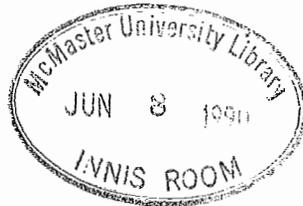




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## VALUE ORIENTATIONS IN URBAN CANADIANS ACROSS THE ADULT LIFE SPAN\*

Thomas E. Muller  
and  
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McMaster University  
Faculty of Business

July 1988

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ABSTRACT

The effect of aging on value orientations has received less attention in the life-span development literature than its effect on personality. The aim of this cross-sectional study was to detect age differences in value orientation and to appraise the nature of the values that were found to differ across the adult life span. A probability survey of 1,197 urban Canadians measured the importance attached by 12 age groups to nine terminal values. The importance of the values excitement, fun and enjoyment in life, security, and a sense of belonging varied significantly among groups, though differences tended to occur at opposite age extremes, not between adjacent age groups. These four values are expressive of the three lowest needs in Maslow's need hierarchy. The importance given to values expressive of Maslow's two higher-order needs did not vary by age.

A review of the literature on life-span research and developmental psychology shows that much of the theory development and empirical activity that deals with personality has centered on the detection of personality changes (including changes in motives) in aging adults [1-11]. It is clear from these studies that personality is treated as a dependent variable to be explained by changes in age. However, with the emerging consensus among many life-span developmental researchers that personality is essentially stable over the course of life [1-3, 5, 6, 9, 10], a case has been made for treating personality as an independent variable in studies of human development.

McCrae and Costa [5] argue that a fruitful model for future developmental research is to "view personality dimensions as independent variables which function jointly with age and stage to influence some of the outcomes of life." Such outcomes would most certainly include peoples' values and resulting lifestyles, which are reflected in their activities, interests and opinions throughout the course of life.

The combined effects of aging and a relatively stable personality on value orientations have so far received little attention in the literature on life-span development. However, indications are that age-related differences in personal values are greater than differences found in studies of individual personality traits [12-15]. More importantly, differences in value orientation across the life cycle are likely to have greater practical consequences than differences in personalities, per se.

To offer just one example, the direction and velocity of developmental value change in the population has important social policy and planning implications. Since values are the cognitive representations of personality, mediated by societal demands [16, p. 48], values define what a person deems

worthwhile in life--what is worth striving for, achieving, fostering, supporting, and nurturing. These, in turn, will determine what material and psychic requirements a person is likely to have at various stages in life. Since Canada, the United States and some Western European nations are experiencing profound changes in their population age structures--due in large part, but not exclusively, to aging post-war baby-boom cohorts--measurable differences in an individual's values at distinct ages will translate into value shifts at the aggregate level (societal values) that are in proportion to the size of these distinct age groups in the population.

The purpose of this study was to detect age differences in value orientations, and to appraise the nature of the values that were found to differ across the adult life span. It is a cross-sectional study of how 12 age groups of urban Canadians differ on nine terminal (end-state) values and examines the magnitude of value orientation differences between adjacent age groups. This study is part of a larger project to determine the life priorities and values of city dwellers in Canada's major metropolitan areas.

## METHOD

### Survey Design

A probability sample of 400 adults living in each of Canada's three largest metropolitan areas--Toronto, Montreal, and Vancouver--was questioned via computer-assisted telephone interviewing from a central research facility in each city. Households were contacted by using an incremental random telephone sampling technique which allowed new listings and unlisted numbers to be included in the sample frame. Within each household contacted, one respondent

was selected randomly using a modification [17] of the Troldahl-Carter procedure [18] in order to balance the sexes and ages of persons, 18 years and over, chosen for the interview. The findings are based on completed interviews with a total of 1,197 urban residents during April and May of 1987.

### Value Measures

Respondents were asked to rate the importance they attached to each of nine personal values: self-respect, security, warm relationships with others, a sense of accomplishment, fun and enjoyment in life, self-fulfillment, being well respected, a sense of belonging, excitement. These comprise a typology of terminal values (end-states to be attained) developed at the University of Michigan Survey Research Center [19, pp. 142-146] and based on the theoretic contributions of Maslow [20], Rokeach [21] and Feather [22]. Reportedly, this list of values--which can be systematized to closely correspond with the human need categories in Maslow's hierarchy--relates more closely to major roles in life (work, leisure, marriage, parenting, consumption) than do the more widely known Rokeach Value Survey's [21] 18 terminal values [see 23, p. 406]. In addition, this nine-item measure of people's value orientations was derived in the context of life-span developmental psychology [23, p. 407].

The value-importance question was put as follows: "I'm now going to name some things that people might look for or want out of life, such as [THE LIST OF NINE VALUES WAS READ OUT]. On a scale of 1 to 10, where "1" is "not important" and "10" is "extremely important," please tell me how important each one is to you as a guiding principle in your own life. While several of these things might be important to you, please keep in mind that I'm interested in finding out which ones are more important than others. The first item is [FIRST VALUE]. Please give me a number from 1 to 10." To negate any

response set due to order, the presentation order of the values was rotated from interview to interview. The respondent's age was obtained by asking for year of birth.

### Analysis

Upon completion of the survey, the respondents were clustered into 12 age groups (see Figure 1), in order to attain two objectives. Virtually all of the aging and developmental studies we had reviewed had limited the number of age groups to between two and eight. Taking advantage of our survey design, we wanted a sufficiently large number of groups across the adult life span so that multiple comparisons could be made and age-related trends detected, while satisfying certain constraints: achieving group sample sizes that were large enough to be statistically meaningful ( $n$  ranged between 45 and 194); preserving the normative age break of 65; it also seemed natural to partition the sample so that the baby-boom generation (1946-1964 birth cohort) remained intact within four groups--23-26 to 37-41. With the exception of the very oldest group (70-85), each group spanned either four or five years.

Since the focus of this study is age-related value orientation differences in the urban population, the methodology relies upon one-way ANOVAs of differences in value means, across age groups. Value scores served as the nine dependent measures and age was the independent variable. However, since sex differences in value orientation have been reported in the literature [7, 13, 14, 16], the main analyses were preceded by nine, separate 12 (Age) x 2 (Sex) ANOVAs in order to detect the effects of sex and to check for age x sex interactions.

## RESULTS

The results of nine Age x Sex ANOVAs are reported in Table 1. The mean ratings show that females accorded a significantly greater importance than men to seven of the nine personal values. Significant age differences showed up in four of the value orientations. Age x Sex interaction effects were nowhere even marginally significant.<sup>1</sup>

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 Insert Table 1 here  
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Given these findings, the observations were pooled across the sexes and the four significant age effects on values were examined further. Before this was done, we checked whether the distributions of males and females, across the 12 age groups, were matched fairly closely. A chi-square analysis showed no significant distributional difference between sexes.

Figure 1 shows the mean importance given to the value excitement, across the adult life span. The 95% confidence intervals about each point are included to identify groups that differ significantly from one another. A one-way ANOVA reveals a highly significant age effect ( $F_{11, 1185} = 10.71; p < .0001$ ). Moreover, a polynomial test for trends exhibits a significant

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<sup>1</sup>An earlier study of this sample [24] detected cultural (French/English-Canadian) differences in value means. To assess this dual-culture effect in conjunction with age and sex, 3-way ANOVAs with the nine value measures were performed. Again, no 2- or 3-way interactions were detected, and the separate age and sex effects were virtually identical to those reported in Table 1.

quadratic term and an age-related pattern that deviates significantly from the linear, meaning that the true relationship between age and the value excitement is likely curvilinear. The importance attached to excitement declines--but at a diminishing rate--until age 65-69, then increases among those aged 70 or more.

A similar result emerges for age differences in a person's devotion to fun and enjoyment in life (Figure 2). The age effect ( $F_{11, 1185} = 8.45$ ;  $p < .0001$ ), as well as the linear and quadratic terms in a polynomial trend test, are statistically significant, though the deviation from a linear trend in the age effect did not reach significance ( $p < .15$ ). Essentially, the importance placed on fun and enjoyment in life declines linearly with age, though a more sensitive methodology may, indeed, find that the age effect on this value is also curvilinear.

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 Insert Figure 1, Figure 2, Figure 3 and Figure 4 here  
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The mean importance of security at different ages is shown in Figure 3. The one-way ANOVA result ( $F_{11, 1185} = 2.01$ ;  $p < .05$ ) and a polynomial trend test reveal a highly significant quadratic term ( $p < .005$ ) and an age-related pattern whose deviation from the linear is barely significant ( $p < .06$ ). It appears that, between ages 18-22 and 42-45, the importance ascribed to security declines very slightly with age, but around the midpoint in life begins to increase again as one gets older. However, this conclusion is advanced cautiously because of the relatively wide confidence intervals around each mean and because pairwise contrasts of age-group means, using the Newman-Keuls procedure (at a nominal alpha of .05), show that significant differences

exist only when the oldest age group is compared with 42 to 45-year-olds, as well as with two younger groups.

Figure 4 shows how the importance of the value a sense of belonging varies with age. The age effect ( $F_{11,1184} = 1.98; p < .05$ ), as well as the linear and quadratic terms in a polynomial trend test, are statistically significant, though the deviation from a linear trend in the age effect is not significant ( $p < .10$ ). Post hoc pairwise contrasts with the Newman-Keuls procedure disclosed that value importance differences appear only when the oldest age group (70-85) is compared to each of the six groups from 18-22 to 42-45--the midpoint in life.

#### DISCUSSION

Not much recent empirical work on personal value change can be found in the literature dealing with life-span development. Studies that did use explicit measures of a person's terminal value orientations have reported value differences across the human life span, and all of these were cross-sectional studies [e.g., 13, 15, 21]. In this cross-sectional study using a typology of nine terminal values, age-related differences were found in the importance that people attach to four such values: excitement, fun and enjoyment in life, security, and a sense of belonging. The first two can be described as hedonistic values; the latter two as values concerned with, respectively, safety and security, and sociability [19, pp. 144-145].

The relationship between age and priority given to excitement is curvilinear, its relative importance decreasing--but at a slower rate in each succeeding five-year period--until the late sixties. Its importance as a

value then apparently increases among people aged 70 or older. Lowenthal et al. [13, p. 183] found a strengthening in hedonistic and ease-contentment values among males at the preretirement stage, when compared to middle-aged men, and it has been suggested that the process of aging may result in a diminishment in the importance of all values except those related to hedonistic contentment and comfort, security and ease [9, p. 1144]. In our study, however, people's devotion to fun and enjoyment in life declines linearly with age, though a more sensitive replication of this study may detect that this value "bottoms out" during the preretirement decade, then increases in importance in later years. Rokeach [21, p. 74], using April 1968 data from a national U.S. sample, compared the median importance rankings on 18 terminal values from the Rokeach Value Survey for six age groups (20s to 70s) and found that people in their 70s ranked an exciting life lower than did any other age group, while ranking pleasure and a comfortable life higher than any other group. Direct comparisons cannot be drawn with our study because excitement is not necessarily the same as an exciting life and because pleasure and a comfortable life may not mean the same to respondents as the fun and enjoyment in life used in our study.

Somewhat smaller and fewer age differences were also found for the values security and a sense of belonging. People aged 70 to 85 placed a higher importance on security than people at the midpoint in life (ages 42-45)--when security may be at or near its lowest importance in the adult life span. Across the life span, a sense of belonging was most important to the group aged 70-85, and least important to the six groups aged 18-22 to 42-45. In between these two age extremes, the priority given to either security or a sense of belonging apparently changes little, with age.

We note with interest that, out of nine value measures, the values whose importance varied significantly with age correspond to the three lowest human need categories in Maslow's [20] hierarchy. Excitement and fun and enjoyment in life are value orientations that are expressive of physiological needs; security is the value driven by safety needs; and a sense of belonging is expressive of belongingness and love needs. Furthermore, considering the significance results in nine ANOVAs of the effect of age on a value orientation (see last column of Table 1), the magnitude of significance is inversely related to that value's position in Maslow's hierarchy. Values expressive of physiological needs differed most significantly across the life span; values expressive of belongingness and love needs (warm relationships with others, as well as a sense of belonging) differed least significantly; values expressive of esteem needs (being well respected and self-respect) and self-actualization needs (self-fulfillment and a sense of accomplishment) did not differ significantly, by even the most liberal of scientific standards. What are the implications of this finding? It suggests that value orientations relating to higher-order needs in Maslow's hierarchy are the ones that are most stable across the life span, whereas values expressive of baser needs are most likely to be affected by the life course. It implies that values associated with a person's esteem needs and self-actualization needs are more impervious to normative life transitions, probably because these same values continue to be viable and functional for the aging individual. Thus, the actualization of human potential is not only a universal goal but, apparently, also a lifetime goal. On the other hand, values expressive of physiological, safety, and belongingness-and-love needs are likely to change in priority because the changing roles defined by successive stages in life

(bachelorhood, marriage, parenting, empty-nest phase, retirement) require such an adaptation of the individual.

To conclude this paper, we point out some of the limitations of this study. First, the population of interest was Canadian adults living in large metropolitan areas and the findings may not be generalizable to the entire country, since rural areas and cities representing all regions were not sampled. Second, the methodology of asking people to rate a list of values on a 10-point metric probably encourages a response set toward the high end of the scale (note the uniformly high means for males and females in Table 1), since people are reluctant to assign a low importance to what are obviously supposed to be important things in life to many people. Hence, a Likert-type scale tends to yield absolute value-importance measures with less differentiation among separate values, from which relative importance must then be deduced. One way around the problem is to get respondents to rank order the list of values, as Rokeach [21] recommends, in order to force them to make hierarchical importance distinctions. However, this limits the researcher to less powerful analytical tools that are appropriate for ordinal measurements; moreover, the ranking task is highly impractical in telephone surveys. A better method has been suggested which requires respondents to first rank the values (so that importance distinctions are coaxed out in the task), then to rate each value on Likert-type scales, while consulting their original ranking [15, p. 207]. The drawback of a cumbersome administration via telephone survey does remain, however.

Finally, this study has all the drawbacks of cross-sectional studies of aging, which cannot separate the effects of aging and maturation from birth-cohort effects. We acknowledge that the age differences reported here may be

differences due to environmental conditions/historical events during the early development of different cohorts, especially for groups widely separated in age. We tried to minimize this possibility by creating as many age groups as practical from our entire sample of adults, so that comparisons of adjacent 5-year age groups would be less susceptible to the confounding effects of birth cohort (which typically span a decade, or more, in this century), but we found no case where two adjacent age groups differed significantly in value orientation. Ideally, further research on aging and value orientation differences should take the more costly approach of combining a cross-sectional research design with a longitudinal one so that aging and cohort effects can be studied separately.

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Table 1. Results of Nine 12(Age) x 2(Sex) ANOVAs  
for Value Importance

<u>Value</u> (Blocked and Ordered to Correspond with Maslow's Need Hierarchy)	<u>Mean Importance</u>		<u>Significance of Difference</u>	
	<u>Males</u>	<u>Females</u>	<u>Between</u>	<u>Among</u>
	<u>(n = 585)</u>	<u>(n = 612)</u>	<u>Sexes</u>	<u>Age Groups</u>
Self-Fulfillment	8.20	8.56	< .001	.749
A Sense of Accomplishment	8.13	8.42	.002	.369
Being Well Respected	7.94	8.55	< .001	.656
Self-Respect	8.74	9.27	< .001	.576
Warm Relationships With Others	8.14	8.61	< .001	.090
A Sense of Belonging	7.23	7.77	< .001	.049
Security	8.15	8.66	< .001	.049
Fun and Enjoyment in Life	8.06	8.03	.867	< .001
Excitement	6.46	6.48	.743	< .001

Figure 1. Mean importance rating given to the value excitement by 12 age groups.

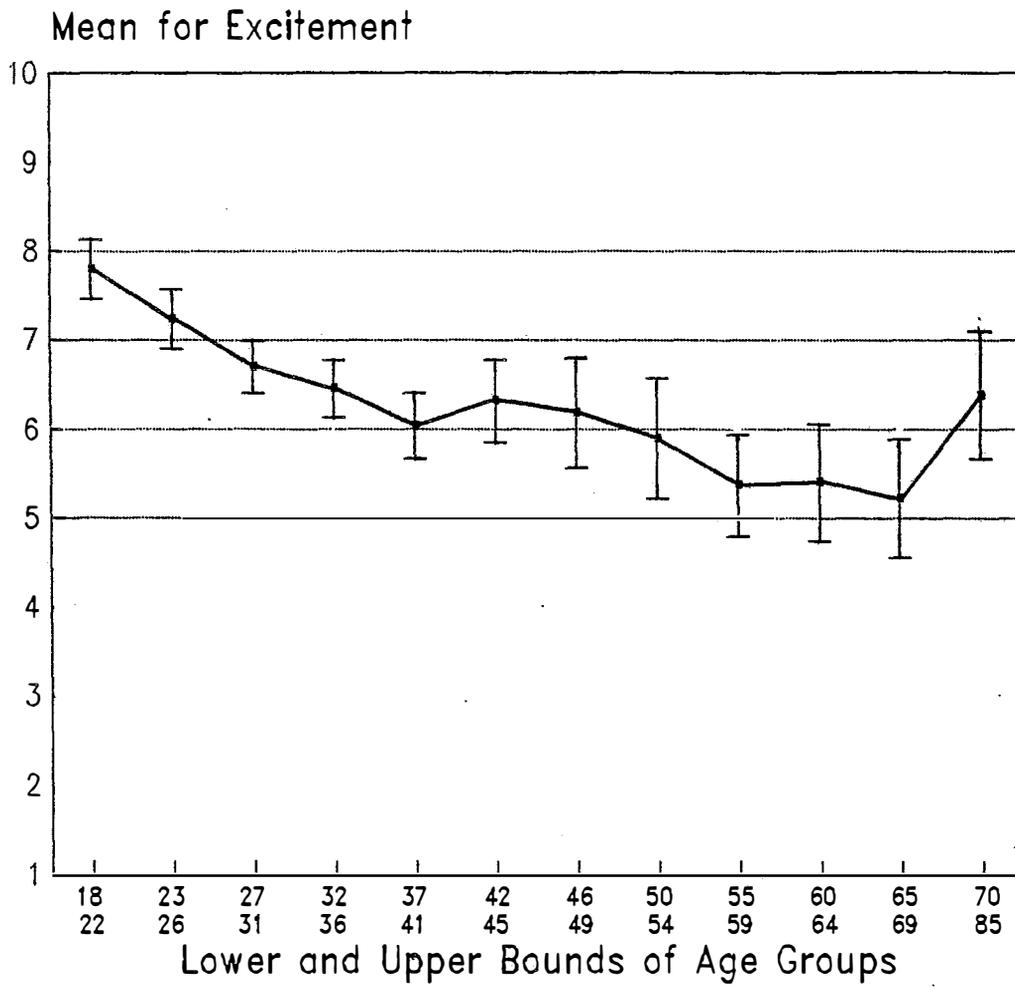


Figure 2. Mean importance rating given to the value fun and enjoyment in life by 12 age groups.

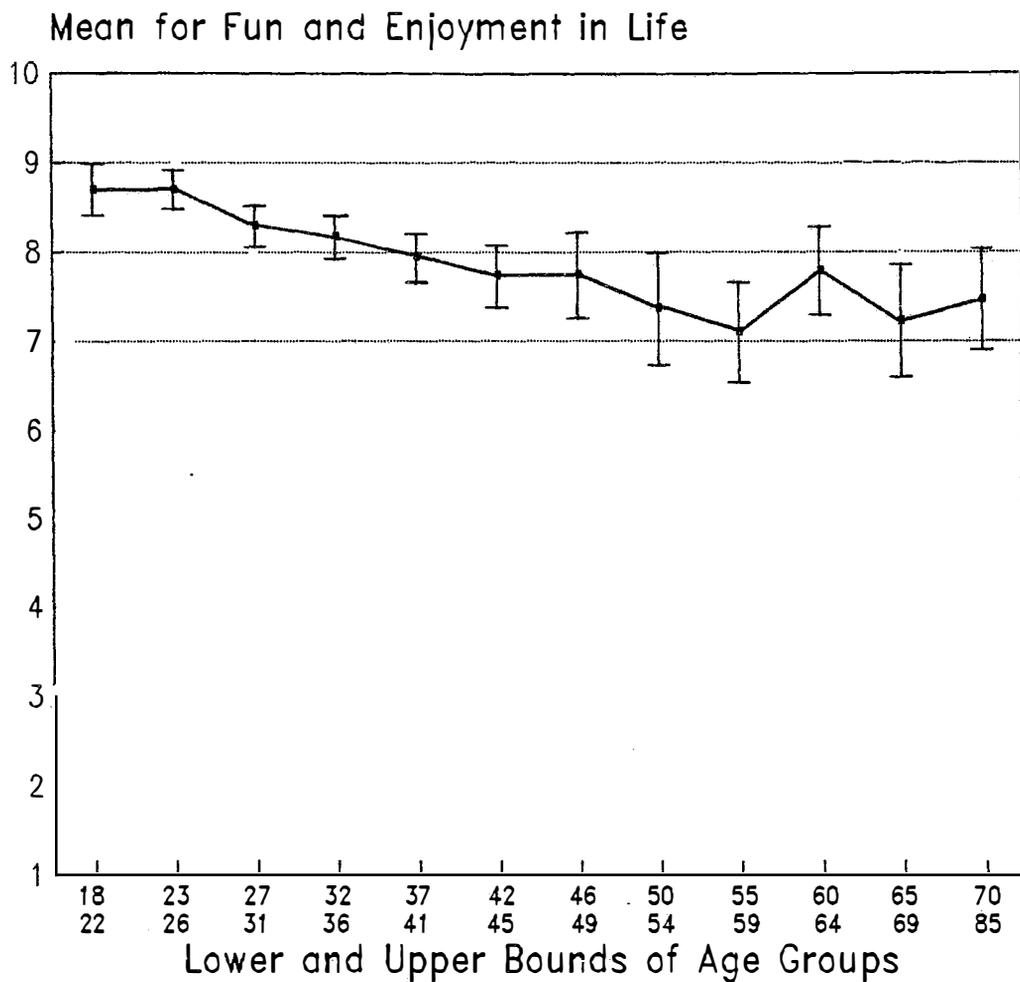


Figure 3. Mean importance rating given to the value security by 12 age groups.

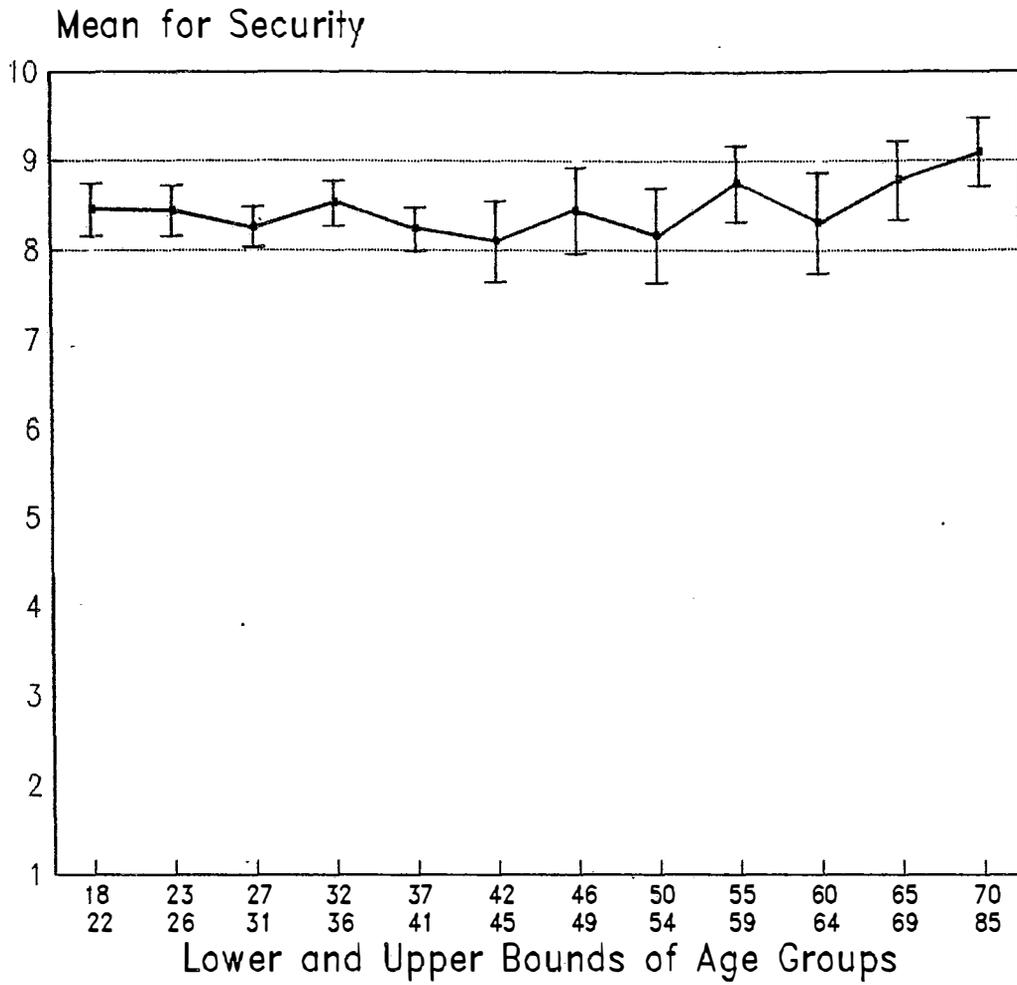
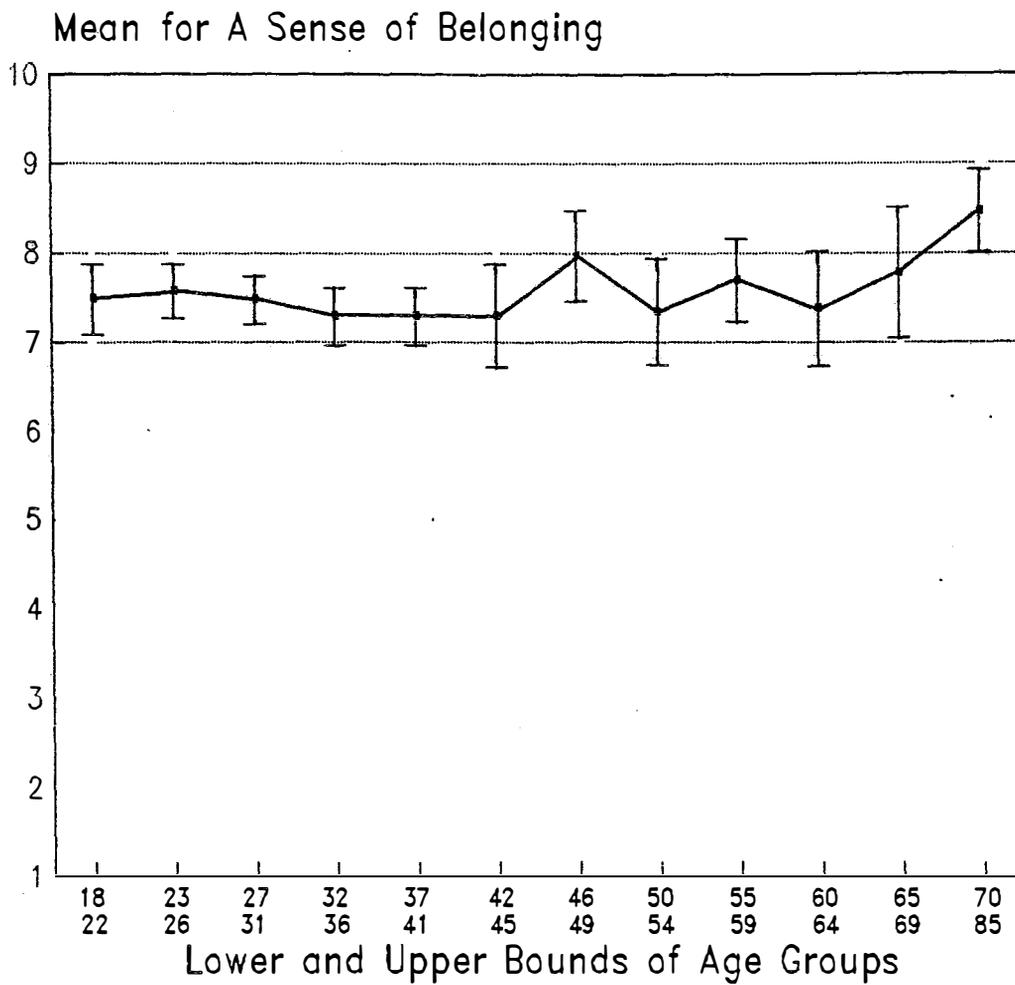


Figure 4. Mean importance rating given to the value a sense of belonging by 12 age groups.



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