (1983) stress the opposite.

b) Four out of 45 patients died within 18 weeks of having moved — which does not constitute a significant increase in mortality. Yet, e.g., Bourestom (1984) takes this as an example of a study that does indicate such an increase.

c) Two groups were studied — one for which the relocation involved a radical change of environment, and one for which the change was only moderate. In the first group, but not in the second, there was increased mortality as compared with a control group.

d) Certain studies we have had access to only by way of other surveys. Where for this reason information is lacking, we here write "ni" ("no information").

e) A group of 40 movers were studied, but mortality was compared with regard to all the patients in the institution — and we are not told how many of them there were.

f) In one of the four groups that moved, mortality increased as compared with a control group.

The majority (approx. 73%) of the studies in Table 1 do not confirm the hypothesis that relocation leads to an increase in mortality. In most of the previous research reviews little or no attention has been paid to the fact that the studies are of very different quality. For instance Borup et al. (1979) draw the conclusion that their hypothesis, that relocation does not influence mortality, can be supported by the argument that 75% of all
studies, and 85.7% of the studies utilizing an experimental design, do not show any significant increase of mortality among the movers. However, because of the different methodological quality of the studies it is not possible to make such a general statement. Studies like Ogren & Linn (1971) are given the same importance as Marlow (1974). In the former, which shows no increase in mortality, only 30 persons were studied, with an experimental design. In the latter there was a follow-up of 1100 patients who moved from a hospital. Comparisons were made between this group and a control group of patients who did not move. The results indicate that moving caused an increase in mortality and also a deterioration in the functional capacity and physical and mental health of many of the survivors.

But what of the relationship between methods and results in the studies presented in Table 1? Two crucial factors regarding the possibility of drawing causal conclusions are: (a) design — where the experimental design, including a matched control group, is in general the most appropriate; (b) size of the group — where the number of people involved in the study limits the possibility of finding significant correlations. Table 2 shows (to the extent that the requisite information is available) (a) how many studies have one type of design and how many the other, (b) how many of each type involve groups of up to 100 persons and how many involve groups of over 100, and (c) how many of each of the different types indicate a positive correlation between relocation and an increase in mortality.

<table>
<thead>
<tr>
<th>Size of group</th>
<th>Design Baseline</th>
<th>Experimental</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 of 5</td>
<td>1 of 5</td>
<td>2 of 10</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td>(20%)</td>
<td>(20%)</td>
</tr>
<tr>
<td>101-</td>
<td>3 of 10</td>
<td>4 of 8</td>
<td>7 of 18</td>
</tr>
<tr>
<td></td>
<td>(30%)</td>
<td>(50%)</td>
<td>(39%)</td>
</tr>
<tr>
<td>Total</td>
<td>4 of 15</td>
<td>5 of 13</td>
<td>9 of 28</td>
</tr>
<tr>
<td></td>
<td>(27%)</td>
<td>(38%)</td>
<td>(32%)</td>
</tr>
</tbody>
</table>

Table 2

Proportion of the Studies That Have Indicated a Positive Correlation between Relocation and Increased Mortality, Divided According to Design and to Size of Group Investigated
Thus when it comes to the studies that support the hypothesis of a positive correlation between relocation and increased mortality, there is a greater proportion of those involving over 100 persons than of those involving up to 100. Furthermore it can be seen that the hypothesis gets a larger percentage of support from the studies that have an experimental design than from those that have a baseline design. Only eight of the 28 studies both have an experimental design and involve a group of over 100 persons — and half of them show an increase in mortality.

We do not agree with Borup et al. that relocation has no influence on mortality. As Rowland (1977) points out, there are two studies that stand out as having the best experimental design: Aldrich & Mendkoff, (1963) and Killian (1970). Both studies give support to the hypothesis that relocation to another institution leads to an increase in mortality (Rowland, 1977, p. 363). If there are studies of very high quality which do support it, this is enough to demonstrate that Borup et al. are wrong, regardless of what percentage of studies support or do not support the hypothesis.

Relocation from Home to Institution

Table 3 offers a summary of the studies that concern the relationship between mortality and relocation to an institution, senior housing or the like — though, as before, it is a question just of studies that have either an experimental or a baseline design.

None of the studies in Table 3 indicates a positive correlation between relocation and increased mortality.

Several studies with a design other than baseline or experimental show a high mortality after relocation to an institution. Ferrari (1963) compares mortality in two groups that moved to an institution, one voluntary and the other not; 16 of 17 in the latter group died within ten weeks. Schulz & Aderman (1973) present results showing a higher mortality in a group that moved to an institution from their homes, than in a group that came from another institution. Kral, Grad, & Berenson (1968) followed 54 elderly people — 24 men and 30 women — who moved to an institution. Four of the men died during the first six months, and ten had died within 23 months. These studies,
which do not compare mortality before and after the move or use a control group of nonmovers, cannot be treated as equal in value to the other studies (those in Table 3), without the methodological drawbacks being considered.

Table 3

<table>
<thead>
<tr>
<th>Study</th>
<th>Type of relocation</th>
<th>Size of group</th>
<th>Design</th>
<th>Increased mortality?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lieberman (1961)</td>
<td>To inst.</td>
<td>782 Baseline</td>
<td>No(^a))</td>
<td></td>
</tr>
<tr>
<td>Costello &amp; Tanaka (1961)</td>
<td>To inst.</td>
<td>454 Baseline</td>
<td>No(^a))</td>
<td></td>
</tr>
<tr>
<td>Carp (1974)</td>
<td>Senior housing</td>
<td>204 Experimental</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Lawton &amp; Yaffe (1970)</td>
<td>Senior housing</td>
<td>129 Experimental</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Wittels &amp; Botwinick (1974)</td>
<td>Senior housing</td>
<td>462 Experimental</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Kasl et al. (1980)</td>
<td>Senior housing</td>
<td>225 Experimental</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Both Lieberman and Costello & Tanaka measured the mortality in a group which moved to an institution. They compared the mortality before and after the relocation. In both cases mortality was considerable higher after the move, and several authors have taken the two studies as supporting the hypothesis that relocation leads to an increase in mortality (Bourestom, 1984; Blenker, 1967; Lawton & Yaffe, 1970). But different lengths of time were being compared — the period of waiting was appreciable shorter. If the same lengths of time are compared, the results do not support the hypothesis.

For example Kasl, Ostfeld, Brody, Shell, & Price (1980) illustrate that mortality can be too crude an indicator of the effects of relocation. The study shows no significantly higher mortality among those that have moved. But the move did have a negative effect on health (measured by a number of indicators, e.g., self-rating on health status, nursing home admissions, hospitalizations and doctor's visits).

In the category home to institution we also find a Swedish study (Toyama, 1988) of 14 households that moved into warden-assisted flats. For some of the elderly the move had very negative health consequences.
Relocation within the Community

Surprisingly few studies are to be found in this category, and none of them take up the effects in terms of mortality. There are two studies reported before 1980 that are concerned with the effects of relocation on health: Kasteler, Gray & Carruth (1968) and Schooler (1976). Their results support the hypothesis that there is an increase in morbidity in the group relocated.

During the 1980s three American investigations of this type of relocation have been reported. Their results are to some extent in conflict with one another. Ferraro (1982) studied the effects of relocation on both functions and health, measured by four indicators: disability, ADL-functions, number of days spent ill in bed, and number of days spent ill in a hospital or other medical institution. The main conclusion from Ferraro’s study is that all four variables are strongly correlated with relocation. Eckert & Haug (1984) followed a group of the elderly who moved between various urban residential hotels. There was no change in the people’s own view of their health, but a deterioration with regard to ADL-functions. In mental health there was in fact an improvement. Also the results of an investigation by Dimond, McCance & King (1987a, 1987b) indicate relocation as having both positive and negative effects.

Recently quite a number of Swedish case-studies have been carried out, all of them in connection with relocation caused by urban renewal. In Danermark (1985) are presented a number of cases where relocation had negative consequences. Ekström & Kullberg (1987) report a survey involving interviews with 38 elderly people who were forced to move because of rebuilding. Some of the people experienced stress and anxiety at the prospect of moving and/or because of not being happy in their new accommodation. In the case of a few the stress was followed by a decline in health. Some of these people died just before or soon after the move. Similar findings are reported by Öresjö (1988) from a study of urban renewal in a neighbourhood unit Öresjo writes that “the physical and mental stress associated with rebuilding has led to a deterioration in the health and well-being of several of those affected” (p. 65).
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Direction for Future Research

It seems perfectly clear that the question as to whether or not there is a positive correlation between relocation and mortality/morbidity is not the fruitful one. What is fundamental, as Bour-estom and Pastalan (1981) put it, is the question “under what conditions and with what kinds of population are those negative or positive effects most likely to be observed” (p. 5).

The factors influencing the outcome of a relocation have in many studies been characterized as having to do with (a) individual characteristics, (b) the environmental change, and (c) voluntariness. The first category includes variables like sex, age, and health. In the second category the change is operationalized in terms of moving from home to home, from home to institution and between institutions. The third category concerns whether or not relocation is voluntary.

Kasl (1972) concludes that several characteristics negatively influence the effects:

...being male, older, and in poor health; living alone and having few contacts with friends and kin; in poor financial circumstances and of lower social class; having lived in an old neighbourhood a long time; of low morale and life satisfaction; reacting to move with depression; giving-up; and hopelessness-helplessness. (p. 381)

But the very broad range of research that we have summarized provides little knowledge of the processes, of the often complex causal mechanisms, whereby relocation affects the health of the elderly. The research offers little in the way of a convincing explanation of how and why the characteristics mention by Kasl influence the consequences of moving. The main reason for this is that the research — like research within the field of social medicine in general — has almost exclusively been a question of quantitative studies and of analyses of statistical correlation, without roots in a developed theory (Diderichsen & Janlert, 1982). It is because of this bias that relocation has to a large extent come to be looked upon as a relatively unequivocal dependent variable. Few studies have gone with any depth into the various meanings that relocation has for the elderly (Redfoot, 1987).
Our survey of more than three decades of research in this field demonstrates with great clarity that there is very little new knowledge to be acquired from a continued atheoretical gathering of data with the aid of quantitative methods. If there is to be a development of knowledge concerning the complex causal mechanisms that lie behind the observed statistical relationships, what is needed is (a) studies grounded in theory, and (b) deeper process-oriented case-studies.

In the realm of psychology several theories and theoretical models have been developed that explicitly take up the question of the health and well-being of the elderly in relation to their environment and to changes in this environment — for instance Lawton’s adaption theory, Kahana’s person-environment congruence model and the cognitive stress theory of Lazarus and his colleagues at Berkeley (See, e.g., Lawton, 1977, Kahana, 1975 and Lazarus & Folkman, 1984). These theories/models have been developed in relation to, and have been used as points of departure for, empirical studies in various fields — though only by way of exception studies of the effect of relocation on the health of the elderly (McCracken, 1986). We find the cognitive stress theory especially valuable. It lays great emphasis on the processes whereby events and situations acquire meaning for, and are handled by, the individual. Central to it are such concepts as cognitive appraisal, coping and control. It has not only a psychological and physiological level, but also a sociological one — and even though the latter level occupies a subordinated position and remains undeveloped, this theory nevertheless has greater depth and explanatory power than Lawton’s theory and Kahana’s model. Both of the latter focus almost exclusively on the psychological level, proceeding from traditional stimulus-response models to putting the individual’s adaption at the centre.

There is a particular lack of sociological contributions to the development of theory in this field. In the rest of this article we introduce two concepts which we think are important in such development: The meaning of home and control.

The Meaning of Home for Older People

In our survey we found only one study that is systematically related to the extensive research that has been carried out
regarding the meaning of home, despite the fact that there is good reason to believe that this has great explanatory value (Toyama, 1988). We contend that relocation has to a great extent a different meaning, and is to a great extent differently perceived, depending on the meaning and the importance of the original and the new home to the mover and on his or her life-situation.

Relatively few of the many studies of the meaning of home have focused on the circumstances of the elderly (Despres, 1989), but a number of researchers have pointed out that the home often has great importance for these people. Taking as our point of departure certain general categories of the meaning of home that are presented by Despres (1989), we now go on to summarize a few of the results of this research.

**Home as Permanence and Continuity**

A lot of elderly people have lived in one and the same place for many years, or if nothing else they have established their home for a long period. Thus the home and the surroundings are often very familiar indeed, involving deep roots and a host of memories. This is pointed out by Sixsmith (1986 and 1988) who on the basis of a survey writes as follows: "To illustrate, older people are likely to have lived in their present home for a long time and thus have many associated memories. They are surrounded by their possessions, which contribute to a feeling of familiarity" (Sixsmith, 1986, p. 338).

In an article based on a survey of 522 men and women in three towns in England, Saunders (1988) writes: "The importance of the home increases as people get older. Not surprisingly, perhaps, older people express stronger emotional attachment to their homes than younger people do, and they also appear more firmly committed to staying in them" (p. 10).

Attachment to home and reluctance to move are related by Saunders to "the longer period of residence built up by older people (i.e., they have had more opportunity to 'put down roots'), and in part to the greater proportion of time spent in the home as people get older" (p. 11). Saunders also says that older people regard the home as an embodiment of past memories.

Golant (1984) presents a survey of 400 elderly people living in Evanston, a small urban middle-class municipality just north
of Chicago. The results show that the majority of the old people were satisfied with, proud of, and had good memories about, their communities, neighborhoods, and dwellings, which is to say that they had very positive territorial experience. Golant gives seven types of explanation for this experience. Two of the explanations have to do with the fact that the elderly have often lived longer in the same dwelling and/or neighborhood than have the young. Golant says, firstly, that: "...older residents have had more time to adapt, adjust, or accommodate their needs and goals to their existing environments. ... they have developed stronger social and psychological attachments to their place of residence". (p. 211).

Secondly, he says that:

...longtime occupancy in one environment increases the probability of cumulated positive (territorial) memories. Thus, the greater environmental satisfaction expressed by older people is due, in part, to their ability to selectively recall and reconstruct a lifetime of favorable environmental experiences that reinforce their present positive feelings and beliefs about their territorial environment. (p. 212).

In a study of elderly persons in a rural northern Appalachian community in the USA Rowles (1983) identifies three dimensions of the ties that elderly people have to their environment: (a) "physical insideness", referring to the person's familiarity with the physical environment, (b) "social insideness", referring to the person's rootedness by way of the social network and the local community, and (c) "autobiographical insideness", referring to the sense of belonging to a place, deriving from a series of events, experiences and memories that over the years have become associated with the place. These dimensions are based more or less on the assumption that the elderly have lived a long time in one and the same place.

*Home as a Symbol — a Reflection of One's Ideas and Values*

Especially for elderly people the home also has a symbolic value and is of great importance with regard both to the creation
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and to the maintenance of personal identity (Golant, 1984; Sixsmith, 1988; and Howell, 1982). Howell thinks that in particular the way in which the elderly evaluate an environment, together with the way in which they react to change in the environment, is determined by their endeavour to defend their identity:

As the individual ages, moves successively through phases of the life-cycle, the perception of risk in the environment changes from that of physical hazard or challenges to mastery, to that of affirming or defending identity. The issue which adult individuals confront, in a highly mobile or rapidly changing physical environment, is how to maintain themselves in historical perspective. (Howell, 1982, p. 21)

Home as Security and Control and Home as a Place for Privacy and Independence

In the above-mentioned study Golant (1984) says that one reason why the residential environment has a special salience for the elderly is that it represents something predictable and controllable. This is important inasmuch as the elderly in other respects often live in greater insecurity and uncertainty than do the young, for instance because of the greater risk of poor health, loss if independence and so on.

Willocks, Peace & Kellaher (1987) and Sixsmith (1988) also identify control, security, privacy and independence as important dimensions of the meaning of home for older people.

Within the privacy of home, an older person can control, and often conceal, declining capacities in the management of daily living. / ... / The ability to continue to master the physical environment despite frailty confers power upon the individual, and this in turn can enhance personal capacity to interact beyond the locus of home. Moreover, such abilities will reinforce an older person's confidence to manage. (p. 7)

Home as a Centre of Activities and Home as Relationships

It is in generally the case that the time people spend at home increases with age, whereby correspondingly less time is spent in shops, on journeys, in parks, etc. (Andersson, 1988).
According to the so-called disengagement theory, originally formulated by Cumming & Henry (1961), old age involves a reduction of people’s interaction with the surrounding society. As they advance in years, people maintain fewer and fewer roles through which they participate in and influence society, becoming at the same time less active in the roles they do maintain. This development is taken as being matched by a corresponding reduction in society’s expectations. The theory is that the disengagement enables the individual to attain an equilibrium with society, and that this equilibrium represents the most satisfactory way of coming to terms with aging (Lehr & Rudinger, 1969).

The disengagement theory has been criticized for its assumption that reduced activity with age is bound up with well-being. The so-called activity theory stresses on the contrary that the elderly benefit from being able to maintain activities and social contacts. The reduction of roles, for instance through retirement or the death of a spouse, is regard as involuntary and negative (Olsen, Trampe & Hansen, 1976 and Teeland, 1979).

Common to these theories, though, is that they indicate that old age usually leads people to abandon the roles which previously have been the basis for social relations and participation in society. Teeland (1978) is of the opinion that the latter part of most people’s lives, at least in urban industrial societies, can be described as a chain of losses:

In the middle of their 60s the occupational role for the man, but increasingly for the woman too, is lost via retirement. After retirement and past the 70 years of age mark, the losses may come quickly. Someone from the category, brothers, sisters, and friends will be lost by sickness or death. More significantly, the retirement couple will be divided by the death of one of the spouses. (p 151)

These social losses could — at least to some extent — be replaced by new activities and new relationships, but the probability is that for many of the elderly it means that their own home becomes more important. Elm Willcocks, Peace and Kellaher (1987) report that “...home will represent, for many, the one remaining domain through which they can connect with the wide context” (p. 7).
It goes without saying that the elderly cannot be treated as a homogeneous group. Factors such as health, gender and socio-economic situation can be very important with regard to what importance the home has for various groups of old people. People's health and economic situation determine for instance what their possibilities are of maintaining activities outside the home that can make the role of the home less decisive. When it comes to the aspect of gender, there are for instance studies which indicate that elderly women spend more of their time at home than do elderly men, which can mean that women are more tied to the home and in this sense more vulnerable to environmental change (Walldén 1975).

By attending to the meaning of home for various groups of the elderly we can thus find explanations of the oft-observed statistical correlation between (on the one hand) such variables as sex, age and class belonging and (on the other) changes in health in connection with moving.

The Importance of Control

We contend that the concept of control is of fundamental importance when it comes to the relationship between relocation and the health of the elderly. Present-day research gives support to the idea that loss of control can cause stress and ill-health, and that variations in control are decisive with regard both to whether an event is perceived as stressful and to whether any stress that occurs leads to a deterioration in health (see e.g., Rodin, 1986).

In the research concerning the relationship between relocation and ill-health controllability has often been studied in terms of voluntary/involuntary relocation. Many scholars contend that the degree of voluntariness is decisive with regard to the effect of relocation on the health of the elderly (see e.g., Bourestom & Pastalan, 1981; Kasl et al., 1980; Rowland, 1977; Toyama, 1988).

While many of these studies can be criticized on methodological grounds and are not in total agreement, the weight of the evidence strongly suggests that voluntary versus involuntary participation is an important factor in relocation outcomes. Moreover, this appears to be the case
whether the relocation is within the community, from home to institution, or from one institution to another (Bourestom, 1984, p. 70).

The research offers examples of relocation being caused by circumstances that the persons affected have had little chance of influencing. In Kasteler (1968), Brand & Smith (1974), and a number of Swedish case-studies (Danermark, 1985; Ekström & Kullberg, 1987 and Öresjö, 1988) there are accounts of compulsory relocation because of urban renewal, and in all these cases there were negative effects. Aldrich & Mendkoff (1963), Killian (1970) and Marlow (1974, in Bourestom, 1984 and Coffman, 1981) show an increase in mortality when patients are forced to move from one institution to another (i.e., when the first one was shut down). Correspondingly, a number of studies show that if relocation is voluntary there is no increase in mortality (see e.g., Lawton & Yaffe, 1970; and, Wittels & Botwinick, 1974) or indeed any negative effect on health (see e.g., Storandt & Wittels, 1975; and Lawton & Cohen, 1974).

In certain studies there is a comparison of persons who moved voluntarily and persons who had no choice. Smith and Brand (1975) compare two groups that moved to an institution, one of them voluntarily from home and the other involuntarily from other institutions. The proportion of the first group that evinced better life-satisfaction after the move was significantly greater than the proportion of the second group that did so. However, it is uncertain to what extent this can be related to the degree of voluntariness. Ferrari (1963) compares two groups that moved from home to an institution — one group that did not regard themselves as having any alternative, and one group that did. During the first ten weeks after the move 16 of the 17 (94%) in the first group died, but only one of the 38 (2.6%) in the second group. But one major defect of this study is that there is no information regarding the people’s state of health.

Schulz & Brenner (1977) are among the few that have related the large number of empirical studies of the relationship between relocation and mortality/morbidity to a theoretical framework. They take it that controllability and predictability are two important mediators of individual response to stressful
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From the theoretical perspective they formulate the following hypotheses: (a) "The greater the choice the individual has, the less negative the effects of relocation. Thus, voluntary relocatees should fare better than involuntary relocatees" (p. 324); and (b) "The more predictable a new environment is, the less negative the effects of relocation" (p. 324).

Schulz and Brenner's survey of research gives support to these hypotheses. At the same time they stress that none of the studies in their survey was specially designed to test the theory of controllability and predictability. Some researchers argue that the notion of predictability is closely tied with the concept of control (See, e.g., Rodin, 1986).

Even though there seems to be general agreement that the concept of control is a fruitful point of departure in the study of the effect of relocation on the health of the elderly, the theoretical model is still underdeveloped. The researchers, including Schulz and Brenner, tend for the most part to treat control as a dichotomous variable — voluntary versus involuntary relocation — and the concept has not been related to other important variables. The degree of control that can be exercised by the individuals over a change in their environment depends on quite a number of factors: the reasons for the move, who took the initiative, who makes the final decision, coping strategy, etc.

The concept of control has been developed to become a central concept in the field of psychologically-oriented stress research, and also a central concept in the accompanying formation of theory (Rodin, 1986, Wills, 1985 and Lazarus & Folkman, 1984). Control is, in this case, principally a matter of the way in which individuals cope with a stress situation that has already arisen.

Further development of theory should add a sociological perspective to the achievements in the field of psychology. In the first place it is essential to focus on the prerequisites for, and the importance of, collective action. In the second place it is essential that the possibilities of such action are looked upon as decisive with regard to what the people's environment is actually like and the shape in which various events appear (including whether or not they give rise to stress). In the third place it is essential that the degree of control be related to people's social
and economic situation. Several researchers indicate, for instance, that there is a strong correlation between control and social support (Syme, 1986, Wills, 1985 and Krause, 1987). In an effort to take research concerning the relationship between social support and health one stage further, Syme (1986) argues that social support — at least in certain connections — should be regarded as one component of a more general concept, control over one's destiny. Syme is of the opinion that this concept can also be used to explain the well-documented circumstance that people in the lowest socio-economic groups often have the highest rates of morbidity and mortality. Finally, it must be taken into consideration that people's control is structurally determined. Both people's conception of their own power of control, and also their actual possibilities of taking action by which to obtain and maintain control of a situation, are closely related to the prevailing power relations in society.

Conclusions

The review indicates that American research is very dominant in this field. Particular attention has been accorded to relocation to, between, and within institutions. Mortality is the commonest dependent variable, but various measures of physical and mental health have also been used. The results of this relatively comprehensive empirical research, which was begun in the mid-40s, are far from unequivocal: there is disagreement as to what conclusions can be drawn.

In the present state of research there are not sufficient grounds for the drawing of general conclusions. On the other hand there is good reason for assuming that relocation under certain circumstances and for certain groups does lead to ill-health and to an increase in mortality. The relationship between relocation on the one hand, and ill-health and mortality on the other, is very complicated. The research indicates a series of factors that are assumed to be of great significance, but there is a lack of studies devoted to systematic investigation of the influence of such factors. Various designs and methods (including measuring instruments) have been used, and this reduces comparability. Furthermore many studies are deficient in both design and method. There is also a lack of theoretically guided
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empirical investigations. The aim in many studies seems to have been restricted to finding statistical correlation between relocation and mortality/morbidity.

Despite the great importance of home for the elderly, few studies have focused on it. Previous research indicates that relocation has a different meaning and is differently perceived, depending on the meaning and importance of the original and the new home to the mover and on his or her life-situation. In order to develop theories and research in this field, research on relocation among the elderly needs to include recognition of the importance of the meaning of home for the elderly.

We also argue that the concept of control is fundamental in this field of research. Control over the environment and over processes like relocation is of great importance. Traditionally, control has been introduced in the research by studying voluntary and involuntary moves. However, the concept has to be elaborated to be a useful tool in the research. For instance, it is necessary to consider factors like the conditions for and importance of collective action, the social and economic situation of the elderly, and the opportunities for individuals and groups to control the environment and the process (whereby it needs to be remembered that such control is structurally determined). This implies the importance of relating the social and material conditions of the elderly to a structural level of analysis.

References


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