Supplementary Material: Are loneliness and social isolation associated with quality of life in older adults? Insights from Northern and Southern Europe

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Supplementary table 1. Characteristics of non-respondents in Sweden

	Participants in wave 6 only N=881	Participants in waves 6 & 7 N=2,995	p-value
Age (mean, SD)	71.5 (10.5)	70.4 (8.7)	.053
50-64	246 (27.9%)	805 (26.9%)	
65-74	312 (35.5%)	1,272 (42.5%)	
75-84	201 (22.8%)	726 (24.2%)	
85+	122 (13.8%)	192 (6.4%)	
Gender			.160
Male	404 (45.9%)	1,377 (46.0%)	
Female	477 (54.1%)	1,618 (54.0%)	
Education level			<.001
Primary	244 (27.7%)	598 (20.0%)	
Secondary	411 (46.7%)	1,369 (45.7%)	
Tertiary	226 (25.7%)	967 (32.3%)	
Missing	0 (0.0%)	61 (2.0%)	
Activity limitations (mean, SD)	1.0 (2.5)	0.4 (1.4)	<.001
0	648 (73.6%)	2,516 (84.0%)	
1+	227 (25.7%)	475 (15.9%)	
Missing	6 (0.7%)	4 (0.1%)	
Chronic diseases (mean, SD)	1.6 (1.5)	1.4 (1.4)	<.001
0	215 (24.4%)	878 (29.3%)	
1	272 (30.9%)	932 (31.1%)	
2+	394 (44.7%)	1,180 (39.4%)	
Missing	0 (0.0%)	5 (0.2%)	
EURO-D (mean, SD)	2.2 (2.0)	1.9 (1.8)	<.001
<4	643 (73.0%)	2,438 (81.4%)	
≥4	183 (20.8%)	503 (16.8%)	
Missing	55 (6.2%)	54 (1.8%)	
Memory test			<.001
Fair/Poor	283 (32.1%)	771 (25.7%)	
Excellent/Very good/Good	598 (67.9%)	2,147 (71.7%)	
Missing	0 (0.0%)	77 (2.6%)	
Hearing test			<.001
Fair/Poor	182 (20.7%)	556 (18.6%)	
Excellent/Very good/Good	699 (79.3%)	2,435 (81.3%)	
Missing	0 (0.0%)	4 (0.1%)	
Eyesight			<.001
Fair/Poor	145 (16.5%)	379 (12.7%)	
Excellent/Very good/Good	736 (83.5%)	2,612 (87.2%)	
Missing	0 (0.0%)	4 (0.1%)	
Loneliness (mean, SD)	3.8 (1.2)	3.7 (1.1)	.110
Low	650 (73.7%)	2,454 (81.9%)	
High	189 (21.5%)	512 (17.1%)	
Missing	42 (4.8%)	29 (1.0%)	
Social isolation (mean, SD)	2.0 (0.9)	1.8 (0.9)	<.001
Low	604 (68.6%)	2,241 (74.8%)	
High	210 (23.7%)	588 (19.7%)	
Missing	67 (6.7%)	166 (5.5%)	
Baseline CASP (mean, SD)	39.1 (5.2)	39.6 (5.0)	<.001
Missing	71 (8.0%)	124 (4.1%)	

Note: p-values obtained using ANOVA and Pearson's chi-square test

Supplementary table 2. Characteristics of non-respondents in Spain

	Participants in wave 6 only N=1,398	Participants in waves 6 & 7 N=4,154	p-value
Age (mean, SD)	71.7 (11.3)	69.9 (10.2)	<.001
50-64	453 (32.4%)	1,464 (35.2%)	
65-74	390 (27.9%)	1,274 (30.7%)	
75-84	331 (23.7%)	1,029 (24.8%)	
85+	224 (16.0%)	387 (9.3%)	
Gender			.080
Male	657 (47.0%)	1,841 (44.3%)	
Female	741 (53.0%)	2,313 (55.7%)	
Education level			.250
Primary	826 (59.1%)	2,385 (57.4%)	
Secondary	446 (31.9%)	1,230 (29.6%)	
Tertiary	126 (9.0%)	421 (10.2%)	
Missing	0 (0.0%)	118 (2.8%)	
Activity limitations (mean, SD)	1.9 (4.1)	1.0 (2.7)	<.001
0	991 (70.8%)	3,266 (78.6%)	
1+	402 (28.8%)	884 (21.3%)	
Missing	5 (0.4%)	4 (0.1%)	
Chronic diseases (mean, SD)	2.0 (1.7)	1.9 (1.6)	.054
0	298 (21.3%)	790 (19.0%)	
1	331 (23.7%)	1,145 (27.6%)	
2+	769 (55.0%)	2,215 (53.3%)	
Missing	0 (0.0%)	4 (0.1%)	
EURO-D (mean, SD)	2.4 (2.7)	2.4 (2.5)	.690
<4	847 (60.6%)	2,777 (66.9%)	
≥4	312 (22.3%)	1,034 (24.8%)	
Missing	239 (17.1%)	343 (8.3%)	
Memory test			.540
Fair/Poor	576 (41.2%)	1,616 (38.9%)	
Excellent/Very good/Good	822 (58.8%)	2,398 (57.7%)	
Missing	0 (0.0%)	140 (3.4%)	
Hearing test			.020
Fair/Poor	384 (27.5%)	1,010 (24.3%)	
Excellent/Very good/Good	1,014 (72.5%)	3,139 (75.6%)	
Missing	0 (0.0%)	5 (0.1%)	
Eyesight			.003
Fair/Poor	357 (25.5%)	901 (21.7%)	
Excellent/Very good/Good	1,041 (74.5%)	3,245 (78.1%)	
Missing	0 (0.0%)	8 (0.2%)	
Loneliness (mean, SD)	3.8 (1.4)	3.7 (1.3)	.100
Low	916 (65.5%)	3,106 (74.8%)	
High	244 (17.5%)	717 (17.2%)	
Missing	238 (17.0%)	331 (8.0%)	
Social isolation (mean, SD)	2.3 (0.9)	2.1 (0.9)	<.001
Low	646 (46.2%)	2,496 (60.1%)	
High	482 (34.5%)	1,205 (29.0%)	
Missing	270 (19.3%)	453 (10.9%)	
Baseline CASP (mean, SD)	35.9 (6.6)	36.1 (6.3)	.500
Missing	279 (20.0%)	405 (9.7%)	

Note: p-values obtained using ANOVA and Pearson's chi-square test

Supplementary table 3. Baseline characteristics (means, proportions and 95% CI) of unweighted and unimputed sample by country

	Sweden n=2995	Spain n=4154
Age (mean, SD)	70.4 (8.7)	69.9 (10.2)
50-64	805 (26.9%)	1464 (35.2%)
65-74	1272 (42.5%)	1274 (30.7%)
75-84	726 (24.2%)	1029 (24.8%)
85+	192 (6.4%)	387 (9.3%)
Gender		
Male	1377 (46.0%)	1841 (44.3%)
Female	1618 (54.0%)	2313 (55.7%)
Education level		
Primary	598 (20.0%)	2385 (57.4%)
Secondary	1369 (45.7%)	1230 (29.6%)
Tertiary	967 (32.3%)	421 (10.1%)
Missing	61 (2.0%)	118 (2.8%)
Activity limitations (mean, SD)	0.4 (1.4)	1.0 (2.7)
0	2516 (84.0%)	3266 (78.6%)
1+	475 (15.9%)	884 (21.3%)
Missing	4 (0.1%)	4 (0.1%)
Chronic diseases (mean, SD)	1.4 (1.4)	1.9 (1.6)
0	878 (29.3%)	790 (19.0%)
1	932 (31.1%)	1145 (27.6%)
2+	1180 (39.4%)	2215 (53.3%)
Missing	5 (0.2%)	4 (0.1%)
EURO-D (mean, SD)	1.9 (1.8)	2.4 (2.5)
<4	2438 (81.4%)	2777 (66.9%)
≥4	503 (16.8%)	1034 (24.8%)
Missing	54 (1.8%)	343 (8.3%)
Memory test		
Fair/Poor	771 (25.7%)	1616 (38.9%)
Excellent/Very good/Good	2147 (71.7%)	2398 (57.7%)
Missing	77 (2.6%)	140 (3.4%)
Hearing test		
Fair/Poor	556 (18.6%)	1010 (24.3%)
Excellent/Very good/Good	2435 (81.3%)	3139 (75.6%)
Missing	4 (0.1%)	5 (0.1%)
Eyesight		
Fair/Poor	379 (12.7%)	901 (21.7%)
Excellent/Very good/Good	2612 (87.2%)	3245 (78.1%)
Missing	4 (0.1%)	8 (0.2%)
Loneliness (mean, SD)	3.7 (1.1)	3.7 (1.3)
Low	2454 (81.9%)	3106 (74.8%)
High	512 (17.1%)	717 (17.2%)
Missing	29 (1.0%)	331 (8.0%)
Social isolation (mean, SD)	1.8 (0.9)	2.1 (0.9)
Low	2241 (74.8%)	2496 (60.1%)
High	588 (19.7%)	1205 (29.0%)
Missing	166 (5.5%)	453 (10.9%)
Baseline CASP (mean, SD)	39.6 (5.0)	36.1 (6.3)
Missing	124 (4.1%)	405 (9.7%)