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Everyday Lives of the Elderly: A Dimensional Analysis

Cover Page Footnote

We wish to thank Robert Maiden and Karen Porter for their helpful comments on earlier drafts of the article.

Everyday Lives of the Elderly: A Dimensional Analysis*

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ABSTRACT

Considerable dissension surrounds the number and composition of the domains comprising the daily lives of the elderly. The present study employs an array of biological, economic, political, social, and psychological data obtained from a house-to-house survey of elderly citizens to derive a mapping of dimensionality. Factor analysis of the data isolated eight domains: Poor Health, Disengagement, Self-Sufficiency, Female Aging, Meaningful Employment, Political Faith, Self-Starting, and Stoicism. External validation supported the factor solution and highlighted the impact of dietary and economic deficits on the problems of the aged.

Considerable discussion in gerontological circles has concerned the dimensions of mature citizens' lives. In the present study, this issue is addressed inductively and quantitatively by a factor analysis of an array of biological, economic, political, social, and psychological variables. The core domains of elderly citizens' daily existence and the constitutive facets of these domains are delineated.

* We wish to thank Robert Maiden and Karen Porter for their helpful comments on earlier drafts of the article.

The study follows what Rose (1989:xi) has called an “underall” orientation toward public policy. Issues concerning the elderly are examined from the viewpoint of common citizens, not from *a priori* assumptions or mathematical models. From our findings, theorists and practitioners may focus more efficiently on the key domains of daily life and extract the specific questions that must be asked in order to measure these dimensions and formulate appropriate policies.

Dimensional Debate

The study focuses on the central features of the everyday lives of the elderly. These features might be regarded as “life domains” or “dimensions of daily living,” i.e., the key factors that structure one’s everyday behavior and orientation toward the larger world. The analysis aims to empirically identify a set of salient dimensions that comprise the “life spaces” of the elderly.

A review of previous theory and research on the dimensions of the elderly’s daily lives suggests a number of factors that may be central. A collection of essays published three decades ago, *Handbook of Social Gerontology* (Tibbitts, 1960), included such domains as health, income security, status/role, work-life patterns, retirement, leisure activities, family, and religion. In the subsequent literature, one finds similar modal dimensions: health, orientations toward others, social life, participation in organizations, economic/social resources, leisure activities, personal care, life satisfaction, self-esteem, psychological orientations, religion, basic needs, politics, and relationship to organizations providing services (Hoffman, 1970; Fisseni, 1976; Byerts et al., 1978; Hendricks and Hendricks, 1979; George and Dearon, 1980; Berghorn et al., 1981; Altergott, 1988).

These domains have been considered important for many reasons. Lawton and colleagues (1982) stressed the interactions between individuals’ behavior and the environment, which is composed of a number of external “life domain” factors like those noted above. A similar collection of essays (Hareven and Adams, 1982) emphasized that the life course of an individual—and changes therein—is part of a complex process of interactions among several dimensions of daily life, which have been listed in the literature.

However, our understanding of the dimensions comprising the daily lives of the elderly is limited, incomplete, and insufficiently verified by empirical analysis. To that extent, appropriate policy formation becomes

problematic. As Borgatta and Montgomery (1987:25) note, "Resources are directed toward the creation of programs to ensure the well-being of the elderly . . . but minimal basic developmental work has been done on the conceptualization and measurement of well-being." A number of domains appear to constitute the key components of elderly well-being (Wan, 1985), including economic status (Usui et al., 1985), involvement in institutions such as the church (Koenig et al., 1988), place of residence (Liang and Warfel, 1983), and a variety of objective life conditions (Okun and Stock, 1987). The comparative importance of these facets of existence, however, is unclear.

Thus, a number of specific questions arise. Exactly how many essential dimensions of elderly life are there? From the listings above, can we isolate a more parsimonious set of dimensions? What are the key items of each dimension? Might some of the "dimensions" listed above, in fact, be sub-categorizes of other, broader dimensions? What interdisciplinary linkages (e.g., between biology and social life) can be found within dimensions, and between dimensions and other phenomena? While disciplinarity may have a place in academe, life is experienced quite interdisciplinarily. As the Committee on an Aging Society (1988:3) put it, "One must take into account concepts from and the knowledge bases of diverse fields." The present study aims at providing (1) a summary empirical account of these dimensions, (2) an external validation of the dimensions by means of correlations with other variables, and (3) some policy implications flowing therefrom.

Methodology

In the summer of 1987, a team of trained interviewers went into the field in Allegany County, New York, to survey residents 60 years of age and older in their homes. A proportionate stratified random sample was used to select towns in which interviews would be held. The towns were stratified on the basis of both population size and geographic location (northern versus southern half of the county) to ensure that respondents would be selected from these different strata in representative numbers.

Within each town thus selected, names of potential respondents were obtained from the Allegany County Office for the Aging. The names were derived from lists of residents who had (1) contacted the office concerning services, (2) used county programs for the elderly, or (3) otherwise come to the attention of the office. While this population was not a perfect one from

which to choose, the aggregated listings gave potential access to a large proportion (65 percent) of the county's elderly population. Further, the demographic breakdown of the respondents was similar to that derived from statistics in the 1980 census of the county. There were no evident biases. Thus, we were reasonably confident that the sample adequately represented the county's elderly population.

The interviewers made initial contact with the potential respondents by telephone or home visit. Up to four calls were made if necessary. When contact could not be made, the interviewer proceeded to the next name on the list. If the potential respondent had no telephone, the interviewer proceeded directly to the person's home and tried to make contact. The response rate for completed questionnaires was 72 percent, yielding a final sample size of 358.

The survey instrument was a modified form of the Older Americans' Status and Needs Assessment Questionnaire (Brukhardt and Lewis, 1975). Additional questions were then piggybacked onto this questionnaire. Among the addenda were standard measures of personality (e.g., locus of control, openness, extraversion, neuroticism) and political orientation and behavior (trust, interest, efficacy, participation). The instrument assessed the needs of individuals in a variety of areas. The additional items were included to tap the domains suggested above and provide a more interdisciplinary scope to the analysis. The final questionnaire (available on request) thus included a wide battery of metrics in order to more completely map out the everyday lives of the elderly.

Socioeconomic "background" characteristics (e.g., sex, income) were deliberately included in the set of variables to be dimensionalized. These variables, it was thought, constitute facets of daily life in their own right and are experienced as such. It seemed inappropriate to assume that these variables "explain" the various dimensions. They could therefore be examined more usefully as dimensions themselves or as constituent parts of dimensions. As a preliminary means of data-reduction, we constructed a number of summative scales for highly specific and related variables. For example, a Physical Problems Index was formed by adding responses to questions measuring deficits in eyesight, hearing, and other physical capacities.

Findings

We employed principal components analysis to estimate the exact number of dimensions. Out of the total array of variables that were entered into

the analysis, some 48 variables fell into eight comprehensible dimensions with eigenvalues greater than one. Varimax rotation was then employed to obtain uncorrelated factors appropriate for the exploratory nature of our research (Harman, 1976; Kim and Mueller, 1978b)¹

All of the factors had at least three variables, which suggests their stability and validity (see Table 1). The two highest loadings on any factor usually provide the clue to its interpretation. For the first and strongest factor, the two highest loadings fell on the summative scales which measured physical problems, i.e., physical infirmities (sight, hearing, etc.) and deficits in activities of daily living (dressing, bathing, etc.). Two other variables, namely days of restricted activity and tiring easily, also appear constitutive of a physical capacity dimension. This Factor 1 might be labeled "Poor Health." Associated with these physical capacity variables are those variables reflecting psychological health and relative satisfaction with life. Concerns about physical health not only seem to represent the major dimension of everyday life, they are also bound up with psychological states. Also associated with Factor 1 is a variable indicating inadequate social contacts. In short, overall satisfaction with daily life among the elderly seems largely dominated by health condition.

Factor 2 we call "Disengagement." We are aware that use of this concept reflects a theoretical position in poor repute among gerontologists. Here, however, it shows up as the second strongest factor. The variables reflect *nonparticipation* in political activities and social organizations, as well as a minimal stock of essential resources, such as low education and income. Note that the specifically social variables (e.g., club membership) do not necessarily reflect the actual amount of social contact, which was constitutive of the Poor Health factor. These variables tap objective organizational connectedness to the community, rather than social isolation or lack of "bi-lateral" contacts with other citizens. The fact that our measures for a narrow material resource base fall into this "withdrawal" factor is illuminating. It suggests that *organizational* disengagement is a function of socioeconomic structure (Schattschneider, 1960). Note, of course, that health variables do not load on this factor. The implication is that a low degree of group engagement derives more from one's position in the socioeconomic structure than from one's physical condition. Shyness loads on this factor as well. This "psychological withdrawal," in turn, may hinder the "pyramiding" of intellectual and economic resources available through involvement in educational and occupational institutions.

Factor 3 represents "Self-Sufficiency." Items loading most heavily on this dimension suggest individualism (questions from an index tapping

TABLE 1
DIMENSIONS OF LIFE AMONG THE ELDERLY

	1	2	3	4	5	6	7	8
Physical infirmities*	.691							
Deficits in activities of daily life*	.651							
Feeling useless	.632							
Non-enjoyment of life	.628							
Days of restricted activity	.538							
Hopelessness	.531							
Dissatisfaction with life in general	.489							
Problem with spare time	.471							
Inadequate social contacts	.429							
Sense of worthlessness	.429							
Tire easily	.414							
Low political involve- ment in community		.737						
Few contacts with bureaucracies		.651						
Low education level		.604						
Few political contributions		.590						
Low campaign involvement		.584						
Church non-attendance		.522						
Low political interest		.486						
No club memberships		.444						
Dislike of theory		.417						
No membership in elderly groups		.384						
Shyness		.370						
Low income		.313						
Not feeling tense			.626					
Not pushed around			.601					
Can change things			.527					
Poor blame the system			.453					
Poor can advance			.442					

(continued on next page)

TABLE 1 (continued)

	1	2	3	4	5	6	7	8
Good memory			.422					
Not lonely			.383					
Unmarried				.773				
Female				.761				
No home-ownership				.524				
Age				.395				
Lack of job opportunities					.704			
Age discrimination problem					.589			
Emptiness of life					.429			
Dissatisfaction with programs					.421			
Government not too complicated						.607		
Trust in government						.588		
Government pays attention						.403		
Satisfaction with retirement							.636	
Need to keep busy							.466	
Registered to vote							.400	
Even-tempered								.603
Can resist cravings								.569
Not excited easily								.545
Non-imaginative								.374
Eigenvalue	7.66	2.87	2.48	2.11	1.81	1.67	1.62	1.49
Percent of variance	16.0	6.0	5.2	4.4	3.8	3.5	3.4	3.1
Overall factorial determination:	45.2							
N of cases =	200							

Note: Factor 1 = Poor Health; 2 = Disengagement; 3 = Self-Sufficiency; 4 = Female Aging; 5 = Meaningful Employment; 6 = Political Faith; 7 = Self-Starting; and 8 = Stoicism. All variables are derived from single questions except for three summative scales indicated by asterisks in the table: Physical infirmities (index of sight, hearing, missing limbs, obesity, palsy, speech, and mobility); Activity deficits (index of dressing, bathing, cutting toenails, reading, preparing meals, going outside for walks, climbing stairs, cleaning house, shopping, driving, using toilet, and standing from a sitting position); and Dissatisfaction with programs (index of 21 variables indicating dissatisfaction with government programs for the elderly, including cooking and delivery of meals, visitations, personal and home care, legal services, medical transportation, tax advice, discount privileges, social clubs, information and referral services, recreation, housing aid, emergency service, and home energy assistance).

individualistic orientations; see Feldman, 1982), sense of personal mastery over the environment (questions from an abridged version of Rotter's locus of control instrument), and lack of feelings of loneliness or tenseness. The tenseness or "stress" variable, which has been found to be related to several maladies of everyday life (Goldberger and Breznitz, 1982), seems to be intimately connected with one's sense of personal control. Moreover, the location of the memory-ability variable in this factor suggests its importance for one's sense of control over everyday life.

Factor 4 might be labeled "Female Aging." Its four items include being unmarried and female, not owning a home, and age. Females tend to live longer and, thus, outliving their husbands, tend to be unmarried. Given the likelihood of declining economic resources as females age and the lower availability of potential spouses, the lower rate of home-ownership in this factor is unsurprising. Note that chronological age falls precisely in this factor. Age, of course, is not completely unrelated to the other dimensions of everyday life. However, the data suggest that age per se represents a domain of elderly citizens' lives in its own right.

Factor 5 can be called the "Meaningful Employment" dimension. It includes perceptions of job opportunities, discrimination because of age, emptiness of life, and dissatisfaction with programs designed for the elderly. This combination of variables suggests a lacuna in current policies for the aged, namely a shortfall in linking programs to people's needs. Future policies designed to combat ageism in employment may need to address this concern. Ideally, these policies would reduce the sense of existential meaninglessness and enhance the feeling of life-fulfillment.

Factor 6 taps "Political Faith." Trust in government and political efficacy (the sense that one can have some political influence) load most heavily on this dimension. Note that the factor reflects only *beliefs*, in contrast to the Disengagement factor, which includes actual political *activities* (which, in turn, are intimately connected with education and income). This pattern suggests that the political mobilization of the elderly is less a function of faith in the political system and more a result of socioeconomic status.

Factor 7 we label "Self-Starting." Its items include happiness with retirement, desire to stay active, and (perhaps related to the desire to stay active) being registered to vote. Although some of the elderly may be dissatisfied with retirement because of occupational ageism, presumably those with self-starting dispositions can compensate with personally initiated activities.

Factor 8 suggests a purely psychological dimension of "Stoicism." Respondents scoring high on this domain assessed themselves as individuals

who are even-tempered, have a high degree of self-control, do not get too excited, and display a weak imagination. This factor may reflect a psychological compensatory mechanism to deal with the manifold difficulties of the biological aging process. It also may reflect the calmness and control acquired by some citizens from their long experience in handling the problems of life.

Noteworthy is the fact that most of the factors are at least bi-disciplinary and the most important ones are clearly multidisciplinary. Only Factors 6 and 8 might be described as discipline-defined. These findings demonstrate the utility of a multidisciplinary approach to the problems of the elderly. They underscore the need for a comprehensive orientation to conducting research, training gerontologists, formulating policies, and implementing programs.

Factor Validation

Factorial dimensions, however, should not be accepted blindly. If possible, they should be subjected to empirical validation. Given the breadth of the survey instrument, we were able to select a number of variables which failed to fall into the simple factor structure, but which could be used to substantiate the dimensional solution. Those variables were chosen which were expected to be significantly related to the factors, assuming that the dimensionality which was found empirically was valid. Space disallows a full listing of our expectations, all of which were relatively straightforward (e.g., the Poor Health factor should be correlated with poor diet). The correlations between these variables and the factors can also provide a check on our substantive interpretations of the dimensions.

Given the problems of potential error associated with computing factor scores for each case, a conservative strategy of constructing simple summative scales from the standardized scores on each variable was taken (see Kim and Mueller, 1978a, 1978b; McIver and Carmines, 1981). These factor-based scales were then correlated with the external variables. The Pearsonian coefficients which proved statistically significant are reported in Table 2.

The Poor Health factor, as expected, is associated with economic problems and poor diet, presumably its structural and biological causes. It is also connected with self-consciousness and a feeling of helplessness, presumably its psychological effects.

The Disengagement factor is related to dislike of people, having few friends nearby, and psychological withdrawal. It is strongly connected with

TABLE 2
Correlations of Factor-based Scales with External Variables

	PoHe	Dise	S-Su	FeAg	MeEm	PoFa	S-St	Stoi
Poor diet	.24***	—	-.16*	—	.14*	—	-.18**	—
Economic problems	.18**	.30***	-.25***	—	—	—	—	—
Unable to cope	.43***	.22**	-.23***	—	.14*	—	—	—
Feeling helpless	.29***	.24***	-.25***	—	—	-.14*	-.28***	—
Little control over life	.23***	.21***	-.38***	—	—	-.12*	—	—
Dislike of people	.22***	.23***	—	—	.12*	-.13*	.12*	—
Few friends nearby	.20**	.18**	—	—	.12*	—	—	—
No participation in support group	—	—	—	—	-.24***	—	—	—
Self-conscious	.13*	.15*	—	.14*	—	—	—	-.15*
Not assertive	—	.19**	-.16*	—	—	—	—	.26***
No need of emotions	—	.16*	.16**	—	—	—	—	.16*

Note: PoHe = Poor Health; Dise = Disengagement; S-Su = Self-Sufficiency; FeAg = Female Aging; MeEm = Meaningful Employment; PoFa = Political Faith; S-St = Self-Starting; Stoi = Stoicism. Single asterisks indicate one-tailed significance levels of .05; double, .01; and triple, .001.

economic problems, suggesting that social and political withdrawal has an economic basis, as was surmised above. The disengaged also feel an inability to cope with their problems. Unfortunately, they are somewhat less likely to participate in community support groups to enhance their coping ability.

Self-Sufficiency is related to better diet, few economic problems, a sense of control over one's life, and assertiveness. But this rugged individualism may have a psychological price tag; it is correlated with the belief that the emotions are not needed.

The Female Aging factor is correlated with self-consciousness. Elderly females, lacking age-mates and their own homes, appear to feel an acute sense of social marginality.

Meaningful Employment is related to nutrition (poor diet) and social relationships (few friends). However, those perceiving a lack of meaningful

employment are more likely to participate in community support groups. It is encouraging to note that such groups are indeed attracting those with retirement problems. Yet the items in this factor (perception of few opportunities and occupational ageism, and a dissatisfaction with government programs) suggest that these groups provide only limited coping resources. Indeed, lack of meaningful employment is associated with inability to cope.

Political Faith is associated to some degree with psychological sociability and personal efficacy (feelings of not being helpless and being able to control one's life). Political efficacy seems closely related to personal efficacy in daily life.

Self-Starters have better diets and feel they can help themselves. Their stronger dislike of people may reflect a greater reliance on personal than social resources.

Stoics are less self-conscious but also less assertive. This indicates effective emotional control on the one hand, but social caution on the other. Expectedly, these "cool elderly" feel little need for emotionality. In sum, the external validation seems to provide support for the factor solution.

Conclusion

We discovered eight distinct dimensions that make up elderly daily lives. Our findings tend to confirm and also extend the theoretical considerations of other gerontologists. Previous literature has accepted *a priori* the existence of several factors that help to define the life spaces of older citizens. However, these have been pronounced *ex cathedra*. In this article, the domains that constitute the daily lives of the elderly have been determined according to statistical analysis of data provided by the elderly themselves.

Some broad implications for policy formation follow from the factor analysis and external validation. Specifically, the findings may assist in assessing needs, configuring institutions, and gearing legislation and services to the neediest groups.

First, policymakers must know their constituents' needs. Information costs are high, however, and the needs, especially for the elderly, are many. The eight factors of our analysis, however, summarize a wide variety of needs and constitute a shorthand way to isolate the key concerns of the elderly. In addition, by knowing the scores of constituents on the two items with the highest loadings in each factor, a policymaker can estimate their rankings on other items in the dimension. Take, for example, the Poor

Health factor. By knowing the degree to which elderly citizens suffer physical infirmities and deficits in activities, a policymaker also has some knowledge of their sense of hopelessness and uselessness. The costs of needs assessment might therefore be correspondingly reduced.

Further, the external correlates of the factors provide additional useful information about needs. For example, the fact that certain elderly citizens have physical infirmities strongly suggests as well that they have economic problems, poor diet, and an inability to cope. These correlates imply that income supplements, meals-on-wheels, and similar services may be needed to help alleviate physical infirmities and other aspects of "poor health."

Second, the analysis suggests the desirability of a multidisciplinary configuration for public and private institutions. For example, the items in the Poor Health factor embrace three kinds of inadequacies: physical (such as activity deficits), psychological (feeling worthless), and interpersonal (few social contacts). The pattern hints that elderly citizens who score high on this factor are in need of services from a multidisciplinary "health team" of experts in medicine, psychology, and sociology. Otherwise, only some aspects of the poor health of these citizens will be treated. Likewise, the items of the Disengagement factor suggest that some of the aged suffer simultaneous deficits in politics (few contacts with bureaucracies), enlightenment (low education), and social life (few group memberships). The appropriate "engagement team," then, might include volunteers to enhance political participation (League of Women Voters), education (teachers), and social involvement (entertainers). In short, a "bits-and-pieces" approach to the problems of the elderly might usefully give way to a more holistic one, whose elements might well have a synergistic impact.

Third, the findings have implications for crafting legislation and gearing programs for the appropriate groups. The Female Aging factor, for instance, suggests that lack of home ownership is a particular problem for elderly women. Women's organizations, then, might be useful allies in pushing for housing legislation, which should have special provisions for elderly females. The Meaningful Employment factor indicates that mere creation of job possibilities for the elderly is not enough; anti-ageism legislation may be necessary to prevent discrimination. The Self-Sufficiency and Self-Starting factors suggest that some of the elderly have little trouble in fulfilling their needs, including accessing government programs. Those with greater dependency and less initiative, however, are less likely to take advantage of available services, especially if they suffer from physical problems (Peterson, 1987, 1988, 1990; Peterson and Somit, 1990). These citizens, therefore, should be targeted for aggressive outreach programs.

Note

1. Principal components analysis is used to isolate the number of key dimensions underlying a large set of variables. These principal dimensions or "components" might be viewed as the "magnetic poles" toward which indicators having common variance are attracted. The variables falling outside of the eight components constituted far weaker and uninterpretable dimensions. Theoretically, the decision to truncate the number of dimensions at eight was dictated, on the one hand, by the multifaceted nature of everyday life, and, on the other, by the desire for a data-reductive solution. Methodologically, while parsimony is a value, one is advised to err on the side of too many factors. Empirically, the scree plot revealed an elbow over nine dimensions, suggesting that the ninth and subsequent components were random noise (Kim and Mueller, 1978a; Gorsuch, 1983). The remaining variables thus appeared to represent less important or weaker, subsidiary surrogates for the items in the strong dimensions.

For the factor analysis, the conventional criterion of .3 for loadings was used to determine whether a variable should be included in the solution. Only 18 variables had a factorial complexity greater than one. Each of these had a complexity of only two. For each of these variables the highest loading, on its primary factor, made substantive sense. The additional loadings on secondary factors were theoretically uninterpretable or contradictory. None were larger than .41. Such chance loadings are not uncommon in factor analysis (Gorsuch, 1983). Thus, the extraneous loadings were omitted from the simple structure displayed in Table 1.

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