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## SUBJECTIVE WELL-BEING AND AGE\*

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**ABSTRACT.** The relationship between subjective well-being and age is equivocal. This issue is addressed by two studies. In the first, a cross-sectional design with over 1000 participants revealed a positive association between well-being and age, with age as the most significant predictor of well-being and age, with age as the most significant predictor of well-being using multiple regression analysis. A longitudinal study found less stability in well-being than has been found in the past. Differential age experiences and access to available resources may help to explain the results.

Reviews of the subjective well-being (SWB) literature in recent years have yielded some confusing and contradictory conclusions, and none has been more confusing than the relationship between SWB and age. Examination of only two reviews (Diener, 1984; Wilson, 1967) reveals the difficulty. According to Diener (1984), there is no relationship between SWB and age, and this position has gotten some support from Costa *et al.* (1987). According to Wilson (1967), however, there is a negative relationship, where the young tend to be happier than the old. Others (e.g., Kutner *et al.*, 1956) suggest a positive relationship between age and morale. Veenhoven (1984), perhaps to settle this issue, has suggested that hedonic level decreases with age while contentment increases. This view finds some support in the work of Campbell, Rodgers, and Converse (1976) in their national study of SWB in the United States, so long as one equates hedonic level with happiness and contentment with satisfaction. Definition of understanding of well-being, too, may well vary with age (Ryff, 1989).

A final resolution to this debate is unlikely, but we do have two sets of data that bear on the question. The first phase of a study of "Well-being and everyday activities" involved over 1000 Canadians who ranged in age from 15 to 95. After a seven year interval, 93 research participants

repeated these SWB measures and others (see Horley and Lavery, 1991). These cross-sectional and longitudinal studies can address the problem in various ways (e.g., the age distribution of SWB scores at any given time can reveal a trend among respondents, or the tracking of individuals over time can document SWB as respondents age).

#### STUDY 1 – A CROSS-SECTIONAL EXAMINATION OF CANADIANS' WELL-BEING

##### *Method*

Respondents were recruited in 1980 on a volunteer basis through community advertisements in St. Catharines, Ontario, Canada. In total, 1321 people agreed to participate in a study of well-being and everyday activities. There were 691 women and 606 men (24 unknown), whose ages ranged from 14 to 95 years. They were almost exclusively white and middle-class, and roughly 56% were married.

All respondents completed a number of SWB measures. These included: a version of the Affect Balance Scale (Bradburn, 1969) which examines happiness as a function of both positive and negative affective ratings; an 11-point life satisfaction rating used by Atkinson (1982) and others; and an 11-point quality of life self-anchoring ladder, after Cantril (1965), with a rating of present life quality (see Horley, 1992). Among other measures, respondents completed a symptomatology inventory (MacMillan, 1957) that required frequency ratings of a number of common symptoms of ill health.

Respondents completed the assessment booklets in small groups of various sizes led by a team of research assistants. Analyses of variance were calculated on each of the three SWB measures using seven age levels. These age groups were: 19 and under, 20–29, 30–39, 40–49, 50–64, 65–74, 75 and over. Using demographic and health variables as predictors, a multiple regression analysis was performed on a multiplicative combination of the three measures, interpreted as a generalized well-being rating.

TABLE I  
Average well-being ratings of various age groups

Age groups	Well-being scale		
	Life satisfaction	Quality of life	Happiness
19 & under	7.06	6.80	21.91
20-29	7.04	6.76	23.49
30-39	6.92	6.92	23.81
40-49	7.22	7.27	24.22
50-64	7.79	7.74	24.32
65-74	7.94	8.06	24.43
75 & over	7.49	7.69	24.30

### *Results and Discussion*

Analyses of variance revealed a significant age effect. As shown in Table I, all measures showed some increase with age particularly after 40 years of age. The life quality ratings did drop for those over 75, but they remained well above the ratings of those under 40.

Multiple regression analysis (see Table II) revealed a predictable pattern of results. Age was found to be a significant predictor of SWB, as was health symptomatology. Marital status with married individuals reporting higher well-being than single individuals, was a significant correlate but not predictor.

The findings that health and marital status are significant correlates of SWB is not surprising given a number of fairly consistent results in the literature (Diener, 1984). The rather massive age effect, however, may be somewhat surprising, at least to some. Even happiness ratings, in contrast to Campbell *et al.* (1976), increased with age.

Questions that cannot be addressed by this cross-sectional study (e.g., Are these results consistent for respondents over time?) can be examined, in part, in a second phase of this research.

TABLE II  
Regression of demographic variables on well-being ( $n = 1186$ )

Multiple $R = 0.39$ Multiple $R^2 = 0.15$ $F(5,1180) = 41.49$ , $p < 0.01$				
Variable	r	Standardized coef.	t	p
Constant		0.00	18.14	0.01
Age	0.27	0.27	7.33	0.01
Health status	-0.25	-0.28	10.12	0.01
Marital status	0.21	0.03	0.82	n.s.
Education	0.01	-0.01	0.24	n.s.
Gender	0.01	0.10	2.18	0.05

STUDY 2 – A LONGITUDINAL EXAMINATION OF SWB

*Method*

A random selection of the Study 1 participants ( $n = 298$ ) were mailed a survey booklet roughly seven years after the first interview, and 136 returned the survey. A listwise deletion of cases (i.e., cases were eliminated when inconsistent background data between the two survey sessions were provided) resulted in a further reduction of 43 respondents. The remaining 93 participants, although less than 1/10 of the original sample, resembled the original sample; and, in spite of the volunteer nature of the sample, both correspond to Atkinson's (1982) representative, national sample of Canadians.

The SWB measures included in this version of the assessment were the 11-point life satisfaction rating and the 11-point present life quality rating. The differences in these repeated measures were examined using analyses of variance and two age groups, younger versus older (with a mean age split of 32 years), conducted because of a smaller sample and very few representatives in some of the original age categories.

TABLE III  
 Repeated measures analysis of variance for life quality ( $n = 93$ )

Source	<i>ss</i>	<i>df</i>	<i>ms</i>	<i>F</i>
Young vs. old	12.64	1	12.64	5.30*
Between-subjects error	216.95	91	2.38	
Within-subjects effect	0.15	1	0.15	0.08
Within-subjects error	166.30	91	1.83	

\*  $p < 0.05$

### *Results and Discussion*

Over the seven-year period from the first assessment to the second, younger respondents tended to report lower life satisfaction (Time 1  $\bar{x} = 7.36$ , Time 2  $\bar{x} = 7.24$ ) and lower life quality (Time 1  $\bar{x} = 7.04$ , Time 2  $\bar{x} = 6.96$ ) while older respondents showed the reverse for both life satisfaction (Time 1  $\bar{x} = 7.68$ , Time 2  $\bar{x} = 7.82$ ) and life quality (Time 1  $\bar{x} = 7.48$ , Time 2  $\bar{x} = 7.59$ ). Repeated measures analyses of variance revealed a significant between-subjects effect for life quality but there was not a significant within-subjects effect (Table III).

Similarly, there was a near significant between-subjects effect for life satisfaction, where the probability was roughly one in 10, but no significant within-subjects effect (Table IV).

The differences between the reported life quality ratings of the younger and older respondents were predictable in light of the results from the first study. Forty years of age appears to be a critical time with respect to SWB, at least for the present respondents, where well-being levels begin to rise at least to 70 years of age. The absence of within-subjects effects suggests that knowing an individual's well-being at any point in time, and knowing nothing further about that person, will not lead to accurate predictions of that individual's future well-being.

TABLE IV  
 Repeated measures analysis of variance for life satisfaction  
 ( $n = 93$ )

Source	<i>ss</i>	<i>df</i>	<i>ms</i>	<i>F</i>
Young vs. old	8.27	1	8.27	2.60*
Between-subjects error	289.19	91	3.18	
Within-subjects effect	2.42	1	2.42	1.25
Within-subjects error	176.08	91	1.94	

\*  $p < 0.05$

### *General Discussion*

Increases in SWB that our research reveals may not be so much a function of age as a cohort effect or due to personal situation or history. Health, availability of social and physical resources, the duration of retirement, among other factors are likely more important determinants of well-being than age (Schaie, 1993). Certainly this is the point stressed by Neugarten and Neugarten (1989), who argued that a number of factors are more important than chronological age in influencing adjustment. As they wrote, "the stereotype that old people are lonely and isolated does not fit today's reality any more than the stereotype that they are ill and poor . . . (older people) report active family ties, close friends whom they see frequently, good relations with neighbours, and participation in churches and synagogues" (p. 153). The older individuals in our study who were recontacted were well situated for the final years of life in terms of finances and social resources while the younger people, facing global economic downturn and personal unemployment, were not in such favourable circumstances. For the very old individuals in our research, those over 70 years, declining health may account for their slightly lower SWB reports.

Older individuals, too, may perceive their life circumstances and activities differently than younger individuals, but again due to their particular experiences. In our past research, older individuals differ

significantly from younger people in terms of what they derive from the activities in which they are engaged. They tend to enjoy them more and find them less stressful and difficult (Horley, 1992; Lavery and Horley, 1990). It must be emphasized, however, that we are not suggesting these findings will exist invariably across time and culture (c.f., Yetim, 1993).

Our findings call into question the view that SWB tends to be very stable with age. One large study (Costa *et al.*, 1987) conducted in the United States over a nine year period using a cross-sequential design reported SWB stability. It is noteworthy that their stability refers to a lack of change in various group means. The lack of change that they report could be due to the "personal consistency" of Americans or, as the researchers believe, it simply reflects the stability of an underlying personality trait in all individuals. This stability, however, is possibly the result of either data analytic approach (i.e., the analysis of group means) or a result of assessment technique. Costa and colleagues used the General Well-Being Schedule in their research. This technique may possess high temporal reliability but it may also be an insensitive device. The quality of life ladder, as one example, shows both temporal stability and sensitivity to change in some conditions of life (Horley and Lavery, 1991). Only further sensitivity analyses will determine whether the General Well-Being Schedule and other measures are equally sensitive.

The results of our second study are, of course, limited both by the number and nature of our participants (e.g., more respondents would have permitted more detailed analyses of age categories, the inclusion of more working class respondents would have increased the scope of the work) and the time period (e.g., a seven year period may be too brief a time to examine SWB changes). Only further large-scale, cross-cultural explorations will shed further light on the issues related to well-being and aging.

#### NOTE

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