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AUTHOR Cutler, Neal E.
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ABSTRACT

While a number of studies have documented a variety of attitudinal correlates of the subjective dimension of age, some writers have suggested that, especially at the older end of the life cycle, subjective age is but a surrogate for measures of disadvantaged social status. Specifically, this alternative view is that only the poor or retired or widowed or lower social class individuals are likely to identify themselves (and, hence, their problems) in terms of age. This paper, directly tests the proposition that variation in subjective identification is mainly a statistical function of measures of socioeconomic factors. The study is based on the 725 respondents over the age of 50 sampled in a national survey of the American adult population taken in 1972; the study included measures of subjective age identification, as well as a number of social and economic indicators. The results indicated that subjective age is substantially related to chronological age, but that within groupings of chronological age (50-64, 64-75, 75+), the following factors do not measurably influence variations in subjective age: income, education, occupational status, subjective social class, sex, widowhood, retirement. A multiple regression analysis including all of these variables plus chronological age combined to explain only 8.6% of the variance in subjective age identification among the over-50 respondents. It is therefore concluded that subjective age is not simply a reflection of socioeconomic variables. (Author)

SOCIOECONOMIC PREDICTORS OF SUBJECTIVE AGE

Neal E. Cutler

University of Southern California*

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*Associate Professor, Department of Political Science, and Laboratory Chief, Social Policy Laboratory, Andrus Gerontology Center.

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Socioeconomic Predictors of Subjective Age

Neal E. Cutler
University of Southern California

I. CONTEXT AND CENTRAL HYPOTHESIS

This paper seeks to address an analytic issue of substantial importance to social gerontology -- the issue of whether "subjective age identification" among older persons exists as an independent dimension of their orientation toward self and society, or whether such identification is simply an artifact of the older individual's social location. This analysis is part of a larger issue in social gerontology, that concerning non-chronological definitions and conceptualizations of aging.

One of the most interesting non-chronological conceptualizations of aging is that of subjective age identification -- the degree to which a chronologically older person communicates to himself and to his environment that he is old, the degree to which he identifies as part of an aggregate known as (but not always precisely defined) "old people." "It is how a person feels in regard to age, his self-orientation within the limits set by his own social situation and experience, and the limits of his physiological condition" (Peters, 1971). While there are, of course, biological and physiological changes which occur with age, it is also clear that social factors play a large role in precipitating an individual's subjective feelings of age. As has been noted with respect to critiques of disengagement theory, it may be society disengaging from the older person, rather than the opposite, that accounts for observed patterns of old-age social behaviors (Atchley, 1972; Bengtson, 1973).

Much of the prior research on subjective age identification has focused upon old age as a pathological condition. That is, researchers concerned with the successful adjustment of old people to their age have found that the acceptance or denial of old age is a general indicator of the individual's mental health. Thus one review in this area notes that older persons who maintain a subjectively younger self image tend to be better adjusted, have higher morale, react more favorably to role changes, and are better able to withstand stress (Peters, 1971).

A more recently emerging genre of studies concerning subjective age, however, focuses upon age identification or age consciousness as a possible organizing framework for social and political action among older persons. Riley (1971) suggests that age consciousness parallels class consciousness in the sense that while every person possesses attributes which are indicators of social class, every person is not subjectively aware of his class, and those persons who are subjectively aware of their class position do not necessarily consider this as a salient dimension of their social and political orientations. The same, Riley says, may be said for age and subjective feelings of age identification. While objectively everyone has an age, not all persons are age conscious, and even among those who are, not all find the age dimension a salient basis for individual or collective behavior.

Following this line of analysis, a growing number of studies is concerned with the role that age identification may play in social and political activities among the aged. One line of research has examined social and political attitudes as correlates and consequences of subjective identification (Cutler, 1974; Cutler, 1975; Cutler and Bengtson, 1975). A second line of research has investigated the involvement of the older person in a network of organizational relationships. This research has found that such

organizational involvements tend to increase age identification while at the same time serving as focal points for an emerging politics of old age (Trela, 1971; Trela, 1973; Pratt, 1974; Pratt, 1976; Dowd and Cutler, 1975). As Riley (1971) noted, for both subjective social class identification and subjective age identification, certain historical conditions will emerge in which people will become aware of their age (or class) and will act on the basis of such identifications -- as the cited studies are beginning to demonstrate.

While, in the review cited earlier Peters (1971) found subjective age identification to be substantially associated with indicators of psychosocial well-being, the two factors found most often to be correlated with subjective age were social structural in nature -- social class and sex. Thus the analyst is faced with the question of whether or not subjective age identification really exists as "its own" phenomenon, or whether it is simply a reflexive outgrowth of the milieu engendered by identifiable social class and social experience configurations. Indeed, some analysis in the political context has argued that subjective age identification is but a reflection of social class, or other indicators of "disadvantaged status;" that is, it is only the disadvantaged elderly who are likely to identify themselves as old since the more affluent elderly are in a better position to maintain their previous life-cycle identifications (Binstock, 1972).

The suggestion that subjective age identification might largely be an outgrowth of sex differences is supported by the observation that females may be more likely to hold old-age subjective identifications since "women are judged as old on the basis of chronological age while men are judged in more functional terms" such as occupation or labor force participation (Atchley and George, 1973). Such sex differences in age identification are

magnified since widowhood, an experience which affects considerably more older females than males, is known to be correlated with old age identification (Riley and Foner, 1968).

Thus we come to the central hypothesis of the present study. Subjective age identification is a key concept in social gerontology, as it represents a major mode of non-chronological conceptualization of age -- and has been seen to be substantially related to both individual-level and societal level behavioral orientations. But is subjective age, as some have suggested, simply an outgrowth of social position? Are feelings of subjective age distributed relatively evenly throughout the older population, or is subjective age disproportionately concentrated among females, those with low education, income, and social status, and persons who are widowed and retired?

This paper, consequently, will systematically consider the effects of a set of indicators representing the above questions upon subjective age identification. The central hypothesis to be tested, therefore, is the hypothesis that differences in subjective age identification are accounted for by the indicators of social position. That is, *it is hypothesized that subjective age identification is primarily a simple reflection of other variables; i.e., is a dependent variable most of whose variance can be explained by indicators of social position.*

This hypothesis will be evaluated employing data from a recent nationally representative sample of the adult American population, and will include bivariate and multivariate tests. The following section, consequently, briefly overviews the nature of the data base, the operationalization of the subjective age identification variable, and the nature of the analytic tests to be employed.

II. DATA BASE, VARIABLES, AND MODES OF ANALYSIS

The present study is based on a national probability sample of the adult American population, undertaken in 1972, representing 2,705 personal interviews. The attitude survey was undertaken by the Center for Political Studies of the University of Michigan and is part of a long-term program of national attitude surveys, taken in conjunction with presidential and congressional elections -- a series of bi-annual national surveys which began in 1948.

Included in the 1972 survey was a series of dichtomous "closeness" items in which the respondent was asked "Do you feel close to _____?" -- yes or no.* In the interview, this question was asked for sixteen different groups, including, for example, farmers, whites, blacks, businessmen, and "young people" and "old people." At the end of the series of dichotomous items was a summary question which asked for the one group toward which the respondent felt closest.

The operationalization of subjective age identification employed in the present research combines the pair of dichotomous items pertaining to age and the single summary question. That is, the subjectively old respondent is the one who said he did feel close to old but did not feel close to young, or who felt close to both old and young but felt closest to old.

It is important to note here that not every respondent in the national sample can be characterized as having a subjective age identification; for

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*The data were acquired through the Inter-university Consortium for Political Research. The items on age identification were designed by Professor Gerald Gurin, Department of Psychology, University of Michigan. Sincere gratitude is expressed to Professor Gurin for releasing the data on age identification for this research project even though his own research is not yet completed. The particular index of subjective age identification constructed from the available items, however, is the present writer's responsibility.

many of the respondents age was just not a salient part of their social psychological composition. In fact, 38.2% of the total sample felt close to neither old nor young. The focus of our analyses is upon a comparison of those who do not have any age identification with those who may be characterized as having a subjective old-age identification. These comparisons will be made within successive groups of individuals defined in terms of their chronological age. The data base for the present analysis is, initially, all respondents age 50 and over; preliminary analysis, however, demonstrated that more detailed chronological grouping is necessary. Thus we are asking if, within groupings of the chronologically old, there are identifiable differences between those individuals who possess a subjectively old-age identification and those individuals who do not identify with age at all. Excluded from this analysis are those chronologically older respondents who identified as young. Table 1 provides a descriptive profile of the analytic sample on which this paper is based.

Table 1: Derivation of Subjective Age Data Base

A. Total National Sample N = 2169[a]

B. Over Age 50 N = 805

	N	% Over 50	% Old vs. No Age Identification
C. Young Age Identification	80	9.9	--
D. Old Age Identification	304	37.8	41.9
E. No Age Identification	421	52.3	58.1

[a]531 respondents in the total national sample of 2705 did not participate in the sequence of subjective identification items included in the study.

The central hypothesis suggests that subjective age identification is a function of the respondent's social location. To test the hypothesis, the following are included as independent variables: sex, education, income, occupational status, owning versus renting one's home, subjective social class identification, labor force status, and widowhood status. The analytic results will be presented in three sections: (1) percentage distributions indicating the bivariate association between subjective age and each of the social indicators; (2) a diagrammatic or "tree-branching" analysis indicating the cumulative effects of alternative combinations of independent variables upon differences in subjective age identification; and (3) the results of stepwise multiple regression techniques to demonstrate the total amount of variation in subjective age identification explained by the whole set of independent variables.

III. BIVARIATE ASSOCIATIONS

Although the initial data base for the present study comprised all those over 50 years of age in the 1972 national sample of the American adult population, it is clear that the "older population" is not a homogeneous set of persons. Even when dealing with the over-50 (or the over-65) population, chronological age -- as an index of a range of biological, physiological, psychological, and social processes -- is still an important discriminator variable. To cite just one illustration: in recent writings Neugarten (1974) notes the emergence of the young-old as a bona fide life stage, defined as persons age 55-75, and characterized by relatively good health, affluence, education, and social involvement. The old-old, Neugarten argues, are those persons above age 75, and are those who more closely fit societal images of "old age."

We assume, therefore, that important chronological divisions exist within the older population, and further assume that subjective age identification is at least to some extent correlated with chronological age. Table 2, consequently, indicates the bivariate association of chronological and subjective age within the sample of respondents over 50 years of age..

Table 2: Subjective Age and Chronological Age

	Subjectively Old Identification	No Age Identification	(N)
50-64	31%	69	(406)
65-74	51%	49	(197)
75+	62%	38	(122)

Chi-square, $p < .001$; Gamma = .43; Pearson correlation (using ungrouped age) = .25.

Table 2 clearly demonstrates that expressions of a subjectively old age identification systematically increase with age even when attention is focused on the latter half of the life cycle. Clearly only a minority of those under age 65 identify as old. Conversely, the "old-old," or the "frail old" as those over 75 are sometimes called, substantially identify as old. And those between the traditional age of retirement and age 75 as a group are split virtually evenly between those who do identify as old and those who do not express an age identification at all.

Aside from the specifics of the association between chronological age and subjective age identification, two suggestions can be drawn from Table 2. First, the percentage distributions set the stage for the central hypothesis of this study: since not all persons in any of the chronological subgroups

identify as old, are the subjectively old simply a socioeconomically defined subset of each group or is -- for example -- the 51 percent of the 65-74 age group which does identify as old drawn from all social and economic strata of society? Second, it is clear that we must observe the interrelationship of socioeconomic indicators and subjective age identification within the separate chronological age groups. Since chronological age is correlated both with subjective age identification, and with such key independent variables as retirement, widowhood, income, education, and sex, it is clearly necessary to control for subjective age and investigate the various relationships separately for each of the three roughly-drawn chronological ages.

Table 3 presents the percentage distributions for the subjectively old and the non-subjectively old respondents distributed across eight indicators of social location -- and within each of the three chronological age groups noted above. In addition, for purposes of comparison, Table 3 presents the percentages for the total over-50 sample. It is clear from an examination of the columns representing the three separate age groups that little support is given for the hypothesis that subjective age identification is a direct function of social and economic position in society. With only a few exceptions there is little significant statistical association between subjective age and the independent variables. Similarly, few of the gamma correlation coefficients are above the .2 level.

Of course, it must be noted that for several of the independent variables the hypothesized relationship appears as a tendency in the data. Thus, for example, those categories representing poorer respondents, those with less education and lower occupational status, and those who are retired or widowed do tend to exhibit somewhat larger percentages of subjectively old identifiers. But it certainly cannot be concluded that a subjective old age identification derives solely from these indicators of social location.

Table 3: Subjective Age Identification and Indicators of Social Location

	50-64		64-75		75+		Total 50+	
	Subj Old	Non-Subj Old	Subj Old	Non-Subj Old	Subj Old	Non-Subj Old	Subj Old	Non-Subj Old
SEX								
male	29	71	51	49	46	54	37	63
female	33	67	51	49	69	31	45	55
(χ^2/gamma)	*ns/.12*		*ns/.00*		*.03/.45*		*.02/.18*	
EDUCATION								
< 8 years	39	61	58	42	71	29	54	46
8-11 years	29	71	50	50	58	42	38	62
12 years	24	76	47	53	*	*	29	71
Coll, incomplete	33	67	29	71	30	70	31	69
Coll, 4 years and above	26	74	42	58	*	*	33	67
(χ^2/gamma)	*ns/-.16*		*ns/-.25*		*.05/-.40*		*.01/-.30*	
OCCUPATIONAL STATUS								
Low	34	66	55	45	67	33	45	55
Medium	35	65	56	44	47	53	41	59
High	23	77	47	53	50	50	31	69
(χ^2/gamma)	*ns/-.17*		*ns/-.10*		*ns/-.26*		*.03/-.19*	
INCOME								
< $4000	43	57	57	43	64	36	54	46
$4000-7999	34	66	53	47	61	39	44	56
$8000-14,999	27	73	46	54	*	*	32	68
$15,000+	24	76	44	56	*	*	27	73
(χ^2/gamma)	*.04/-.22*		*ns/-.13*		*ns/-.11*		*.01/-.32*	
SUBJECTIVE SOCIAL CLASS								
Low/working	36	64	49	51	62	38	44	56
Lower Middle	25	75	55	45	60	40	39	61
Middle/Upper Middle	18	82	53	47	70	30	36	64
(χ^2/gamma)	*.02/-.30*		*ns/.10*		*ns/.02*		*ns/-.06*	

HOUSING								
Own	30	70	52	48	63	37	41	59
Rent	37	63	52	48	59	41	46	54
(χ^2/gamma)	*ns/.16*		*ns/.01*		*ns/-.10*		*ns/.11*	
WORK FORCE STATUS								
Retired	36	64	53	47	60	40	52	48
Working	31	69	49	51	65	35	38	62
(χ^2/gamma)	*ns/.12*		*ns/.08*		*ns/.11*		*.01/.27*	
WIDOWHOOD STATUS								
Widowed	30	70	55	45	70	30	54	46
Non-widowed	32	68	49	51	46	54	37	63
(χ^2/gamma)	*ns/.04*		*ns/.12*		*.02/.47*		*.01/.33*	

Table 3 also demonstrates that in those few instances where the social indicators do have a significant assbciation with subjective age, the role of the social variable is not constant across the chronological age groupings. Income level, for example, is important only for the 50-64 age group: in this group it is clearly the poorer respondents who tend to identify themselves in terms of old age. One might speculate on the basis of data such as these that a process of economic aging begins earlier in the life cycle for categories of economically disadvantaged persons (Walther, 1975). Indeed, the variety of governmental programs which treat "old age" as a category of economically-based need employ substantially different chronological definitions of "old age" as criteria for eligibility under the programs (Cain, 1974). The income variable is not significantly associated with subjective age identification in either of the remaining age groups.

As a second example, we see that among the "old-old" (75+), both sex and widowhood are significantly associated with an old age identification: females and widowed persons (the latter, of course, being heavily dominated by females) exhibit substantially higher proportions of old age identifiers than males and nonwidowed persons. This finding is consistent with the Atchley and George (1973) study cited earlier which concluded that females tend to be socially defined by others as old in terms of chronological age, while males may be socially defined in terms of their work roles. Thus, it is interesting to note that sex and widowhood attain statistically significant relationships with subjective age only in the 75+ group.

In short, the data in Table 3 tend to substantially support the proposition that subjective age identification among older persons is not simply a function or reflection of traditional indicators of social position. The statistical relationships are largely non-significant and the magnitudes of

the relationships are in general quite low. And in those instances where the association is significant, the variable is seen to have an impact localized to specific chronological stages within old age.

In addition to the above generalizations, Table 3 suggests an important cautionary point for gerontological researchers. While few of the relationships within the three chronological age groupings are significant, it is more often the case that relationships attain statistical significance when all persons age 50 and over are grouped together. One may wonder, for example, how it can be that there are no significant associations between retirement and subjective age within each of the three chronological age groupings, yet for the total over-50 sample the relationship is significant. The answer is clear, although perhaps not obvious, and is suggested in Table 2. The real relationship is that between chronological age and subjective age. Within the over-50 sample -- given in the last column of Table 3 -- most of the retired persons are the older respondents and most of the working persons are the younger respondents. Thus while the data describing everyone over 50 demonstrate a significant relationship between subjective age and retirement, in fact the relationship is a spurious one, with chronological age being the exogeneous variable which is associated both with subjective age and retirement. Therefore, the data in Table 3 -- comparing the first three columns of data with the fourth column -- strongly suggest that social gerontologists not consider all older persons as a single homogeneous grouping as far as subjective age identification is concerned. Since chronological age is highly correlated with subjective age identification, even within samples of the older population, the introduction of "explanatory" variables which are themselves highly intercorrelated with chronological age may provide quite misleading and inaccurate explanations.

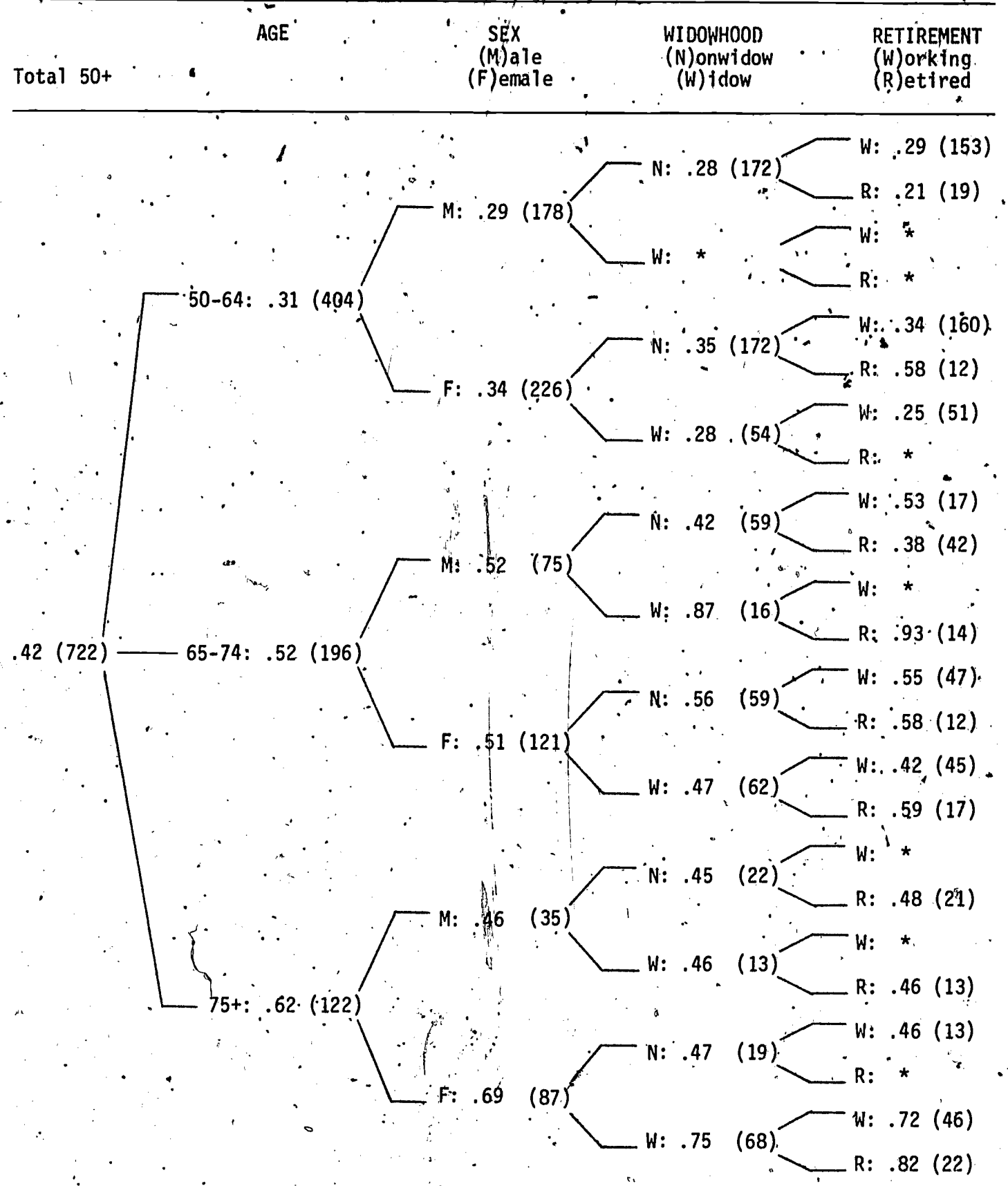
IV. COMBINED EFFECTS OF SOCIAL LOCATION ON SUBJECTIVE AGE IDENTIFICATION

In this and the following sections we present alternative ways of examining the impact of combinations of the independent variables upon subjective age identification. This section uses the independent variables to define successively more unique subgroups of the over-50 population; the means of these subgroups are then compared to determine the degree to which the variables combine to influence subjective age identification. The following section will employ correlation and regression analysis to test the hypothesis that subjective age is a function of indicators of social status and social location.

For this analysis the dependent variable, subjective age identification, was scored as 1 for those respondents indicating a subjectively old identification, and 0 for those indicating no age identification. Thus for any group the mean ranges between 0 and 1. Furthermore, because the variable is dichotomously coded in this way, the mean score for any group or subgroup is also the proportion which expressed the subjectively old response. For example, for the entire over-50 sample the mean score is .42. This corresponds directly to Table 1 which indicates that 41.9% of the sample were coded as having an old age subjective identification.

From the eight independent variables included in Table 3, literally hundreds of two-variable, three-variable, and other multi-variable combinations could be constructed to test for the cumulative effects of the variables upon subjective age identification. In this section, however, only two basic sequences will be considered. The first sequence focuses upon the possible differential impact of events which are associated with old age: retirement and widowhood; thus, this sequence will consider the effects of successively combining age, sex, widowhood status, and retirement status.

Table 4: Subjective Age Mean Scores and Indicators of Life Stage Events



* = fewer than 10 cases.

The second sequence is directly socioeconomic in nature and will consider successive groups of respondents identified by age, education, and income.

Table 4 presents the first sequence of independent variables. The "tree-branching" or "breakdown" approach simply takes each group of respondents and sorts them into subgroups based upon the next variable in the sequence. The breakdown is first made on the basis of the three chronological age categories employed in Tables 2 and 3; and again it is seen that chronological age within the over-50 sample is strongly associated with differences in subjective age -- the older the respondent the greater the subjective old age.

The impact of sex differences is not the same for each age group, as is seen in the second column of Table 4. Females in the 50-64 age group have a slight tendency to be more identified with old age than are males (.34 vs. .29), while for the 65-74 age group there is virtually no difference between males and females (.52 vs. .51). It is not until the oldest chronological age group is observed that substantial sex differences in subjective age identification are seen (.46 vs. .69).

Widowhood does have some impact upon feelings of subjective age identification, but this impact is different for males and females, and the sex differences are not the same for each chronological age group. For males of each age group widowhood appears to have the expected impact: more widowed males express a subjectively old identification than do nonwidowed males -- an observation, however, which represents a substantial difference only in the case of males in the 65-74 age group.

For females in the younger two age groups, widowhood seems to have a reverse effect upon subjective age identification. Widowed females in both the 50-64 and 65-74 age groups have noticeably lower scores (i.e., in the

direction of no age identification) than nonwidowed females (.28 vs. .35 and .47 vs. .56). It is only among the oldest females that widowhood produces the anticipated increases in old age identification, and here the difference between nonwidows and widows is substantial (.47 vs. .75). One might speculate that widowhood for the younger old females acts as a kind of liberating event in so far as subjective age identification is concerned. Perhaps an old-age identification on the part of the wife reflects her (typically older) husband's retired and perhaps unhealthy status. The loss of the husband might, after the basic shock and grief have diminished, allow the widowed female to establish a more independent set of self-images in which the age factor plays a relatively diminished role.

When we consider retirement, the final variable included in this sequence, we again note that the variable does not have a homogeneous impact upon all groups in the sample. While it might be initially assumed that retirement would contribute to increased subjective feelings of old age, such is not always the case in these data, and where retirement does have this predictive impact, the magnitude of the impact varies from group to group.

For nonwidowed males in the two chronologically younger age groups retirement actually has the opposite effect upon subjective age, i.e., retired males have lower average subjective age identification scores (.21 vs. .29 and .38 vs. .53). It may well be that earlier than normal retirement for many men is based either on poor physical health or on robustly healthy finances. In either case, factors other than old age may be salient in the subjective identifications of these persons.

For females the results are all in the anticipated direction, although the magnitude of the increase in old age identification associated with being retired varies across the groups. For example, retirement appears to

contribute more toward female identification with old age among widows than among nonwidows. A perhaps more interesting difference is that retirement appears to make a much more substantial contribution to feelings of old age among the younger women in the over-50 sample than the two other age groups -- and this is true for both the widowed and nonwidowed females.

In summary, Table 4 suggests that the variables age, sex, widowhood, and retirement do at times combine to produce increased levels of subjective age identification -- but not universally for all older persons. In many instances the reverse of what may be hypothesized has been found (e.g., that for younger females widowhood lessens feelings of subjective age identification rather than promoting such feelings). Furthermore, the magnitude of the contribution of these variables to subjective age identification varies across the several sequential combinations of variables. Finally, it should be noted that only one sequence in Table 4 systematically demonstrates the expected contribution of these four variables to subjective age identification. The bottom line, or "branch," in the Table indicates that the oldest (.62) females (.69), who are both widowed (.75) and retired (.82), exhibit successively higher levels of subjective age identification; in addition, it may be noted that the 22 respondents defined by this combination of attributes do indeed have the highest score in the whole table.

A three-variable sequence including chronological age, income, and education is presented in Table 5. In order to provide groups in which the number of cases per group was sufficient for analysis, income was dichotomized at $8,000 per year; and high and low education level were defined as twelve or more years of formal schooling (i.e., completion of high school), versus eleven years or fewer. Although completion of high school would today not be considered as achievement of a "high" level of education, such is an

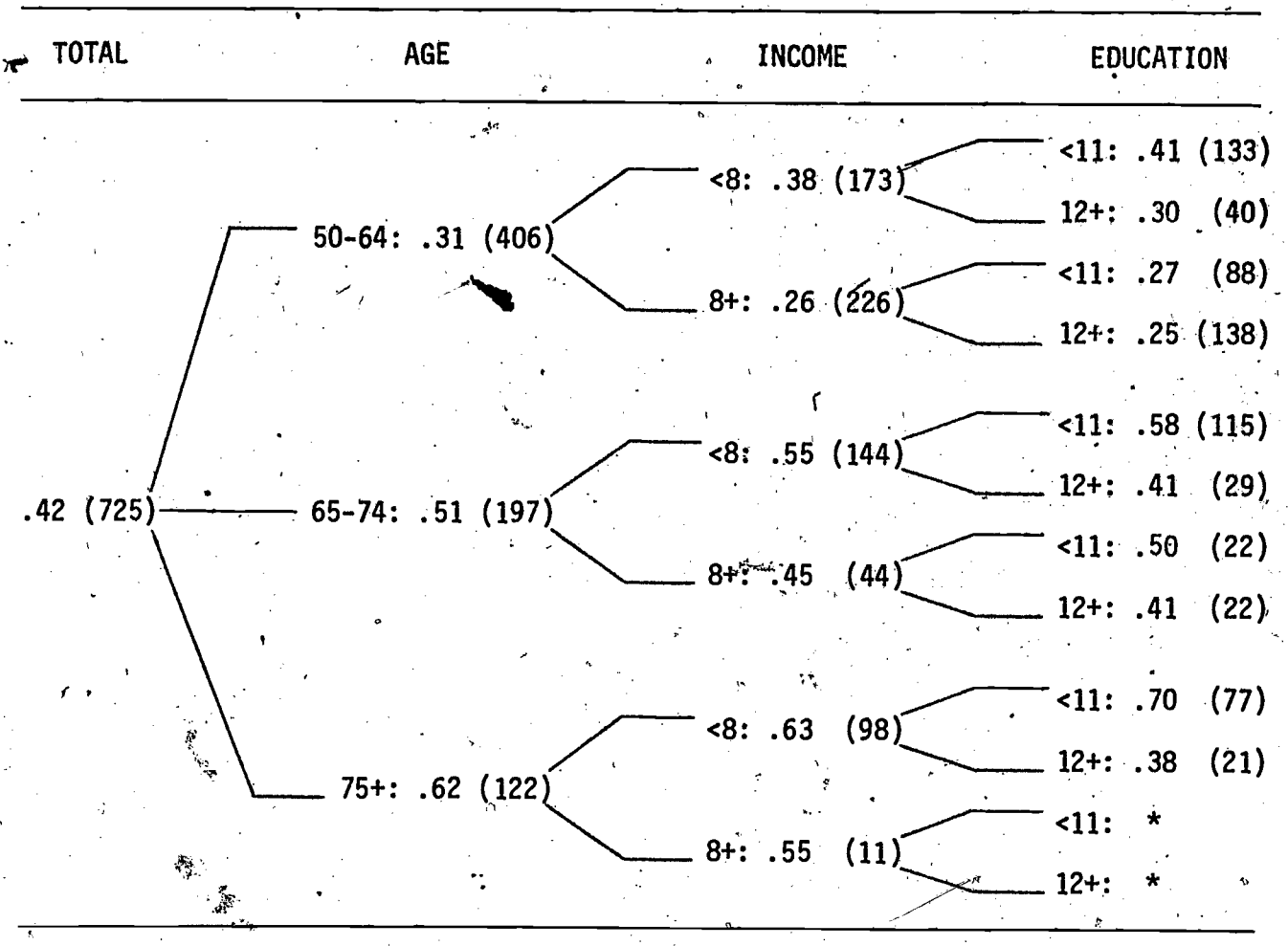
acceptable criterion when dealing with older people whose education took place in an earlier historical era (Cutler and Schmidhauser, 1975).

The mean subjective age identification scores for the various groups appear to provide some support for the central hypothesis that subjective age is influenced by socioeconomic factors. In each of the income and education comparisons, as suggested by the hypothesis, the higher income respondents have a lower subjective old age identification, as is also characteristic of the higher education respondents.

It should also be noted that the lowest and highest mean scores in Table 5 are found precisely in those combinations of attributes suggested by the central hypothesis. Thus the 138 respondents who are in the youngest age group, the higher income group, and the higher education group have an average subjective age identification score of .25. At the other end, the 77 respondents representing the oldest age group and the lower income and education categories have an average score of .70, suggesting considerably more subjective identification with old age.

While the sequence of variables in Table 5 does give some support to the hypothesis that subjective age identification is a function of socioeconomic factors, two limiting observations must also be made. First, while the two "extreme" groups do have scores of .25 and .70, it must be noted that the average scores computed for the 50-64 age group and the 75+ age group are .31 and .62; thus much of the difference between the two extreme groups appears to be a function of chronological age. A second and related observation is that in general, the mean scores associated with the chronological age groups exhibit greater differences than do the scores associated with income and education.

Table 5: Subjective Age Mean Scores and Socioeconomic Indicators



* = fewer than 10 cases.

NB: Income dichotomized above (8+) and below (<8) $8,000 per year.
Education dichotomized at completion of high school or more (12+) versus less (<11).

V. MULTIPLE CORRELATION AND REGRESSION ANALYSIS

The previous section provided modest evidence that additive combinations of social class and social location variables provide better predictions of subjective age identification than any single indicator or variable. Consequently, our final test will be a multiple regression analysis using all of the independent variables. Several questions will be answered by this analysis: (1) As suggested in the central hypothesis of this study, is subjective age identification best understood as a function of indicators of social location and socioeconomic status? (2) Within a nationally representative sample of the over-50 population, does chronological age still play a significant role in the genesis of subjective age identification? (3) When all of the potential predictors are included in a single multiple regression analysis, what is the independent contribution of each to the explanation of subjective age identification?

Table 6 presents several interrelated kinds of information concerning the contribution of each of eight predictor variables to subjective age identification. In this analysis, subjective age is again dichotomized (no age identification = 0; and subjective old identification = 1). Income, education, occupational status, and subjective social class were each coded with the higher values representing the higher socioeconomic positions. Sex, widowhood, and retirement were coded with the higher values for females, widowed, and retired.

The first two columns of Table 6 present the results of a preliminary but revealing bivariate correlational analysis. In the first column the simple bivariate correlation between subjective age identification and each of the predictors is given. While none of the correlations is outstandingly high, and several are distinctly low, all of them are at least in the direction

that is suggested by previous research. That is, subjective old age identification is negatively related to indicators of socioeconomic status, but positively related to being older, widowed, retired, and female.

The results of this correlational analysis, corroborated by the data presented in Table 2, suggest that chronological age rather than the other independent variables, is the key predictor of subjective age. And, as Table 3 demonstrated, when the other variables are analyzed within three roughly-drawn chronological age categories, their connection to subjective age identification is reduced. Correlational methods provide a more direct and telling test of the degree to which the bivariate associations of the independent variables with subjective age identification might be spurious.

The second column of Table 6, consequently, presents the first-order partial correlation between each of the predictors and subjective age identification, employing chronological age (which is used in its ungrouped raw form for these analyses) as the partialling variable. As the list of correlations clearly demonstrates, in virtually every case the simple bivariate correlation becomes reduced. Thus these partial correlation coefficients strongly suggest that the socioeconomic variables which have been hypothesized to be substantial predictors of subjective age are in fact themselves strongly related to chronological age.

The partial correlations indicate that chronological age rather than the social variables is the key predictor of subjective age. Nonetheless, a final test is needed to precisely determine the relative importance of each potential predictor in the context of all the predictors, as well as the overall cumulative importance of the whole set of predictors. Multiple regression analysis provides this test, and the results of regressing

Table 6: Subjective Age Identification: The Independent Contribution of Social Indicator Variables

	Bivariate Relationships		Multiple Regression Analyses		
	(A)	(B)	(C)	(D)	(E)
	Simple r	First-Order Partials by Age	Cumulative Multiple R	Cumulative % Variance Explained	Standardized Beta Weights
AGE	.247	--	.247	6.09%	.156
INCOME	-.219	-.130	.277	7.67%	-.079
EDUCATION	-.164	-.115	.285	8.14%	-.079
SEX	.089	.073	.289	8.33%	.048
RETIREMENT	.121	.015	.290	8.43%	.037
WIDOWHOOD	.157	.072	.292	8.52%	.035
OCCUP. STATUS	-.122	-.102	.293	8.56%	-.034
SOCIAL CLASS	-.047	-.054	.295	8.62%	.029

subjective age identification upon the set of eight independent variables are given in the last three columns of Table 6. Column C indicates the cumulative multiple correlation of the set of predictors with subjective age. It is clear from these data that while the total set of eight predictors yields a modest Multiple R of .295, most of this correlation is accounted for by the simple correlation between chronological age and subjective age of .247. A slightly different way of looking at the same information is given in Column D in which the squared Multiple R, or percentage of variance explained, is cumulatively given. Chronological age alone accounts for 6% of the variance in subjective age identification. The income of the respondent adds another 1.6% of the variance, and the remaining six predictors cumulatively add only another 1% of the variance.

Finally, the last column of Table 6 presents the standardized regression coefficients, or beta weights, indicating the relative contribution of each of the eight independent variables in predicting subjective age identification. Again chronological age is seen to be by far the most important variable in explaining subjective age. Indeed, the contribution of chronological age is more than double that of the second most important variable in the list of predictors.

VI. SUMMARY AND CONCLUSION

This analysis began with the proposition that subjective age identification is an important non-chronological dimension of aging which is gaining increasing attention by social gerontologists. Yet there has been a question raised as to whether subjective age exists as an independent dimension of the older person's life space, or if it is simply an artifact of social and economic position within society. Specifically, it has been suggested or

hypothesized that only the poor, the uneducated, or other disadvantaged older persons are likely to express a subjective old age identification. The present analysis has sought to directly test this hypothesis employing a set of multiple predictors, a measure of subjective age identification, and a national sample of the adult population of the United States.

This study should lay to rest the belief that subjective age identification is a simple function of socioeconomic indicators. Although the analysis has focused only upon those respondents age 50 and above, it is still the case that chronological age is the single best predictor of subjective age. This generalization is supported by an analysis of frequencies, percentages, and means in which chronological age was broken down into the three intervals of 50-64, 65-74, and 75+, as well as a correlation and regression analysis in which "raw" age was employed. By contrast, indicators of socioeconomic position -- income, education, occupational status, and the respondent's own subjective social class identification -- contribute very little independent explanation to subjective age identification. This latter conclusion is also valid for two traditional indicators of life course transition -- widowhood and retirement. Of these latter two variables, however, it should be noted that for identifiable stages in the life cycle and in combination with specifiable sex-age configurations, widowhood and retirement do influence levels of subjective age identification.

Although the descriptive portrayal of the connections (or, rather, lack of connections) between subjective age and the independent variables has been presented in terms of sequences of means and percentages, the testing of the central hypothesis is most clearly revealed by the multiple regression and partial correlation analyses. In the latter we note that when the effects of chronological age are statistically partialled out, the correlation

between subjective age and each of the predictors is reduced. Similarly, the regression analysis demonstrates that the independent contribution of the social indicator variables is quite small after the contribution of chronological age is taken into account.

By rejecting the central hypothesis of the study and documenting the proposition that subjective age identification is *not* a simple function of social and economic variables, the present analysis raises a larger number of questions than it answers. If the social and economic variables are not predictive, what then are the wellsprings of subjective age identification? What kind of person tends to feel old or identify himself as old? There are clearly a number of clusters of variables which are critical to answering this question but which have not been considered here -- variables which should be built into new studies specifically designed to answer these kinds of questions.

For example, the data base employed in this study did not contain information on the details of either the widowhood or the retirement context. The voluntary or forced genesis of the retirement "decision," for example, may be more important to feelings of subjective age than the retirement itself. Furthermore, while income level was measured as it typically is in studies of the national adult population, more precise measures concerning amounts and sources of money income as well as other kinds of resources might have a greater bearing of feelings of subjective age than simple family or personal income. Other family resource and family context variables which may well prove to be important would include indicators of family interaction in the post-empty-nest years.

And, of course, related to questions of personal and family resources are issues of health status, medical resources, and even subjective likelihood

of staying alive. To what degree, for example, does an older individual attempt to integrate the longevity of his parents, his smoking behavior, his level of tension, etc., in a calculation of personal life expectancy -- and to what degree is such a calculation related to feelings of subjective age identification?

To the kinds of individual or personal variables suggested, variables indexing the relationship of the individual to the social system may also provide parts of the explanation of subjective age. For example, to what degree are age-segreted or age-integrated residential neighborhoods conducive to feelings of subjective age identification? To what extent does belonging to age-homogeneous versus age-heterogeneous groups and associations of various kinds affect subjective age identification? Clearly, if the immediate environment and the larger society of which all persons are a part are each supportive of the view that old age is a positively-valued stage of life, with legitimate roles and rights, then chronologically older persons are more likely to subjectively identify as old. The present analysis, therefore, has hopefully made the responsibility of social gerontologists more complex by noting the disutility of the simple socioeconomic hypothesis, and thereby directing attention to the more interesting and challenging antecedents and causes of subjective age identification.

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