

Please note that this is a preliminary report which should not be quoted without consulting the author.

PERSONAL TRAITS OF OLDER PEOPLE AS JUDGED BY THEIR JUNIORS

Address delivered at the Second International Gerontological Congress, St. Louis, Mo., September, 1951

Albert R. Chandler, Philosophy Department

Ohio State University, Columbus, Ohio

1951.

There is a wide spread and long standing belief that certain changes of personality are a normal result of the aging process. Most of these changes are for the worse. More than two thousand years ago Aristotle in his book on rhetoric described men past their prime of life as being stingy, cowardly, pessimistic, talkative, living in the past, disinclined to joke or laugh, and having other disagreeable traits.

About five years ago, Cavan, in an article called "Index of Senility" in R.J. Havighurst's volume on Social Adjustment in Old Age*, summarized the opinions of various professional writers, mostly psychiatrists, that the following changes are frequent in old age:

Worry over finances...; worry over health; feeling unwanted, isolated, lonely; feeling suspicious; narrowing of interests...; loss of memory...; mental rigidity; overtalkativeness, especially of the past; hoarding, often of trivial things; loss of interest in activity...; feeling of inadequacy, leading to feelings of anxiety, feeling of guilt, irritability; reduction of sexual activity but increased sexual interest, especially in the male; regression to earlier level of expression; untidiness, uncleanness; conservatism...; inability to adjust to changed conditions; decreased social contacts and participation.

At the start of the study on which I wish to give you a preliminary report, I had no intention of attacking a doctrine that has been held for so long by professional and popular opinion. Rather, I was influenced by Cavan's suggestion in the article above mentioned that an index of senility should be developed by extensive observations on personality at different ages in the later years of life. I aspired to make a simple preliminary study that would pave the way for the more elaborate studies she suggested.

*Social Science Research Council, N.Y., 1946, pp. 139-145

RECEIVED

NOV 15 1951

INSTITUTE OF
INDUSTRIAL RELATIONS

I set out to gather data on personal traits in different age groups. I began with age 50, in order to include the transition from middle age to old age. I chose to gather reports on older people by persons younger than they. One reason for this was distrust of many forms of self-reports. Another was the fact that I had readier access to students, young alumni and professional groups than to old people themselves. I was impressed by the fact that much of the study of old age is based on the experience of social workers, who see people in economic distress, and of clinical psychologists and psychiatrists, who see people in mental illness. Such studies are certainly valuable, but they need to be supplemented by studies of normal or superior old people. I felt that reports by college students, alumni and professional people would reach a group of better than average mentality and socio-economic status.

In constructing my questionnaire I selected traits that have been supposed to change with age in some typical fashion, and which are easily observed in persons we know well. The twenty-two traits I selected were--

Concern about health, enjoyment of food, inclination to physical activity, concern about money, concern with past as compared with the present and future, memory, ease in changing habits to meet changed conditions, rigidity of opinion, interest in social contacts, suspicion, dominance, talkativeness, irritability, tidiness and cleanliness, inclination to give advice, interest in public affairs, interest in intellectual problems, concern with personal religion, pessimism and optimism, fondness for competition, adventure or risk, sensitivity to noise and confusion, and sense of humor.

You will see that I used some but not all of Aristotle's and Cavan's items. I used the method of multiple choice, offering three, or rarely four, choices. I thought my informants would find this easier than scales of 5, 7, or 10 points, and would be less like to throw my questionnaire in the waste-basket. I did not hesitate to use value terms, as in "dwells unduly on the past," "normally open to argument," "talks too much."

This questionnaire was circulated^Q to students, alumni and certain professional groups. I received 503 usable returns. These were submitted

to statisticians in the Psychology Department of Ohio State University to determine which traits showed changes with age and to what degree. To my astonishment they found that no single trait showed any significant relation to age.

Could it be that no one's personality changes with age? That seemed contrary to general observation. Could it be that changes in one direction are balanced by equally numerous changes in the opposite direction? That also was scarcely plausible.

I decided to approach the matter from another angle. Much as been said of the need of longitudinal studies. If I had been thirty years younger I might have projected a series of follow-up studies at five-year intervals on as many as possible of the 503 persons described in these returns. It occurred to me that a partial substitute for a longitudinal study might be found by appealing to the memories of my informants. I could ask them, "How has this man, whom you know well, changed in a certain period?"

The choice of a period presented difficulties. Memory would be less reliable for a long period than a short period. On the other hand, a short period might be too short for observing gradual changes. A long period would have the disadvantage that a young reporter would have to reach back into his childhood to find the beginning of it. I fixed on a period of five years, not thinking it perfect, but thinking it a tolerable compromise in the circumstance.

My second questionnaire accordingly asked for reports on increases and decreases observed in these same 22 traits in the preceding five years. I soon abandoned this questionnaire, because I realized that I could not judge changes in certain traits as desirable or undesirable unless I knew the present state in which the person was left. For instance, moderate concern about health is considered better than slight concern or extreme concern.

On this basis, increase from a low to a medium degree of concern would be desirable, but increase from a medium to a high concern would be undesirable. Results on this questionnaire are not included in this report.

My third questionnaire was essentially a combination of the two preceding ones. I used the same 22 traits, asking whether the present degree of each was low, medium or high, and whether in the last five years it had decreased, remained unchanged or increased. In general I did not retain the multiple choices; I feared they would be confusing when linked with idea of increase and decrease. Thus instead of the multiple choice: "over anxious about health, reasonably careful of health, careless about health," I offered, "concern about health—low, medium, high." In a few cases I felt it necessary to retain some remnants of the multiple choice method. For instance, in the case of optimism I offered, "outlook (pessimistic—low; intermediate or mixed—medium; optimistic—high)." This change of method casts some doubt on comparisons of returns on this and the first questionnaire. Judgments may be differently distributed when an item reads, "concern about health—low, medium, high" than when the extremes are described as "careless about health" and "over anxious about health."

Explanation of Tables

Table I shows the distribution of persons described in Questionnaires I and III according to age and sex. You will note that the smallest group in Questionnaire I is 24 women aged 60-64, and the largest, 48 women past 80. In the third questionnaire the smallest group is 3 women aged 50-54, and the largest, 12 men aged 60-64. In this case, smaller groups were combined for statistical purposes.

The figures on education (not mimeographed) on Questionnaire I throw some light on the mentality and socio-economic status of the group: 26% of men and 5% of women had advanced degrees; 14% of men and 13% of women had finished college; 23% of men and 42% of women had finished high school, leav-

ing 35% of men and 40% of women who never finished high school. On Questionnaire III the percentage is similar for advanced degrees; higher for the two middle groups, and therefore lower for the lowest group. This shows both groups well above the general public in education.

Table II deals with a rating scale of desirable and undesirable traits applied to Questionnaire I. This scale will be described in connection with Table IV. Possible scores ranged from -9 to 49; to avoid negative quantities 9 was added to all scores. The lack of any trend with age is clear, but the sex differences prove to be statistically significant.

Table III A deals with a similar rating scale applied to the present traits in Questionnaire III. Neither age nor sex differences are significant here.

Table B under III deals with changes—desirable and undesirable. Here men show more high scores than low scores; women, the reverse. Persons aged 50-64 show more high scores than low scores, older persons, the reverse. For both sex and age the value of p , equal .10 to .05 is not so good as statisticians like to see. It indicates that there is no more than one chance in ten that the apparent differences are due to chance; statisticians demand one in 20 or one in 50. But as explorers in an untrodden field, I think we may accept these figures as a clue.

Table IV lists the traits used, with their frequencies, and shows how they are used as a rating scale. In the original scale a single degree of each trait was chosen and rated plus or minus. For instance, in the first few traits at the top of the column, "low" was rated minus. In this table, instead of rating "low" minus, we rate "^{low}not" plus, and so throughout. Thus all minuses are avoided, and comparison is made easy.

This scale is merely an expression of my opinion, formed after consulting friends in the psychology departments who are interested in these matters. My opinion is that it is "better" in the practical sense of more useful or agreeable to himself and to others for a person to have the degree of each trait that is indicated at the left of this table than to have some other degree of it.

In the rating scale for changes, similar assumptions were made. In such traits as humor, tidiness, etc. "High" is preferred, therefore all increases are rated plus and all decreases minus. This applies to items 5,8,9,11,16,18,19,20,21,24. In a few cases we find the reverse, as in sensitivity to noise and confusion, where "low" is preferred. This applies to items 7,15,23, where medium degree is preferred, as in concern about health or money, changes toward the medium or terminating in it are rated plus, changes away from it, minus. This applies to items 3,4,6,10,12,13, 14,17,22.

Traits 4,5,20 and 22 were not included in the original scale for present traits. But in rating changes I perhaps illogically ventured to use a tentative evaluation as a basis.

The little table at the bottom of Table IV is of great importance. Since there are 22 traits and 92 subjects involved, there were 2024 judgments to be made. Of these there turned out to be 22.6% desirable changes, 38.8% undesirable changes and 37.0% no change. The apparent contradiction between this preponderance of undesirable changes and the lack of significant differences in present traits among age groups will be discussed later.

Returning to the body of Table IV we find eighteen present traits arranged in descending order of frequency for the largest sub-group, namely the 278 men described in returns on Questionnaire I. This enables the reader

to make quick comparisons of the frequencies of each trait in different groups by bringing them on the same *line*.

Comparison of the first two columns shows that the record of the women is close to that of the men, but more frequently below it than above it. A Chi Square test (p equals .05-.02) shows that the sex difference is significant. The largest differences are in #18, #23 and #17: more men are interested in public affairs by 14%, fewer men are high in sensitivity to noise and confusion by 14%, and more men are normal in giving advice by 13%. Ladies present are at liberty to argue that these traits are unimportant.

Columns 3 and 4 record the present traits of the smaller group described in Questionnaire III. Comparisons with the larger group are subject to the reservation that the questions were somewhat differently formulated as mentioned above. On the whole these differences are unfavorable to the smaller group. Comparing men with men (columns 1 and 3) we find notably more men in the larger group with medium inclination to talk (#14), medium concern about health (#3) and medium concern about money (#6). Comparing women with women (columns 2 and 4) we again find inferiority in items #14, #3 and #6, but also a sharp inferiority in #9, ease of changing habits. On the other hand we find both sexes in the smaller group showing less irritability than in the larger group (#15).

Comparing women with men in the smaller ^{group} we find women notably inferior with reference to memory (#8), pessimism (#21), and public affairs (#18).

Columns 5,6,7,8 show desirable and undesirable changes on all 22 traits in men and in women. You will note that no trait shows undesirable changes in as many as 50% of the subjects. The nearest approach is inclination to physical activity (#5), which declined in 48% of men and 45% of women. Observers may have difficulty in distinguishing diminished inclination to activity from enforced reduction of activity due to weakness or physical handicaps. A

person who no longer goes up stairs two steps at a time may still wish he could do so. I therefore hesitate to consider reports of change in this item as showing a change in personality.

In the case of sensitivity to noise and confusion (#23) increases exceeded decreases by 24% to 7% in men, 43% to 3% in women. Power of memory (#8) showed decreases exceeding increases by 17% to 2% in men, 35% to 3% in women.

In no trait did desirable changes exceed undesirable ones by as much as 10% in men or 20% in women. Interest in prayer, sacraments and other aspects of personal religion showed increases exceeding decreases by 18% to 3% in women and 13% to 7% in men.

In two traits men and women show opposite trends. Interest in intellectual problems of science, philosophy and religion showed increases exceeding decreases in women, 19% to 5%, and decreases exceeding increases in men, 18% to 7%. In women changes toward pessimism (#21) exceed those toward optimism, 27% to 8%; in men, changes toward optimism exceed those toward pessimism, 13% to 9%.

Discussion of Results

There is one outstanding paradox in these data. On the one hand, the different age groups show no significant difference in personal traits. That is, groups of people in their 70's or 80's show no larger proportion of persons who are suspicious, irritable, talkative, pessimistic, etc. than the group of fifty-year-olds. On the other hand 5/8 of the traits show changes in the past five years. These changes do not balance on another, but undesirable changes predominate in a ratio of about 5 to 3.

The problem is, how is it possible that deterioration is reported in all age groups, yet older groups show no inferiority to younger groups? Various hypotheses deserve consideration.

Hypothesis A. Changes for the worse may not really predominate. Since reports

are based on self-reports and popular opinion, etc.

on changes were asked for, and popular opinion expects undesirable changes, my informants may have tended to choose subjects who showed many undesirable changes.

An objection is that more than half of my informants chose one of their parents as their subject. This suggests that they chose some one they knew especially well or some one they especially admired.

Hypothesis B. The older groups may be really inferior, this inferiority being disguised by a tendency of the reporters to make allowance for age. A reporter may say to himself, "This man is ^{not} unduly suspicious, or irritable, or talkative—for a man of his age."

An objection is that it would be strange if this allowance should exactly offset an actual inferiority for each age group.

Hypothesis C. Deterioration may actually predominate in each age group, yet the older groups may not be actually inferior. The explanation might be found in a kind of selective mortality. The eighty-year olds who are alive today are not a random sample of those who were fifty years old thirty years ago. We know that those who had long-lived ancestors, those who were not over weight, etc. have survived in larger numbers than the rest. I do not mean to suggest that superior personality directly increases longevity, though I would not rule out the possibility. What I do suggest is that the basic causes of longevity, whatever they may be, contribute to the production and maintenance of superior personality.

This is the hypothesis that I find most seductive, but that is a subjective reaction.

An objection to it is that women are inferior to men by the ratings I have used, yet we know that women outlive men.

In any case I suggest that the relations between personality and longevity deserve study.

This is only a preliminary report. I wish to carry the study somewhat further before I publish anything on it. I am eager to have your criticisms and suggestions either now, or by later conversation or correspondence.

PERSONAL TRAITS OF OLDER PEOPLE AS JUDGED BY THEIR JUNIORS

Albert R. Chandlee, Philosophy Department, Ohio State University, Columbus, Ohio

Table I -- Distribution by Age and Sex

First Questionnaire, 503 returns

Age	Total	50-54	55-59	60-64	65-69	70-74	75-79	80+
Male	278	47	47	40	40	36	33	35
Female	225	37	31	24	30	30	25	48
Both sexes	503	84	78	64	70	66	58	83

Third Questionnaire 92 returns

Age	Total	50-54	55-59	60-64	65-69	70-74	75-79	80+
Male	54	8	11	12	6	7	6	4
Female	38	3	5	9	4	6	6	5
Both sexes	92	11	16	21	10	13	12	9

Table II -- First Questionnaire, 503 returns

Medians of scores on rating scale by age and sex

Eighteen present traits scored as +1 (desirable) or -1 (undesirable)

Age groups	50-54	55-59	60-64	65-69	70-74	75-79	80+	All age groups
Medians of males	15.2	15.1	13.5	14.5	14.2	15.6	14.7	14.7
Medians, females	14.7	13.1	14.0	14.5	13.5	14.8	14.1	14.1

Note: To avoid negative quantities, 9 was added to all scores.

By Chi Square test, age differences are non-significant

By Chi Square test, for scores by sex, p equals .05-.02

Table III -- Third Questionnaire, 92 returns

Distribution of scores on rating scales by age and sex

A. Eighteen present traits scored as +1 (desirable) or -1 (undesirable)

Algebraic sum of scores	-7 to +3	+4 to +7	Totals
Number of males	24	30	54
Number of females	22	16	38
Both sexes	46	46	92

By Chi Square test, p equals .30 to .20

Algebraic sum of scores	-7 to +3	+4 to +7	Totals
Age 50-64	26	22	48
Age 65 and over	20	24	44
Both age groups	46	46	92

By Chi Square test, p equals .80 to .70

B. Twenty-two changes scored as +1 (desirable) or -1 (undesirable)

Algebraic sum of scores	-13 to -2	-1 to +7	Totals
Number of males	21	33	54
Number of females	22	16	38
Both sexes	43	49	92

By Chi Square test, p equals .10 to .05

Algebraic sum of scores	-7 to +3	+4 to +7	Totals
Age 50-64	18	30	48
Age 65 and over	25	19	44
Both age groups	43	49	92

By Chi Square test, p equals .10 to .05

Table IV

Frequencies of Traits and Changes, Distributed by Sex

Traits	Questionnaire I				Questionnaire III			
	Present Traits		Present traits		Changes in past 5 years			
	278 men	225 women	54 men	38 women	54 men	38 women	54 men	38 women
(columns)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
#24. Sense of humor, not low	94%	94%	89%	82%	4%	2%	0%	11%
#16. Tidiness & cleanliness, not low	90	93	93	93	4	7	0	19
#18. Interest in public affairs, not low	89	75	94	76	13	9	21	13
#9. Ease in changing habits, not low	85	83	70	58	9	15	11	40
#8. Power of memory, not low	85	74	89	59	2	17	3	35
#11. Interest in social contacts, not low	85	87	80	76	17	26	13	32
#21. Not pessimistic	83	82	93	71	13	9	8	27
#23. Sensitivity to noise & confusion not high	83	69	72	61	7	24	3	43
#7. Interest in the past, not high	78	68	83	87	7	22	3	21
#14. Inclination to talk medium	75	76	48	53	15	6	11	5
#12. Normal confidence in others	75	75	83	68	2	4	11	13
#3. Concern about health, medium	74	70	52	45	28	22	21	21
#6. Concern about money, medium	73	70	50	42	24	17	5	21
#19. Interest in intellectual problems, not low	72	62	67	55	7	18	19	5
#13. Normally cooperative	69	59	67	61	18	9	11	8
#17. Willing to give advice when asked	69	56	56	61	9	9	13	11
#15. Not irritable	69	69	91	82	17	11	5	29
#10. Normally open to argument	52	41	57	47	11	20	11	11
Mean percents	77.8	72.4	74.1	65.3				
#4. Enjoyment of food (toward medium)					13	4	8	21
#5. Inclination to physical activity (toward high)					4	48	0	45
#20. Interest in prayer, sacraments, etc. (toward high)					13	7	18	3
#22. Interest in competition, etc. (toward medium)					18	29	8	26
Totals					255	345	203	440
Means					11.6	15.7	9.2	20.0
Possible changes 2024								
Desirable changes	458	22.6%						
Undesirable changes	785	38.8%						
No change	749	37.0%						
No report	32	1.6%						