The Life Expectancy Test. Can you live to be 100?

adapted from:

Diana Woodruff-Pak (1988). Psychology and aging. Englewood Cliffs, NJ: Prentice Hall

Introduction

This test is an exercise designed to teach the psychology student about the factors contributing to the longevity of persons living in the United States. Remember there is no test in existence which can tell you with absolute certainty how long you will live. The test presented here is based on the best scientific evidence available. While researchers still don't know all of the factors causing long life, they are aware of some of the phenomena that seem to be correlated with longevity. The Life Expectancy Test is based on those data.

Instructions

Begin the test by finding your life expectancy from the Life Expectancy Table presented below (Table 6.1). On the basis of your current age, race and sex, you start with this AVERAGE life expectancy. Next we'll see how you differ from the average.

Now that you have a starting life expectancy, add and subtract years according to how you answer the questions about yourself on the Life Expectancy Test. When you have completed the test, sum all of the pluses and minuses to yield your individual difference from the average life expectancy value. Add (subtract) this net value from the starting value that you looked-up in Table 6.1 to yield your Personalized Life Expectancy Value.

How did you do? What factors contributed the greatest effect upon your personalized life expectancy? Can you change your behavior/lifestyle in any way such as to increase your calculated life expectancy? If so: How long is your new and improved life expectancy based upon these hypothetical changes.

TABLE 6.1 (continued)

Age	White Male	White Female	Black Male	Black Female
50	75.7	81.2	72.5	78.1
51	75.8	81.3	72.8	78.3
52	76.0	81.4	73.1	78.5
53	76.2	81.5	73.4	78.7
54	76.4	81.7	73.7	78.9
55	76.6	81.8	74.1	79.1
56	76.8	81.9	74.4	79.4
57	77.1	82.1	74.8	79.7
58	77.3	82.3	75.2	79.9
59	77.6	82.4	75.6	80.2
60	77.9	82.6	76.0	80.5
61	78.2	82.8	76.5	80.9
62	78.5	83.0	76.9	81.2
63	78.8	83.3	77.4	81.6
64	79.2	83.5	77.9	81.9
65	79.5	83.7	78.4	82.3
66	79.9	84.0	78.9	82.6
67	80.3	84.2	79.4	83.0
68	80.7	84.5	79.9	83.3
69	81.1	84.8	80.4	83.7
70	81.5	85.1	80.9	84.1
71	82.0	85.4	81.5	84.6
72	82.5	85.7	82.1	85.0
73	82.9	86.1	82.7	85.5
74	83.4	86.4	83.3	86.0
75	84.0	86.8	84.0	86.5
76	84.5	87.2	84.6	87.0
77	85.1	87.6	81.2	87.4
78	85.7	88.0	81.8	87.9
79	86.2	88.4	82.4	88.5
80	86.9	88.8	87.1	89.0
81	87.5	89.3	87.8	89.6
82	88.2	89.8	88.5	90.2
83	88.8	90.3	89.3	90.9
84	89.5	90.9	90.1	91.6
85	90.2	91.5	91.0	92.4

^{*}Life expectancies presented here are based on life tables computed by the National Center for Health Statistics for 1983 (National Center for Health Statistics, 1986).

TABLE 6.1 Life Expectancy Table^a

Age	White Male	White Female	Black Male	Black Female
10	72.7	79.6	67.2	75.2
11	72.7	79.6	67.2	75.2
12	72.7	79.6	67.2	75.2
13	72.8	79.6	67.3	75.2
14	72.8	79.6	67.3	75.2
15	72.8	79.6	67.3	75.3
16	72.9	79.7	67.4	75.3
17	72.9	79.7	67.4	75.3
18	73.0	79.7	67.5	75.3
19	73.1	79.7	67.5	75.4
20	73.1	79.8	67.6	75.4
21	73.2	79.8	67.7	75.4
22	73.3	79.8	67.8	75.5
23	73.4	79.9	67.9	75.5
24	73.4	79.9	68.0	75.6
25	73.5	79.9	68.1	75.6
26	73.6	80.0	68.2	75.7
27	73.7	80.0	68.3	75.7
28	73.7	80.0	68.4	75.8
29	73.8	80.0	68.6	75.8
30	73.9	80.1	68.7	75.9
31	73.9	80.1	68.8	76.0
32	74.0	80.1	69.0	76.0
33	74.1	80.2	69.1	76.1
34	74.1	80.2	69.3	76.2
35	74.2	80.2	69.4	76.2
36	74.3	80.3	69.6	76.3
37	74.3	80.3	69.7	76.4
38	74.4	80.3	69.9	76.5
39	74.5	80.4	70.0	76.6
40	74.6	80.4	70.2	76.7
41	74.6	80.5	70.4	76.8
42	74.7	80.5	70.6	76.9
43	74.8	80.6	70.8	77.0
44	74.9	80.7	71.0	77.1
45	75.0	80.7	71.2	77.2
46	75.1	80.8	71.4	77.4
47	75.2	80.9	71.7	77.5
48	75.4	81.0	71.9	77.7
49	75.5	81.1	72.2	77.9

^aLife expectancies presented here are based on life tables computed by the National Center for Health Statistics for 1983 (National Center for Health Statistics, 1986).

LIFE EXPECTANCY TEST

Heredity and Family

1. Longevity of grandparents

Have any of your grandparents lived to age 80 or beyond? If so, add one year for each grandparent living beyond that age. Add one-half year for each grandparent surviving beyond the age of 70.

2. Longevity of parents

If your mother lived beyond the age of 80, add four years. Add two years if your father lived beyond 80. You benefit more if your mother lived a long time than if your father did.

3. Cardiovascular disease of close relatives

If any parent, grandparent, sister, or brother died of a heart attack, stroke, or arteriosclerosis before the age of 50, subtract four years for each incidence. If any of those close relatives died of the above before the age of 60, subtract two years for each incidence.

4. Other hereditable diseases of close relatives

Have any parents, grandparents, sisters, or brothers died before the age of 60 of diabetes mellitus or peptic ulcer? Subtract three years for each incidence. If any of these close relatives died before 60 of stomach cancer, subtract two years. Women whose close female relatives have died before 60 of breast cancer should also subtract two years. Finally, if any close relatives have died before the age of 60 of any cause except accidents or homicide, subtract one year for each incidence.

5. Childbearing

Women who have never had children are more likely to be in poor health, and they also are at a greater risk for breast cancer. Therefore, if you can't or don't plan to have children, or if you are over 40 and have never had children, subtract one-half year. Women who have a large number of children tax their bodies. If you've had over seven children, or plan to, subtract one year.

6. Mother's age at your birth

Was your mother over the age of 35 or under the age of 18 when you were born? If so, subtract one year.

7. Birth order

Are you the first born in your family? If so, add one year.

8. Intelligence

How intelligent are you? Is your intelligence below average, average, above average, or superior? If you feel that your intelligence is superior, that is, if you feel that you are smarter than almost anyone you know, add two years.

9. Weight

Are you currently overweight? Find your ideal weight in Table 6.2. If you weigh more than the figure in Table 6.2, calculate the percentage by which you are overweight, and subtract the appropriate number of years shown in Table 6.3. If you have been overweight at any point in your life, or if your weight has periodically fluctuated by more than ten pounds since high school, subtract two years.

10. Dietary habits

Do you prefer vegetables, fruits, and simple foods to foods high in fat and sugar, and do you *always* stop eating before you feel really full? If the honest answer to both questions is yes, *add one year*.

TABLE 6.2 1983 Metropolitan Height & Weight Tables

TO MAKE AN APPROXIMATION OF YOUR FRAME SIZE...

Extend your arm and bend the forearm upward at a 90 degree angle. Keep fingers straight and turn the inside of your wrist toward your body. If you have a caliper, use it to measure the space between the two prominent bones on either side of your elbow. Without a caliper, place thumb and index finger of your other hand on these two bones. Measure the space between your fingers against a ruler or tape measure. Compare it with these tables that list elbow measurements for medium-framed men and women. Measurements lower than those listed indicate you have a small frame. Higher measurements indicate a large frame.

Height in 1' heels Men	Elbow Breadth	
5′2″—5′3″	21/2"—27/4"	
5'4"-5'7"	25/8"—27/8"	
5'8"-5'11"	23/4"-3"	
6'0"-6'3"	23/4"-31/e"	
6'4"	21/8"-31/4"	
Women		
4'10"—4'11"	21/4"-21/2"	
5′0″—5′3″	21/4"-21/2"	
5'4"5'7"	23/8"-25/8"	
5'8"—5'11"	23/8"25/8"	
6'0"	21/2"-23/4"	

1983 METROPOLITAN HEIGHT AND WEIGHT TABLES

Weights at ages 25–59 based on lowest mortality. Weight in pounds according to frame (in indoor clothing weighting 5 lbs. for men and 3 lbs. for women, shoes with 1" heels)

Height		Small	Medium	Large
Feet	Inches	Frame	Frame	Frame
5	2	128-134	131-141	138-150
5	3	130-136	133-143	140-153
5	4	132-138	135-145	142-156
5	5	134-140	137-148	144-160
5	6	136-142	139-151	146-164
5	7	138-145	142-154	149-168
5	8	140-148	145-157	152-172
5	9	142-151	148-160	155-176
5	10	144-154	151-163	158-180
5	11	146-157	154-166	161-184
6	0	149-160	157-170	164-188
6	1	152-164	160-174	168-192
6	2	155-168	164-178	172-197
6	3	158-172	167-182	176-202
6	4	162-176	171-187	181-207
Wome	n			
Height		Small	Medium	Large
Feet	Inches	Frame	Frame	Frame
4	10	102-111	109-121	118-131
4	11	103-113	111-123	120-134
5	0	104-115	113-126	122-137
5	1	106118	115-129	125-140
5	2	108-121	118-132	128-143
5	3	111-124	121-135	131-147
5	4	114-127	124-138	134-151
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5	5	117-130	127-141	137-155
5		117-130 120-133	127-141 130-144	
	6	120-133	130-144	140-159
5 5	6 7	120-133 123-136	130-144 133-147	140-159 143-163
5 5 5	6 7 8	120-133 123-136 126-139	130-144 133-147 136-150	140-159 143-163 146-167
5 5 5 5	6 7 8 9	120-133 123-136 126-139 129-142	130-144 133-147 136-150 139-153	137-155 140-159 143-163 146-167 149-170 152-173
5 5 5	6 7 8	120-133 123-136 126-139	130-144 133-147 136-150	140-159 143-163 146-167

Source: Metropolitan Life Insurance Company (Health and Safety Education Division).

11. Smoking

How much do you smoke? If you smoke two or more packs of cigarettes a day, subtract twelve years. If you smoke between one and two packs a day, subtract seven years. If you smoke less than a pack a day, subtract two years. If you have quite smoking, congratulations, you subtract no years at all!

TABLE 6.3 Risk to Life of Being Overweight (in years)

	Markedly Overweight (more than 30%)		Moderately Overweight (10–30%)	
Age	Men	Women	Men	Women
20	- 15.8	-7.2	- 13.8	-4.8
25	-10.6	-6.1	-9.6	-4.9
30	-7.9	-5.5	-5.5	-3.6
35	-6.1	- 4.9	-4.2	-4.0
40	-5.1	-4.6	-3.3	-3.5
45	-4.3	- 5.1	-2.4	-3.8
50	-4.6	-4.1	-2.4	-2.8
55	-5.4	-3.2	-2.0	-2.2

Source: Metropolitan Life Insurance Company. (1976) Longevity patterns in the United States. Statistical Bulletin, 57, p. 2.

12. Drinking

If you are a moderate drinker, that is, if you never drink to the point of intoxication and have one or two drinks of whiskey, or half a liter of wine, or up to four glasses of beer per day, add three years. If you are a light drinker, that is, you have an occasional drink, but do not drink almost every day, add one and one-half years. If you are an abstainer who never uses alcohol in any form, do not add or subtract any years. Finally, if you are a heavy drinker or an alcoholic, subtract eight years. (Heavy drinkers are those who drink more than three ounces of whiskey or drink other intoxicating beverages excessively almost every day. They drink to the point of intoxication.)

Exercise

How much do you exercise? If you exercise at least three times a week at one of the following: jogging, bike riding, swimming, taking long, brisk walks, dancing, or skating, add three years. Just exercising on weekends does not count.

Sleep

If you generally fall asleep right away and get six to eight hours of sleep per night, you're average and should neither add nor subtract years. However, if you sleep excessively (ten or more hours per night), or if you sleep very little (five or less hours per night), you probably have problems. Subtract two years.

Sexual activity

If you enjoy regular sexual activity, having intimate sexual relations once or twice a week, add two years.

16. Regular physical examinations

Do you have an annual physical examination by your physician which includes a breast examination and Pap smear for women, and a proctoscopic examination every other year for men? If so, add two years.

17. Health status

Are you in poor health? Do you have a chronic health condition (for example, heart disease, high blood pressure, cancer, diabetes, ulcer) or are you frequently ill? If so, *subtract five years*.

Education and Occupation

18. Years of education

How much education have you had? Add or subtract the number of years shown in Table 6.4.

TABLE 6.4 Education and Life Expectancy^a

Level of Education	Years of Life
Four or more years of college	+3.0
One to three years of college	+2.0
Four years of high school	+ 1.0
One to three years of high school	+0.0
Elementary school (eight years)	-0.5
Less than eighth grade	-2.0
(주) - (주) - (주)	

^aEstimates based on data presented in E. M. Kitagawa and P. M. Hauser, Differential mortality in the United States: A study in socioeconomic epidemiology. Cambridge, MA: Harvard University Press, 1973 (pp. 12, 18), and in Metropolitan Life Insurance Company, Socioeconomic mortality differentials, Statistical Bulletin, 1985, 56, 3–5.

Occupational level

If you are working, what is the socioeconomic level of your occupation? If you do not work, what is your spouse's occupation? If you are retired, what is your former occupation? If you are a student, what is your parents' occupational level? Add or subtract the number of years shown in Table 6.5.

20. Family income

If your family income is above average for your education and occupation, add one year. If it's below average for your education and occupation, subtract one year.

21. Activity on the job

If your job involves a lot of physical activity, add two years. On the other hand, if you sit all day on the job, subtract two years.

TABLE 6.5 Occupation and Life Expectancy^a

Occupational Level	Years of Life
Class I —Professional	+1.5
Class II —Technical, administrative, and managerial. Also agricultural	
workers, as they live longer for their actual socioeconomic	
level	+1.0
Class III-Proprietors, clerical, sales, and skilled workers	± 0.0
Class IV—Semi-skilled workers	-0.5
Class V —Laborers	-4.0

^aEstimates based on data presented in E. M. Kitagawa and P. M. Hauser, Differential mortality in the United States: A study in socioeconomic epidemiology. Cambridge, MA: Harvard Unviersity Press, 1973 (pp. 12, 18), and in Metropolitan Life Insurance Company, Socioeconomic mortality differentials, Statistical Bulletin, 1975, 56, 3–5.

22. Age and work

If you are over the age of 60 and still on the job, add two years. If you are over the age of 65 and have not retired, add three years.

Life Style

23. Rural versus urban dwelling

If you live in an urban area and have lived in or near the city for most of your life, *subtract one year*. If you have spent most of your life in a rural area, *add one year*.

24. Married versus divorced

If you are married and living with your spouse, add one year.

- A. Formerly Married Men. If you are a separated or divorced man living alone, subtract nine years, and if you are a widowed man living alone, subtract seven years. If as a separated, divorced, or widowed man you live with other people, such as family members, subtract only half the years given above. Living with others is beneficial for formerly married men.
- B. Formerly Married Women. Women who are separated or divorced should subtract four years, and widowed women should subtract three and a half years. The loss of a spouse through divorce or death is not as life-shortening to a woman, and she lives about as long whether she lives alone or with family, unless she is the head of the household. Divorced or widowed women who live with family as the head of their household should subtract only two years for the fomerly married status.

25. Living status as single

If you are a woman who has never married, subtract one year for each unmarried decade past the age of 25. If you live with a family or friends as a male single person, you should also subtract one year for each unmarried decade past the age of 25. However, if you are a man who has never married and are living alone, subtract two years for each unmarried decade past the age of 25.

26. Life changes

Are you always changing things in your life; changing jobs, changing residences, changing friends and/or spouses, changing your appearance? If so, *subtract two years*. Too much change is stressful.

27. Friendship

Do you generally like people and have at least two close friends in whom you can confide almost all the details of your life? If so, add one year.

28. Aggressive personality

Do you always feel that you are under time pressure? Are you aggressive and sometimes hostile, paying little attention to the feelings of others? Subtract two to five years depending on how well you fit this description. The more pressured, aggressive, and hostile you are, the greater your risk for heart disease.

29. Flexible personality

Are you a calm, reasonable, relaxed person? Are you easygoing and adaptable, taking life pretty much as it comes? Depending upon the degree to which you fit this description, add one to three years. If you are rigid, dogmatic, and set in your ways, subtract two years.

30. Risk-taking personality

Do you take a lot of risks, including driving without seat belts, exceeding the speed limit, and taking any dare that is made? Do you live in a high crime rate neighborhood? If you are vulnerable to accidents and homicide in this way, subtract two years. If you use seat belts regularly, drive infrequently, and generally avoid risks and dangerous parts of town, add one year.

31. Depressive personality

Have you been depressed, tense, worried, or guilty for more than a period of a year or two? If so, subtract one to three years depending on how seriously you are affected by these feelings.

32.	Are you basically happy and content, and have you had a lot of fun in life? If so, add two years. People with feelings like this are the ones who live to be 100.
	TOTAL

OVERVIEW OF FACTORS INVOLVED IN LONGEVITY AND HEALTH