Supplementary materials

Contents

A. Measures

A.1. COVID-19-related social restrictions

Table A.1: Items regarding COVID-19-related social restrictions.

Are you affected by these COVID-10-related social restrictions?	no	yes
1. restrictions regarding freedom of movement	(0)	(1)
2. not being able to see children or grandchildren in person	(0)	(1)
3. not being able to visit care-dependent family members	(0)	(1)
4. not being able to visit seriously or terminally ill family members	(0)	(1)
5. not being able to participate in family celebrations or funerals	(0)	(1)
6. restrictions regarding social activities (e.g. sport or cultural)	(0)	(1)
7. restrictions concerning visiting restaurants and cafes	(0)	(1)

A.2. UCLA three-item loneliness scale

Table A.2: Items of the UCLA three-item loneliness scale.

How often do you feel...	often	sometimes	seldom	never
1. ... a lack of companionship?	(1)	(2)	(3)	(4)
2. ... left out?	(1)	(2)	(3)	(4)
3. ... isolated?	(1)	(2)	(3)	(4)

A.3. Brief Symptom Inventory

Table A.3: Depressive symptoms items.

In the last two weeks,					very
how much did you suffer from:	not at all				strongly
1. Feeling no interest in things?	(1)	(2)	(3)	(4)	(5)
2. Feeling lonely? (OMITTED)	(1)	(2)	(3)	(4)	(5)
3. Feeling blue?	(1)	(2)	(3)	(4)	(5)
4. Feelings of worthlessness?	(1)	(2)	(3)	(4)	(5)
5. Feeling hopeless about the future?	(1)	(2)	(3)	(4)	(5)
6. Thoughts of ending your life?	(1)	(2)	(3)	(4)	(5)

Table notes. The second item (i.e., "Feeling lonely?") has been omitted in order to prevent conceptual overlap with the UCLA loneliness scale.

Table A.4: Anxiety symptoms items.

In the last two weeks,					very
how much did you suffer from:	not at all				strongly
1. Nervousness or shakiness inside?	(1)	(2)	(3)	(4)	(5)
2. Feeling tense or keyed up?	(1)	(2)	(3)	(4)	(5)
3. Suddenly scared for no reason?	(1)	(2)	(3)	(4)	(5)
4. Spells of terror or panic?	(1)	(2)	(3)	(4)	(5)
5. Feeling so restless you couldn't sit still?	(1)	(2)	(3)	(4)	(5)
6. Feeling fearful?	(1)	(2)	(3)	(4)	(5)

For each of these scales, we summed up the respective item scores to a total scale score, where greater scores indicate higher levels of perceived COVID-19-related social restrictions, feelings of loneliness, and depressive and anxiety symptoms, respectively.

B. Results

B.1. Descriptive statistics

The UCLA loneliness scale and both the depressive and anxiety symptoms scales showed good reliability. However, it is a limitation of this study that the COVID-19-related restrictions scale indicated rather poor reliability. Further adjustments of the scale (e.g., removing items with low factor loadings) did not improve reliability or model fit considerably (see further results at OSF).

Table A.5: Descriptive statistics and pairwise correlations across waves.

Variable	M (SD)	N	$\text{restrictions}_{\text{w1}}$	$\text{restrictions}_{\text{w2}}$	$\text{loneliness}_{\text{w1}}$	$\text{loneliness}_{\text{w2}}$	$\text{depressive}_{\text{w1}}$	$\text{depressive}_{\text{w2}}$	$\text{anxiety}_{\text{w1}}$	$\text{anxiety}_{\text{w2}}$
$\text{restrictions}_{\text{w1}}$	3.41 (1.57)	557	(0.59)							
$\text{restrictions}_{\text{w2}}$	3.44 (1.52)	463	0.49	(0.62)						
$\text{loneliness}_{\text{w1}}$	6.75 (2.36)	551	0.37	0.29	(0.83)					
$\text{loneliness}_{\text{w2}}$	7.12 (2.43)	458	0.31	0.39	0.57	(0.83)				
$\text{depressive}_{\text{w1}}$	9.17 (4.10)	548	0.19	0.17	0.54	0.36	(0.88)			
$\text{depressive}_{\text{w2}}$	9.41 (4.46)	456	0.08	0.16	0.38	0.46	0.56	(0.88)		
$\text{anxiety}_{\text{w1}}$	8.34 (3.52)	547	0.13	0.14	0.33	0.24	0.68	0.40	(0.89)	
$\text{anxiety}_{\text{w2}}$	8.44 (3.56)	460	0.07	0.14	0.29	0.29	0.47	0.68	0.57	(0.88)

Table notes. In the lower triangle of the correlation matrix, we report pairwise correlations among variables. Reliability estimates (coefficient ω based on polychoric and tetrachoric correlations) are reported in parenthesis in the diagonal. w1 = wave 1. w2 = wave 2. M = Mean. SD = Standard deviation. N = total number of valid observations for each variable.

B.2. Sample characteristics and attrition

We also examined whether individuals who participated in both waves ($N = 463$) differed from those who dropped out during follow-up ($N = 94$). There was no significant difference regarding age, sex, educational level, whether participants were living alone, the perception of the COVID-19-related social restrictions, feelings of loneliness, and depressive and anxiety symptoms. However, we found a difference in self-rated health. Descriptively, individuals who participated in both waves tended to assess their health more positively than those who dropped out.

Table A.6: Sample characteristics at wave one by drop out.

Variable	no drop out	drop out	statistical test (two-sided)
Age [$M(SD)$]	70.18 (6.6)	69.20 (6.6)	$t(133) = 1.3$; $p = .187$
Sex [$N(\%)$]			$\chi^2(1) = 0.08$; $p = .782$
Male	222 (48)	43 (46)	
Female	241 (52)	51 (54)	
Education [$N(\%)$]			$\chi^2(3) = 1.3$; $p = .729$
Compulsory education	26 (6)	7 (7)	
Apprenticeship/vocational school	230 (50)	50 (53)	
High-school education	125 (27)	21 (22)	
University degree	82 (18)	16 (17)	
Living along [$N(\%)$]			$\chi^2(1) = 0.04$; $p = .842$
No	323 (70)	64 (68)	
Yes	140 (30)	30 (32)	
Self-rated health [$N(\%)$]			$\chi^2(2) = 14.61$; $p < .001$
(Very) good	315 (68)	49 (52)	
Mediocre	313 (28)	35 (37)	
(Very) bad	15 (3)	10 (11)	
COVID-19-related restrictions [$M(SD)$]	3.36 (1.5)	3.67 (1.9)	$t(117) = 1.5$; $p = .139$
Loneliness [$M(SD)$]	6.73 (2.3)	6.81 (2.6)	$t(124) = 0.3$; $p = .796$
Depressive symptoms [$M(SD)$]	9.09 (4.0)	9.58 (4.7)	$t(121) = 1.0$; $p = .340$
Anxiety symptoms [$M(SD)$]	8.32 (3.5)	8.45 (3.5)	$t(134) = 0.3.1$; $p = .744$

Table notes. M = Mean. SD = Standard deviation. Md = Median. t and χ^2 are based on Welch's t-test and the χ^2-test of independence, respectively.

B.3. Model fit

To examine model fit of the cross-lagged panel models, we relied on the Tucker-Lewis-index (TLI), the comparative-fit-index (CFI), the standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA). A TLI and a CFI of $\geq$0.95, and an SRMR and an RMSEA of $\leq$0.06 indicate acceptable model fit. Both models showed very good fit.

- Model fit for depressive symptoms: $\chi^2(5) = 4.4$, $p = .499$; CFI = 1.000; TLI = 1.006; SRMR = .010; RMSEA = .000, 90 % CI [.000; .057].
- Model fit for anxiety symptoms: $\chi^2(5) = 3.9$, $p = .562$; CFI = 1.000; TLI = 1.014; SRMR = .010; RMSEA = .000, 90 % CI [.000; .057].