

HEALTH, SOCIOECONOMIC STATUS AND SELF-PERCEPTION IN THE ELDERLY: AN APPLICATION OF THE INTERPERSONAL CHECKLIST*

ALOIS ANGLEITNER

Department of Psychology

University of Bonn

Bonn, West Germany F.R.G.

ABSTRACT

One-hundred and thirty-four men and women in the Bonn Longitudinal Study of Aging (BLSA) sample from sixty-two to eighty-one years of age were tested and re-tested a year later using the Interpersonal Checklist (ICL) to study the effects of health, sex, socioeconomic status and time of self perception. Preliminary item analysis justified the use of the ICL for older people. A multiple analysis of variance for repeated measures with the factors SEX, SES, and TIME yielded two interactions for "rebellious-distrustful (FG by sex x health) and "self effacing-masochistic" (HI by time x health) and three main-effects for "agressive-sadistic" (DE by sex), "self-effacing-masochistic" (HI by SES) and "docile-dependent" (IK by time).

In a recent review of geropsychology, it is stated that "Clearly, low socioeconomic status, poor health, institutionalization, and other negative concomitants contribute in large measure to views the aged hold of themselves." [1, p. 588] Other studies [2, 3] have found some sex differences, and longitudinal studies indicate that not much change is to be expected over time in self-perception. This study tries to separate the effects of health, socioeconomic status, sex and time in self-perception [4].

* This paper presented at the 10th International Congress of Gerontology in Jerusalem, June 22 to 27, 1975.

BLSA and ICL Studies

In the Bonn Longitudinal Study of Aging (BLSA) sample, 136 men and women (seventy-five men and sixty-one women) from sixty-two to eighty-one years of age were tested and retested a year later using the Interpersonal Checklist (ICL) [5] (in a German translation by C. Theissen and H. Rauh). The ICL is a self-rating checklist and is intended to measure Leary's Level II of personality, the level of conscious self-descriptions [6]. The variables are presented in a circular arrangement containing eight octants with sixteen items each. In our version of the ICL, participants were instructed to answer each item with yes or no, depending on whether they felt that the item corresponded to their own self impressions or not. The octant arrangement was constructed with the assumption that scales located in adjacent octants are more closely related than nonadjacent ones, a proposition confirmed by our findings.

Table 1 shows the average interscale correlations at two points of measurement, represented in terms of distance between the scales, that is the number of octant boundaries that must be crossed in moving around the circle from one scale locus to the other.

RESULTS

These results support Leary's proposition that "opposite points on the perimeter (of the circle) stand for psychologically opposite behavior characteristics." [7, p. 214]

The original scale descriptions are:

- AP = managerial — autocratic
- BC = competitive — narcissistic
- DE = aggressive — sadistic
- FG = rebellious — distrustful
- HI = self-effacing — masochistic
- JK = docile — dependent
- LM = cooperative — overconventional
- NO = responsible — hypernormal

Table 1. Average Interscale Correlations for Two Measurement Points (N = 135)

<i>Measurement Point</i>	<i>Average Interscale Distances</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1st	0.39	0.19	0.07	0.04
2nd	0.49	0.24	0.13	0.07

The original 128 item version of the ICL has seldom been used with elderly samples and the translated version has not yet been widely applied. For these reasons, preliminary item analyses were carried out. Using the Spearman-Brown formula, the split-half reliabilities average as follows over both testing situations: AP 0.77, BC 0.59, DE 0.59, FG 0.60, HI 0.77, JK 0.76, LM 0.77, NO 0.76. It therefore seems justified to use the scales for older people.

The octant scale arrangement is not the only scoring system for the ICL, and although we cannot recommend the alternative method, it should be mentioned. Particularly in studies in the area of clinical psychology, a two-fold score based on the dimensions dominance-submission and love-hate is frequently encountered. However, consensus as to how these scores are to be obtained has not yet been achieved. Furthermore, the results of factor analytic studies reported by Wylie favor a three-factor ICL interpretation, indicating that a two score system should be used with caution [7]. For these reasons, no love-hate and dominance-submission scores were used in this study.

We have continued efforts to uncover more information on the factor structure of our ICL translation. The principle axes method and the Eigenwert rule for factor extraction together with the Varimax rotation produced for both measurement points two factors apiece which account for 42.1 and 45.5 per cent of the total variance respectively. The first factor was identifiable as "dominance," based on significant positive loadings in AP, BC, DE and the second as "love," with significant positive loadings in HI, JK, LM, and NO.

The FG scale designated as rebellious-distrustful could not be integrated in the interpretation due to insufficient communalities in both analyses. Our two factors correspond to the first two of three factors found in other studies [8, 9]. They also support the acceptance of two factors made by Lange [10]. The hypothesized bipolarity of the two factors, on the other hand, was not substantiated. After factor scores were computed, the correlations between the two measurement points were +0.80 for the dominance factor and +0.66 for the love factor, indicating high stability for the scales included in the dominance factor and moderate stability for the scales included in the love factor. From these results we can assume that if there is some change in self-perception over time, it is probably in the scales constituting the love factor.

The participants in this study can be characterized by the means and standard deviations of their answers recorded in terms of the octant scores. This information is given in Table 2.

Since checking some items as true is viewed as normal, while checking a greater percentage is viewed as having an unhealthy amount of the trait, there is some danger in applying the scale descriptions to our results as long as no normative data are available. If one inspects the means for psychiatric outpatients as reported by LaForge and Suczek, it seems that our sample yielded consistently higher scores on LM (cooperative-over-conventional) and NO (responsible-hypernormal) and lower scores in FG (rebellious-distrustful).

Table 2. Means (M) and Standard Deviations (SD)
for Two Measurement Points

<i>Scales</i>	<i>1st Measurement Point</i>		<i>2nd Measurement Point</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
AP	6.7	2.1	6.7	2.5
BC	5.7	2.1	5.5	2.2
DE	7.7	1.6	7.4	1.9
FG	5.4	2.2	5.2	2.4
HI	7.2	2.6	7.8	3.3
JK	6.1	2.3	6.7	2.9
LM	9.4	2.4	9.7	2.8
NO	11.4	2.5	11.1	2.8

For checking the effects of time, health and SES in self-perception as measured by the ICL we used an analysis of variance of repeated measures (fixed effects). The interactions and main effects listed below are the results of this analysis with the factors sex; socioeconomic status (SES) as rated at the first measurement point by an interviewer team on a five-point scale with one or two interpreted as low SES and three, four, or five as high SES; health status as rated by the same team on the basis of interview data on physical ailments also at the first measurement point with ratings from one to four counting as good and five to nine as poor health, and time. The analysis yielded these results at the 1 per cent level of significance:

<i>Interactions</i>		<i>Main Effects</i>	
for FG rebellious- distrustful	sex x health	for DE aggressive- sadistic	sex
for HI self-effacing- masochistic	health x time	for HI self-effacing- masochistic	SES
		for JK docile- dependent	time

Although the health variable did not yield any important main effects, the interactions point out its special importance.

Turing first to the interactions, it can be stated that opposite trends are found

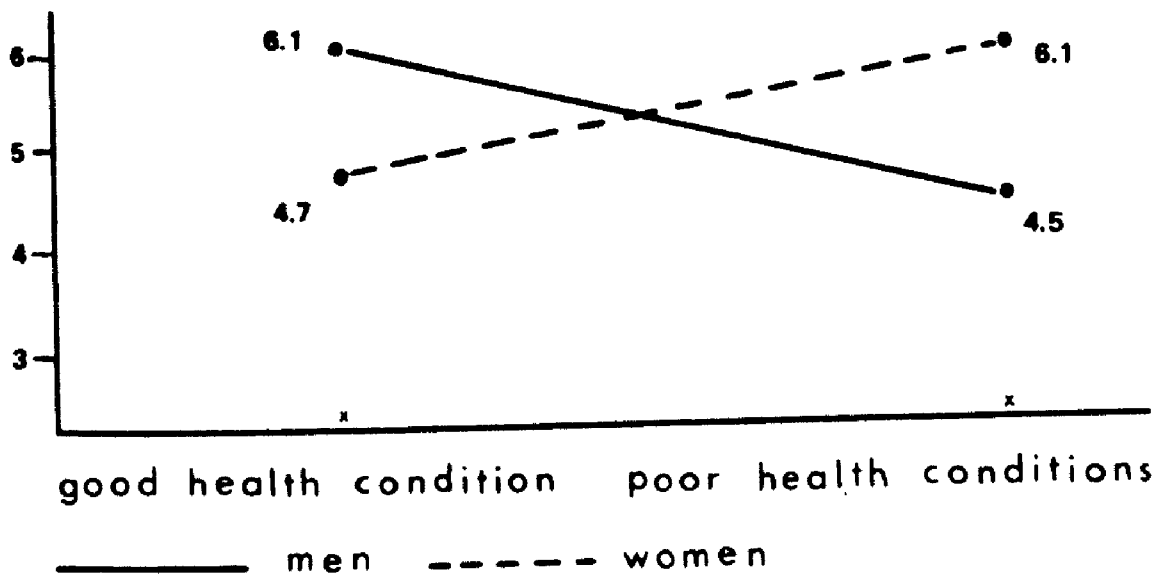


Figure 1. Means for men and women differing in their health conditions on the scale "rebellious-distrustful" (FG).

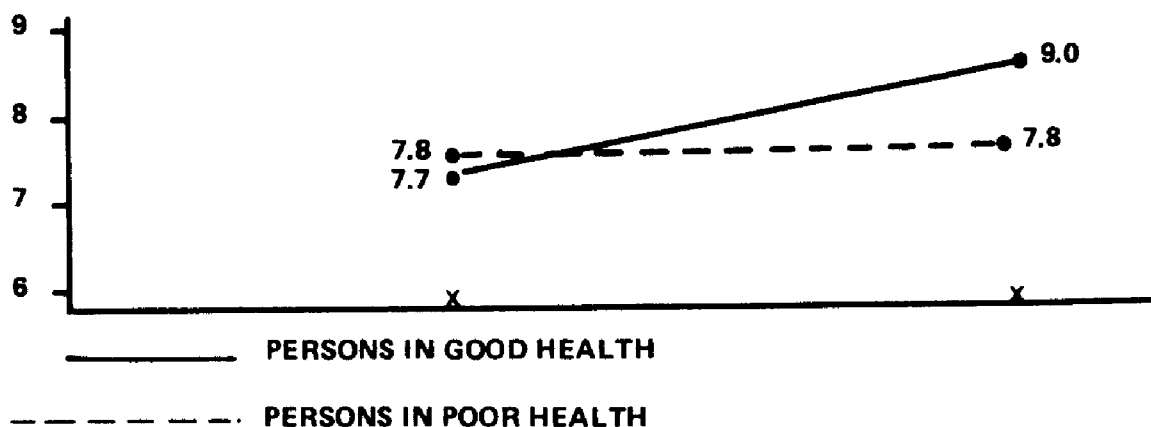
for men and women separated by the two health conditions. Relatively healthy men describe themselves as more "rebellious-distrustful" (FG) than men in worse health, whereas women appear most "rebellious-distrustful" when in poor health. Figure 1 illustrates this interaction.

Regarding the two testing times, our results indicate that without reaching the level of those in poor health, persons in good shape do see themselves as more "self-effacing-masochistic" (HI) in the second testing than during the first session. The group in poor health describe themselves as more "self-effacing-masochistic" than the other in the first testing and show little change. The means for this interaction are shown in Figure 2.

Applying the scale descriptions to our main effects leads us to say that the men in our sample are more "aggressive-sadistic" (DE) than the women, and that persons with low SES describe themselves as more "self-effacing-masochistic" (HI) than those with high SES. In the second testing, our participants obtained higher "docile-dependent" (JK) scores than in the first testing. Table 3 gives the means for the main effects.

Discussion

It will be recalled that as a rule, relatively few items per scale were indicated by our respondents as coinciding with views they held about themselves. Exceptions to this rule occurred in the cooperative-over-conventional LM scale and the responsible-hypernormal NO scale. Applying the bipolar scale descriptions to these results would therefore lead us to conclude that our participants almost always fall into the healthy trait category designated by the first terms of the scale names.



NOTE: The one-year test-retest-correlation coefficients for the SES — and health-ratings are 0.70 and 0.67 respectively.

Figure 2. Means for the two measurement points separated for the two health conditions on the scale "self-effacing-masochistic" (HI)

Table 3. Means of Main Effects for the Factors Sex-SES, and Time

Scales	Sex		SES		Time	
	Men	Women	Low	High	1st mp	2nd mp
Aggressive-Sadistic (DE)	8.0	7.2	—	—	—	—
Self-effacing-Masochistic (HI)	—	—	9.0	7.1	—	—
Docile-Dependent (JK)	—	—	—	—	6.3	7.0

If we were to accept the scale names at face value, some of our results would take on familiar form. For example, we find the men describing themselves as more aggressive than women relating their self images to the very same items. We find persons with higher socioeconomic status putting themselves in the forefront more than those with lower socioeconomic status do. We find the self descriptions of retestees indicating a more pronounced measure of docility at the second measurement point.

More important than these surprisingly predictable results is the evidence that personal health effects self-perception. As repeatedly observed in former studies, we find that the subjective opinion a person has concerning his own state of health, his own judgment of the strain of health factors, bears the closest relationship to how he evaluates his own personal characteristics.

Another interesting aspect of our results concerns the different circumstances under which men and women report seeing themselves as

rebellious. The interplay of health conditions and sex roles manifests itself in the following way. Men find it acceptable to agree with rebellious items as long as they are in good health, while the women find the rebellious items appropriate self descriptions only in case of physical infirmity.

But there is also room to speculate whether an aged person participating in a psychological experiment actually sees himself in the way reported or only chooses to present himself in such a way [7]. Be that as it may, it seems important for future research to take into account the differences in self-perception determined by health, SES, sex, and time.

REFERENCES

1. R. Bennett and J. Eckmann, Attitudes Toward Aging: A Critical Examination of Recent Literature and Implications for Future Research, In: C. Eisdorfer and M. P. Lawton (eds.), *The Psychology of Adult Development and Aging*, APA, Washington, 1973.
2. F. M. Carp, *A Future for the Aged*, University of Texas Press, Austin, London, 1966.
3. A. K. C. Theissen, *Untersuchungen zum Selbstbildnis älterer Menschen*, Phil. Diss. Bonn, 1970.
4. J. H. Britton, Dimensions of Adjustment of Older Adults, *Journal of Gerontology*, 18, pp. 60-65, 1963.
5. R. LaForge and R. Suczek, The Interpersonal Dimension of Personality: III. An Interpersonal Check-List, *Journal of Personality*, 24, pp. 94-112, 1955.
6. T. F. Leary, *Interpersonal Diagnosis of Personality*, Ronald, New York, 1957.
7. R. C. Wylie, *The Self-Concept*, Rev. ed. Vol. 1, University of Nebraska Press, Lincoln, 1974.
8. P. J. Bentler, Interpersonal Orientation in Relation to Hypnotic Susceptibility, *Journal of Consulting Psychology*, 27, pp. 426-431, 1963.
9. S. Briar and J. Bieri, A Factor Analytic and Trait Inference Study of the Leary Interpersonal Check List, *Journal of Clinical Psychology*, 19, pp. 193-198, 1963.
10. D. E. Lange, Validation of the Orthogonal Dimensions Underlying the ICL and the Octant Constellations Assumed to be Their Measure, *Journal of Projective Techniques and Personality Assessment*, 34, pp. 519-527, 1970.

Direct reprint requests to:

Alois Angleitner
 Psychologisches Institut
 Der Universität Bonn
 An Der Schlosskirche 1
 53 Bonn
 Germany