

Supplementary Table 1 Number and percentage of missing values in each variable (n=19452)

Variables	n	%
Visual status	980	5.04
Frequency of laughing	551	2.83
Number of opportunities to laugh	661	3.39
Marital status	368	1.89
Years of education	253	1.30
Equivalized income	2,570	13.21
Depression	233	1.19
Frequency of meeting friends	495	2.54
Total participation score	1,195	6.14
History of systemic comorbidities	653	3.35

Supplementary Table 2 Odds ratios for relationship between visual status and laughter (complete case analysis)

	Odds ratio	95% CI	<i>p</i> for trend	Adjusted odds ratio*	95% CI	<i>p</i> for trend
Frequency of laughing				Almost every day		
Visual status						
Excellent	2.01	1.81-2.24		1.69	1.48-1.94	
Very good	1.37	1.28-1.46	<.01	1.21	1.11-1.32	<.01
Good	1.00	Reference		1.00	Reference	
Fair/poor	0.72	0.64-0.81		0.88	0.74-1.04	
Number of opportunities to laugh				≥ 4 Opportunities to laugh		
Visual status						
Excellent	1.45	1.30-1.62		1.22	1.06-1.41	
Very good	1.27	1.17-1.36	<.01	1.05	0.95-1.15	<.01
Good	1.00	Reference		1.00	Reference	
Fair/poor	0.69	0.60-0.79		0.86	0.71-1.06	

Ci, confidence interval.

* Adjusted for age, sex, marital status, educational attainment, equivalized household income, depressive symptoms, frequency of meeting friends, total participation score and history of systemic comorbidities.