Supplementary Material

Title: Gain- but Not Loss-Related Self-Perceptions of Aging Predict Mortality Over a Period of 23 Years:

A Multidimensional Approach

Figure SM1

Absolute Number of Missing Data



Note. SA = subjective age; OD = Self-perceptions of aging related to ongoing development; PL = Self-perceptions of aging related to physical losses; SL = Self-perceptions of aging related to social losses.

Figure SM2

Alternative Schematic Illustration of the Effect of Gain-Related Self-Perceptions on Aging on Mortality



Time in years

Note. Kaplan-Meier curve as schematic illustration of the effect of gain-related self-perceptions of aging on mortality using a median split and imputed data. After 10 years 25% of the individuals with below median gain-related SPA were deceased, while this percentage of deaths was only reached after 22.9 years for individuals with above median gain-related SPA.

Table SM1

				95% CI			
			HR	lower	upper	Z	р
Self- perceptions of aging (SPA)	Model 1.1	see main text					
	Model 1.2	see main text					
	Model 1.3	see main text					
	Model 1.4	Gain-related SPA (ongoing development)	0.82	0.76	0.88	-5.49	< .001
		Loss-related SPA (physical)	1.07	0.99	1.15	1.61	.105

Additional Information on Sensitivity Analyses

	Loss-related SPA	1.00	0.93	1.08	0.06	.951
	Age	3.46	0.93	1.08	28.14	< .001
Likelihood	df = 4	1210				< .001
ratio test	df - A	1026				< 001
Model 1.5	Gain-related SPA	1030				< .001
	(ongoing	0.63	0.59	0.68	-12.17	< .001
	development)					
	Loss-related SPA (physical)	1.35	1.24	1.46	7.38	< .001
	Loss-related SPA	0.02	0.00	1 04	7.05	/11
	(social)	-0.05	0.50	1.04	-7.05	.411
Likelihood	Gender	-0.50	0.53	0.70	-7.05	< .001
ratio test	<i>df</i> = 4	356.9				< .001
Wald test	<i>df</i> = 4	362				< .001
Model 1.6	Gain-related SPA	0.65	0.00	0.70	11 70	< 001
	(ongoing development)	0.65	0.60	0.70	-11.70	< .001
	Loss-related SPA	1 21	1 77	1 / 2	6.02	< 001
	(physical)	1.51	1.22	1.45	0.92	< .001
	Loss-related SPA	0.96	0.90	1.04	-1.01	0.313
	Education	0.81	0.73	0.90	-3.97	< .001
Likelihood	df = 4	321.6				< .001
ratio test	df - A	242 4				< 001
Model 1.7	Gain-related SPA	542.4				< .001
	(ongoing	0.67	0.63	0.73	-10.51	< .001
	(ongoing development)	0.67	0.63	0.73	-10.51	< .001
	(ongoing development) Loss-related SPA (physical)	0.67 1.19	0.63 1.09	0.73 1.29	-10.51 4.05	< .001
	(ongoing development) Loss-related SPA (physical) Loss-related SPA	0.67 1.19	0.63	0.73	-10.51 4.05	< .001 < .001
	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social)	0.67 1.19 0.95	0.63 1.09 0.89	0.73 1.29 1.02	-10.51 4.05 -1.33	< .001 < .001 .185
Likelikaad	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health	0.67 1.19 0.95 1.33	0.63 1.09 0.89 1.23	0.73 1.29 1.02 1.42	-10.51 4.05 -1.33 7.69	< .001 < .001 .185 < .001
Likelihood ratio test	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4	0.67 1.19 0.95 1.33 363.9	0.63 1.09 0.89 1.23	0.73 1.29 1.02 1.42	-10.51 4.05 -1.33 7.69	< .001 < .001 .185 < .001 < .001
Likelihood ratio test Wald test	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4	0.67 1.19 0.95 1.33 363.9 400.9	0.63 1.09 0.89 1.23	0.73 1.29 1.02 1.42	-10.51 4.05 -1.33 7.69	<.001 <.001 .185 <.001 <.001 <.001
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA	0.67 1.19 0.95 1.33 363.9 400.9	0.63 1.09 0.89 1.23	0.73 1.29 1.02 1.42	-10.51 4.05 -1.33 7.69	<.001 <.001 .185 <.001 <.001 <.001
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development)	0.67 1.19 0.95 1.33 363.9 400.9 0.65	0.63 1.09 0.89 1.23 0.61	0.73 1.29 1.02 1.42 0.70	-10.51 4.05 -1.33 7.69 -11.58	< .001 < .001 .185 < .001 < .001 < .001
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA	0.67 1.19 0.95 1.33 363.9 400.9 0.65	0.63 1.09 0.89 1.23 0.61	0.73 1.29 1.02 1.42 0.70	-10.51 4.05 -1.33 7.69 -11.58	<.001 <.001 .185 <.001 <.001 <.001
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical)	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19	0.63 1.09 0.89 1.23 0.61 1.10	0.73 1.29 1.02 1.42 0.70 1.29	-10.51 4.05 -1.33 7.69 -11.58 4.26	<.001 <.001 .185 <.001 <.001 <.001 <.001
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social)	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96	0.63 1.09 0.89 1.23 0.61 1.10 0.90	0.73 1.29 1.02 1.42 0.70 1.29 1.04	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99	<.001 <.001 .185 <.001 <.001 <.001 <.001 .322
Likelihood ratio test Wald test Model 1.8	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Morbidity	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96 1.40	0.63 1.09 0.89 1.23 0.61 1.10 0.90 1.31	0.73 1.29 1.02 1.42 0.70 1.29 1.04 1.50	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99 10.07	<.001 <.001 .185 <.001 <.001 <.001 <.001 .322 <.001
Likelihood ratio test Wald test Model 1.8 Likelihood	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Morbidity df = 4	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96 1.40 400.5	0.63 1.09 0.89 1.23 0.61 1.10 0.90 1.31	0.73 1.29 1.02 1.42 0.70 1.29 1.04 1.50	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99 10.07	<.001 <.001 .185 <.001 <.001 <.001 <.001 .322 <.001 <.001
Likelihood ratio test Wald test Model 1.8 Likelihood ratio test	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Morbidity df = 4 df = 4	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96 1.40 400.5 425.2	0.63 1.09 0.89 1.23 0.61 1.10 0.90 1.31	0.73 1.29 1.02 1.42 0.70 1.29 1.04 1.50	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99 10.07	<.001 <.001 .185 <.001 <.001 <.001 <.001 .322 <.001 <.001
Likelihood ratio test Wald test Model 1.8 Likelihood ratio test Wald test Model 1.9	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Morbidity df = 4 df = 4 Gain-related SPA	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96 1.40 400.5 425.3	0.63 1.09 0.89 1.23 0.61 1.10 0.90 1.31	0.73 1.29 1.02 1.42 0.70 1.29 1.04 1.50	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99 10.07	<.001 <.001 .185 <.001 <.001 <.001 .322 <.001 <.001 <.001 <.001
Likelihood ratio test Wald test Model 1.8 Likelihood ratio test Wald test Model 1.9	(ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Self-rated health df = 4 df = 4 Gain-related SPA (ongoing development) Loss-related SPA (physical) Loss-related SPA (social) Morbidity df = 4 df = 4 Gain-related SPA (social)	0.67 1.19 0.95 1.33 363.9 400.9 0.65 1.19 0.96 1.40 400.5 425.3 0.63	0.63 1.09 0.89 1.23 0.61 1.10 0.90 1.31	0.73 1.29 1.02 1.42 0.70 1.29 1.04 1.50 0.68	-10.51 4.05 -1.33 7.69 -11.58 4.26 -0.99 10.07	<.001 <.001 .185 <.001 <.001 <.001 .322 <.001 <.001 <.001 <.001

	Loss-related SPA	1.33	1.23	1.44	7.03	< .001
	(physical)					
	(social)	0.97	0.90	1.04	-0.82	.415
	Place of Residency	1.08	0.94	1.24	1.10	.271
Likelihood	<i>df</i> = 4	306.4				< .001
Wald test	df = 4	321.3				< .001
Model 1.10	Gain-related SPA	011.0				
	(ongoing	0.63	0.59	0.68	-12.57	< .001
	development)					
	Loss-related SPA	1.33	1.23	1.44	7.05	< .001
	(physical)	2.00				
	Loss-related SPA	0.99	0.92	1.07	-0.18	.860
	(SOCIAI) Loneliness	0.95	0.88	1 02	-1 45	146
Likelihood		0.55	0.00	1.02	1.15	.1.10
ratio test	<i>df</i> = 4	308.4				< .001
Wald test	<i>df</i> = 4	324.5				< .001
Model 1.11	Gain-related SPA					
	(ongoing	0.65	0.60	0.69	-12.06	< .001
	development)					
	(physical)	1.38	1.28	1.50	8.09	< .001
	Loss-related SPA					
	(social)	1.04	0.97	1.12	1.11	.267
	Negative affect	0.72	0.67	0.77	-8.95	< .001
Likelihood ratio test	<i>df</i> = 4	387.2				< .001
Wald test	<i>df</i> = 4	413				< .001
Model 1.12	Gain-related SPA					
	(ongoing	-0.53	0.54	0.63	-13.65	< .001
	development)					
	Loss-related SPA	0.27	1.22	1.42	6.86	< .001
	(privated)					
	(social)	0.01	0.94	1.09	0.35	.725
	Норе	0.20	1.13	1.31	5.13	< .001
Likelihood	<i>df</i> = 4	333.1				< .001
Wald test	<i>df</i> = 4	353.6				< .001
Model 1.13	Gain-related SPA					
	(ongoing	0.65	0.60	0.70	-10.66	< .001
	development)					
	Loss-related SPA	1.32	1.22	1.43	6.84	< .001
	(pilysical) Loss-related SPA					
	(social)	0.96	0.89	1.03	-1.10	.276
	Positive affect	0.94	0.86	1.02	-1.50	.134
Likelihood ratio test	<i>df</i> = 4	309				< .001
Wald test	<i>df</i> = 4	325.3				< .001

Model 1.14	Gain-related SPA	0.60	0.55	0.64	12 77	< 001
	development)	0.00	0.55	0.04	-13.77	100. >
	Loss-related SPA (physical)	1.33	1.23	1.44	7.11	< .001
	Loss-related SPA (social)	1.02	0.95	1.10	0.60	.549
	Life satisfaction	1.26	1.17	1.36	6.23	< .001
Likelihood ratio test	<i>df</i> = 4	347.4				< .001
Wald test	<i>df</i> = 4	362.5				< .001
Model 1.15	Gain-related SPA (ongoing	0.68	0.62	0.74	-9.03	< .001
	Loss-related SPA (physical)	1.14	1.05	1.24	3.21	.001
	Loss-related SPA (social)	1.04	0.96	1.12	0.91	.366
	Gender	0.57	0.49	0.66	-7.49	< .001
	Education	0.78	0.69	0.87	-4.32	< .001
	Morbidity	1.33	1.20	1.41	6.35	< .001
	Self-rated health	1.30	1.24	1.43	7.90	< .001
	Place of Residency	1.31	1.14	1.52	3.72	< .001
	Loneliness	1.07	0.99	1.15	1.63	.103
	Hone	0.75	0.70	0.01	-7.25	< .001 250
	Positive affect	0.97	0.90	1.15	-0.66	.230
	Life satisfaction	1.31	1.25	1.43	6.26	< .001
Likelihood ratio test	<i>df</i> = 13	646.4				< .001
Wald test	<i>df</i> = 13	683				< .001

Note. All results represent pooled estimates based on 20 imputed data sets.

df = degrees of freedom; *HR* = Hazard Ratio.