

Physical Health Differences May Provide a General Explanation for Why Happy People Live Longer:

A Letter to the Editor Regarding Wiest et al. (2011)

A growing set of prospective studies lend credence to the idea that happiness can improve health and lengthen lives (e.g. Lyubomirsky, King, & Diener, 2005). Wiest, Schüz, Webster, & Wurm (2011) go beyond prior studies investigating the well-being – mortality link (see Chida & Steptoe, 2008) by including an additional control for self-rated health (SRH) in their analyses. They show that SRH, an established predictor of mortality (e.g. Idler & Benyamini, 1997), coupled with the inclusion of physical activity, substantially diminishes the link between the well-being measures and mortality. Crucially, this finding calls into question two decades of studies that have understood the effects of well-being on mortality to be independent of initial health.

Alternatively, it could be the case that measures of subjective well-being predict mortality because they gauge subtle health differences that are inadequately assessed by crude physical health measures (e.g., presence of chronic illness). Including more sensitive measures of physical health may therefore diminish the well-being – mortality link. However, critically, SRH in the form used by Wiest et al. (2011) encapsulates both mental/emotional and physical health. It is therefore not possible to distinguish if physical or mental/emotional health attenuated the link between well-being and longevity.

To address this issue I first tested the link between life-satisfaction and mortality in a representative sample of 5,583 middle aged adults ($M = 46.9$, $SD = 12.9$) drawn from the Midlife in the United States study. This analysis showed a protective effect of life-satisfaction on longevity from 1995-2004 ($\chi^2 = 5.55$, $p < .05$, $OR = .92$ [95% $CI = .86 - .99$]), after controlling for demographic variables (age, gender, and education), physical activity, depression, and the presence of chronic illness. Following this I adjusted for self-rated *mental/emotional health* (1 = poor, 5 = excellent) which slightly attenuated the link between life-satisfaction and mortality ($\chi^2 = 4.07$, $p < .05$, $OR = .93$ [95% $CI = .86 - 1.00$]), Finally, I included a measure of self-rated *physical health* (1 = poor, 5 =

excellent) which entirely eliminated the association between life-satisfaction and mortality ($\chi^2 = .17$, $p = .68$, $OR = .98$ [95% $CI = .91 - 1.06$]).

The results presented here coupled with those of Wiest et al. (2011) suggest that it may be poor physical health not well-being that causes mortality. Further research is urgently needed to critically evaluate the contribution of each component of well-being to longevity over and above the effects of contemporaneous physical health.

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