Who Lives Longer: One Whose Psychological Age is Older, Younger, or Close to Actual Chronological Age?

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Definitions. Psychological Age (PA) is defined as equal to the product of Realization x Years That One Expects to Live. Realization equals the ratio of the psychological past (one's memories) to the sum of the whole (psychological past, present and future.) The formula is $PA = R \times L$, where R is realization, and L is the number of years one expects to live. In other words, PA is the extent to which an individual's expectations and plans for later life have already occurred [1].

Hypothesis. The higher one's PA balance is (the closer is PA to Chronological Age, CA), the higher could be the person's real lifespan. The rational for this hypothesis is the empirical fact that a big gap between PA and CA increases the risk for high anxiety and depression in adult populations [2]. Such a gap, therefore, could affect physical well-being and longevity.

Methods. Clinical data from 2007-2019, with 34 deceased American patients was analyzed: 13 men and 21 women, 71-91 years old (mean CA = 85) at the time of their PA testing. PA-test "Assessment of Five-Year Periods" [3] was used in a paper form or in a computerized off-line version. For statistical analysis, the Kolmogorov-Smirnov test of normality and Student's *t*-test of significance were used on-line: www.socscistatistics.com

Results. The data was divided into four groups: Age Balanced (AB) – with the difference between PA and CA of not more than one year (15 patients, mean CA = 87), and Age Misbalanced (AM) – with the difference between PA and CA of two years or more (19 patients, mean CA = 83). Within AM group, two subgroups were analyzed: Psychologically Older (PO) – with PA higher than CA (14 patients), and Psychologically Younger (PY) - with PA lower than CA (5 patients). AB patients were significantly older and they lived longer - on average, an additional 3 years and 6 months, while AM patients lived, on average, an additional 2 years and 4 months. Thus, the average Real Lifespan (RL) was 90 years for AB patients, and 85 years for AM patients (the difference is significant). Values of average indexes of longevity were almost the same for PO and PY patients (see Table).

Conclusions. For longevity, the optimal value is when one's psychological age corresponds most closely with his/her chronological age. There is reason to believe that monitoring of psychological age will have the same importance for mental health as monitoring of blood pressure for physical health psychologically older or younger people tend to live less. A patented on-line version of PAtest is available at the website: www.psychologicalage.com

Table. Average indexes of longevity (in years) in AB, AM, PO and PY groups.

	CA	RL-CA	RL
AB	87	3.5	90
AM	83**	2.3*	85***
РО	83**	2.2*	85***
PY	82**	2.4*	85**

The differences between AB group and others are significant at p<.01****, p<.05***, p<.10* by Student's t-test.

References

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