Although researchers have investigated the chronological age-subjective age discrepancy in several ways, they have, for the most part, ignored where and how older persons live. The lifestyles of elderly Los Angeles residents (N=308), i.e., institutionalized, socially active in the community, or socially inactive in the community, were taken into account and examined in terms of individual perception of age. Subjects who identified themselves as feeling younger, older, or the same as their chronological age completed a battery of several psychological and sociodemographic measures. Findings indicated that the elderly who felt younger demonstrated greater affiliation tendencies, had subjectively more meaningful experiences, and felt more in control of their lives than those who perceived themselves as older. When the covariates of health, income, psychological health, and interviewer's effects were removed, analysis of covariance revealed that the relationship between perceived age and locus of control disappeared. A person's sense of involvement and personal meaning emerged as the most influential predictors with respect to how old a person felt inside. The results suggest a direct relationship exists between one's concept of self as young or old. (Author/NRB)
Age Identification in the Elderly

Steven K. Baum, PhD
Age Identity

Age Identification in the Elderly

Introduction

The idea that you're as young as you feel is not new. From Shakespeare's quick-witted Falstaff to Ruth Gordon's portrayal of the indomitable Maude in Harold and Maude, literature has well acknowledged older people who think and feel young. But serious empirical investigation into establishing the parameters of identified age has been a recent occurrence in the gerontological literature, and just why many elderly feel young is not yet clear.

Researchers have sought to investigate the chronological age-subjective age discrepancy in a number of ways and formats. Sample size has ranged from N=47 (Perlin & Butler, 1974) to a resounding 6,356 (Hansen & Yoshioka, 1962), with the same phenomena being reported as far away as Yugoslavia (Dilic, 1977) and New Zealand (Preston, 1970). And although as many as six different types of measures have been used, the same nine variables tend to align themselves consistently with age identification. They include chronological age (George, 1975; Streib & Schneider, 1971), although age is not always positively related (Zola, 1962), and gender differences with some studies finding females feeling older (Dilic, 1977) and others finding males feeling older (Streib & Schneider, 1971). Even more studies, however, find no difference (Linn & Hunter, 1979; Tuckman & Lorge, 1954) between the sexes. Married life (Dilic, 1977; cf. Ward, 1974), higher levels of social involvement (Bell, 1967; cf. Ward, 1974), SES (Guptill, 1965; cf. Busse, Jeffers & Obrist, 1957), later retirement (Guptill, 1965...
cf. Streib & Schneider, 1971), and being white racially (Busse et al., 1957) have all been found to be related to feeling younger than one's age. Two of the most established variables are physical and emotional health with many studies demonstrating younger age identifiers as having superior physical (George, 1975; Preston, 1970) and emotional (Linn & Hunter, 1979; Tuckman & Lavell, 1957) functioning when compared to older identifying subjects.

Only recently, however, have researchers begun to break down emotional health into its various components. When Linn and Hunter (1979) tested seven dimensions of mental health, those authors found locus of control to be the best predictor variable of identified age—a finding consistent with Mutran and Burke's (1979a) work. That is that subjects who perceive their age as younger reflected more internal feelings of control.

While personal effectiveness is undoubtedly an important feature of young age and young age identity, subjective meaningful purpose may also be important. If early life is a time that is marked by more engaged activity and purposefulness, then in later life, younger age identity should similarly reflect more meaningful perceptions. Although there is some indirect support for Frankl's (1978) notion (Mutran & Burke, 1979b), most of the work has been anecdotal.

The primary hypothesis was that younger age identification will be related to more internal locus of control and greater subjective feelings of meaning and purpose. Researchers in the
past, however, have ignored where and how an older person lives; so in this study, an older person's lifestyle—as institutionalized, living actively in the community, or living socially inactive—will be taken into account and examined in terms of one's perception of age.

Method

Three hundred and eight voluntary Los Angeles elderly were selected in approximately equal numbers from non-nursing home residences (Institutional) and the community. The community residents were then divided into those who actively participated in group membership clubs (Affiliated) and those who did not (Community).

Prospective participants were gathered via door-to-door canvassing, friendship pyramiding, or through senior citizen center solicitation. The Andrus Gerontology Subject Pool (University of Southern California) also provided many subjects. For the USDA subjects, a packet consisting of instructions, informed consent, and a test questionnaire were mailed out. Follow-up telephone calls netted a final 84% return rate. For the remainder, the tests were administered by two male graduate psychology students. Although all material was capitalized to ensure readability, some subjects required reading assistance and were read to by the graduate students. The effects of reading to subjects were later partialled out statistically.

The average age of the subjects was 75.4 years, S.D. = 7.0 years. The sample was overrepresented in terms of race (100% white), gender (80.5% female), and religion (83.4% Jewish). Most
subjects were retired (76.6%), though some (9.1%) reported part-time or full-time (5.5%) employment. Income tended to be bimodal; either low (24.4% reporting annual income of less than $4,000) or moderate (16.5% in excess of $20,000), reflecting the diversity between groups--institutionalized elderly who tended to be lower SES females and the USC group who tended to be retired professors and professionals. Educational level distribution was also quite skewed with 29.5% reporting at least one college degree. About one in four (22.4%) were married and about the same number (24.7%) preferred to be read to. These elderly who were read to tended to be older ($X^2=49.34$, df = 2, $p < .001$) and less well educated ($X^2 = 26.14$, df = 2, $p < .001$).

The independent variable of age identification consisted of the single-item statement: "I feel older, younger, or the same as my age." George (1975) recently found good reliability with the single-measure approach. The dependent variable of health was assessed using an abbreviated version of the Cornell Medical Index (Broadman, Erdmann, Lorge, Wolff and Broadbent, 1949), a test which purports high validity. Psychological health was measured by the Symptom Checklist-90 (Derogatis, Lipman, Rickels, Uhlenluth & Covi, 1974) and those authors have demonstrated both high validity and reliability. The Purpose in Life Test (Crumbaugh & Maholick, 1964) and Rotter's (1966) Locus of Control scale were also included, as both tests offer good measures of those constructs. The remaining dependent variables were measured by items in the questionnaire.
Ethnicity, as well as English speech, native birth, physical and psychiatric intactness (Kahn, Goldfarb, Pollack & Peck, 1960) were controlled through sampling selection. All other variables were controlled statistically through analysis of variance and covariance. Analyses were initially performed without covariance, then, with covariates added in order to determine the unique contribution of each covariate. Thereafter, all covariates were held constant together in order to assess their combined effect. A stepwise linear regression analysis further corroborated the total proportion of shared variance with the independent variable.

Results

When the independent variable of age identification is separated into older, younger, and same as age categories, it appears that the majority of subjects (62.0%) perceive themselves as younger than they really are, with 29.2% self-rating themselves as the same as their chronological age and 8.4% viewing themselves as older.

Table 1 presents the zero-order correlations for all age identity variables. Only four variables were found to be directly related to identified age: psychological health, physical health, income, and interviewer's effects (reading to subjects). These four variables were entered into the ANCOVA for subsequent analysis.
The first hypothesis of an older person's lifestyle (Institutional, Affiliated, Community), and the relationship to identified age was supported. The analysis of variance indicated that the variable lifestyle has a direct relationship to an older person's identified age $F(2, 304) = 6.83 \ p < .01$. Mean differences between groups suggest that those subjects who were from the Community group did not differ significantly from the Institutional group with respect to felt age ($\bar{X} = 2.40, 2.45$, respectively), so any real differences in an older person's lifestyle could not be attributed to where the older person lived so much as to how he/she lived. The Affiliated group, however, clearly felt youngest $F(2, 304) = 6.83 \ p < .001$. When an analysis of covariance was performed, the amount of shared variance without any covariates effects removed is $4.41\%$. While each covariate separately influences the overall effect, it is not until all covariates are removed that a final $3.28\%$ of the variables' shared influence becomes evident $F(6, 249) = 4.57 \ p < .01$.

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**Insert Table 2 about here**

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It was also suggested that those subjects who possessed a greater internal-oriented outlook would feel younger while more external-oriented subjects would tend to feel older. While $F$-test results lend direct support to the above hypothesis $F(2, 291) = 5.43 \ p < .01$, whether or not a person felt in control of his/her life made little difference with respect to identified age when certain variables were partialled out. For instance,
while 3.61 of the shared variance was initially accounted for, when the effects of health, income, interviewer's influence, and psychological health were held, only 1.9% of the shared variance is explainable and not significant $F(6,245) = 2.63, p \text{ ns.}$

Subjects with more subjective meaningful purpose in their lives were thought to perceived themselves as younger than their ages, while those with less meaning in their lives were thought to perceive themselves as older. An analysis of variance suggests that purpose in life has a very direct effect on an older person's perception of age $F(2,302) = 6.72 \ p < .001$. And similarly, an analysis of covariance reveals that its influence is sizeable (4.41%). Each covariate separately exerts an influence on the dependent variable. However, when all the covariates are removed, 3.65% of the variance is still explainable $F(6,247) = 5.06 \ p < .01$.

A stepwise linear regression was then performed in order to further test out the relationship between the independent and dependent variables. At step one, all four covariates summed explain $R^2 = .0753$. When purpose in life is entered at the next step, it serves to explain almost as much as the four covariates totalled ($R^2$ increase $= .0513), F(1,243) = 14.28 \ p < .01$. Lifestyle entered at the next step offered the second best explanation to the criterion ($R^2$ increase $= .0935), F(1,242) = 5.15 \ p < .05$. Consistent with the analysis of covariance findings, when locus of control was entered it served to explain less than 1% of the $R^2$ increase $F(1,241) = .57 \ p \text{ ns.}$ In sum, purpose in life was found to be the best predictor variable of identified age in older people.
Discussion

An analysis of the data finds that a majority (62%) of the subjects perceive themselves as younger than their chronological age—a finding consistent with the literature (Busse et al., 1957; Guptill, 1965; Linn & Hunter, 1979; Perlin & Butler, 1974; Preston, 1970; Tuckman & Lavell, 1957; Tuckman & Lorge, 1954; Zola, 1962).

In order to examine this finding further, subjects from three lifestyles of later life (Institutional, Affiliated, Community) were selected and tested along the age identity dimension. The notion that younger age identifiers would have more internal locus of control orientations and perceive their lives as having subjectively more meaningful experience was also examined. Several other variables were looked at, and those variables not controlled through the sampling were tested statistically and entered into the subsequent multivariate analyses.

In terms of an older person's lifestyle, it can be stated that there is a direct relationship to one's concept of self as young or old. The Community and Institutional groups did not differ with respect to mean age differences, but both groups did differ significantly from the Affiliated group who perceived themselves as youngest, suggesting that it's not where you live but how you live that is important. The distinguishing factor could well be one's sense of involvement, as documented in other research (Guptill, 1965). The fact that younger age identification is related to
more active group membership participation is not new by any means (Guptill, 1965; Ward, 1974). Indeed, many of these subjects did not belong to one group membership club, but to several, and appeared to fill their days fully.

Contrary to disengagement theorists' (e.g. Cummings & Henry, 1961) claims regarding better emotional adjustment in old people as a function of withdrawal from society, in this study the most socially involved group (Affiliated) clearly felt youngest and recorded the highest levels of health and well-being even when the influence of health, income, and interviewer's effects were held. However, whether belonging to an interest group creates younger self-image or whether those possessing younger age identification gravitate towards such clubs cannot be borne out by the data.

The relationship between feelings of control and identified age was not as clear as with lifestyle. At the univariate level, internally oriented subjects did express younger age identifications. However, that relationship disappeared when the covariates of health (physical, emotional), income, and interviewer's effects were partialled out. In one sense, feelings of control may undoubtedly be more related to emotional and physical health, while the effects of income and reading to subjects also contain elements of control and effectiveness. Furthermore, there are methodological differences which may account for the contradictory findings. Linn and Hunter (1979) used an abbreviated version of the Rotter's (1966) scale and a different age identity measure. In addition to the sampling differences, the data was controlled by social class, disability, and impairment, while the present study controlled for
Feelings of control in later life are an important psychological dimension and one that undoubtedly influences the self-image of older people. To what extent it is influential and impacts upon one's age identity may, however, be based upon the above considerations.

Of all the variables involved, purpose in life emerged as the best predictor of identified age, with youngest feeling elderly possessing the highest subjective meaningfulness scores. This held true at both the univariate and multivariate levels of analysis. The findings suggest that researchers have perhaps underestimated the impact of meaningfulness in an older person's life as well as his/her age identity.

Prior to discussing the overall results, a word of caution about interpretation. The fact that less than 15% of the overall variance is explained by the findings of this study suggests that gerontologists would do well to explore other non-psychological variables given the limited impact of the psychological ones. George (1975), for instance, has found a larger explanation using chronological age-related variables. In addition, it is not clear if age identification is state or trait, or both. Carp's (1967) Victoria Plaza study certainly suggests that situational factors are involved. And, in this study, prospective subjects would sometimes decline to participate because "they felt too old today." Perhaps future research should include a mood adjective checklist.

In terms of the overall results of the study, the quest for the psychological fountain of youth has uncovered some encouraging
clues. From the lifestyle results, it appears that it is not so much where an older person lives as much as how he or she lives. People whose lifestyle was more socially involved seemed better able to escape the ravages of time. Similarly, though feelings of control are somewhat related, they are not as important as a keen sense of purpose in life. Living involved and meaningfully appears to be a good part of the ingredients of thinking and feeling young.

Mental health practitioners could help older people maintain or even rediscover their younger selves by emphasizing involvement and meaningful purpose in their lives. For instance, the clinician could explore some meaningful aspects of the older patient's life which can be recreated and brought into the present. The smallest of articles, the seemingly irrelevant tale, would not be discounted but understood in the context of building a meaningful world. From this perspective, reminiscence can be understood as a way of creating a more meaningful present. And similarly, relocation may not be experienced as devastating if attention to meaningful and relevant detail were emphasized in the adjustment.

If age is a matter of feeling and not of years, the it may be only a question of time before researchers and clinicians stop looking for "age-appropriate norms" and encourage the variety of behavior that is accepted in other age groups.
References


Age Identity

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Tuckman, J., & Lorge, I. Classification of the self as young, middle-aged or old. *Geriatrics*, 1954, 9, 534-536.


Footnotes

1. Paper presented at the 89th Annual meeting of the American Psychological Association, Los Angeles, California, August, 1981. The author would like to thank Andrus Gerontology Center Staff: David Mangen, Ron Silver, Paul Nesseth, Lisa Baum, Lauree Autterson, Margaret Kronauer, Jean Meuller, and Stewart Greathouse, for their assistance.

2. Address reprint requests to Steven K. Baum/Russell L. Boxley, California School of Professional Psychology, Los Angeles, CA 90004.
Table 1
Zero-Order Correlations for All Identified Age Variables

<table>
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<tr>
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</tr>
<tr>
<td>Psychological Health</td>
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<td>Social Participation</td>
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<tr>
<td>Income</td>
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<tr>
<td>Education</td>
<td>.09</td>
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<td>Chronological Age</td>
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<td>Sex Differences</td>
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<td>Marital Status</td>
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<td>Retirement Status</td>
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<tr>
<td>Interviewer's Effects</td>
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*p < .05  
**p < .01
Table 2

Relationship of Lifestyle, Locus of Control, and Purpose in Life and Age Identification Partialled Out

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<thead>
<tr>
<th>Covariates</th>
<th>Lifestyle</th>
<th>Locus of Control</th>
<th>Purpose in Life</th>
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<td>F</td>
<td>Variance</td>
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<tr>
<td>All Effects Removed</td>
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<td>3.28</td>
<td>5.3</td>
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*p < .05

**p < .01

***p < .001
Table 3
Stepwise Linear Regression for Purpose in Life
Lifestyle and Locus of Control

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*p < .05

**p < .01