Supplemental Table 3. Odds ratio of reporting severe loneliness / severe anxiety / low life satisfaction compared to the reference values in the four cohorts (N=69,136). Model 1.

	Exposure			ΤΕΜΡΟ		Constances		UCL Covid-1	9 Social Stud	v
		DNBC Young people	Women	Men	Women	Men	Women	Young people	Men	Women
•	Yes	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Access to outdoor facilities	N	1.33	3.23	0.52 [0.26,	1.44	2.13	1.87	2.54	1.29	1.13
outdoor facilities	NO	[1.08,1.64]	[1.84,5.67]	1.05]	[0.86, 2.45]	[1.80,2.52]	[1.61,2.17]	[1.19,5.44]	[0.99,1.67]	[0.95,1.35
Household density	<43 m2	Ref	Ref	N/A	N/A	Ref	Ref	N/A	N/A	N/A
	≥43 m2	0.96 [0.89,1.04]	1.25 [1.16,1.35]	N/A	N/A	1.08 [0.94,1.25]	1.00 [0.88,1.12]	N/A	N/A	N/A
Household crowding	Ideal	N/A	N/A	N/A	N/A	Ref	Ref	Ref	Ref	Ref
	Crowded	N/A	N/A	N/A	N/A	1.40	1.20	0.58	1.13	1.25
	Underoccupied	-	N/A	N/A	N/A	[1.09,1.79] 0.44 [0.38,0.50]	[0.96,1.50] 0.57 [0.52,0.64]	[0.29,1.16] 1.00	[0.77,1.64] 0.75 [0.59,0.94]	[0.96,1.62 0.79 [0.69,0.90
Household composition	Adults-only	Ref	Ref	Ref	Ref	[0.38,0.50] Ref	Ref	[0.54,1.88] Ref	[0.59,0.94] Ref	Ref
	households Households	0.92	0.84	0.67 [0.27,	1 61 [0 77	1.00	1.17	1.98	0.92	1.01
	with children	[0.92]		• •	3.56]	[0.84,1.20]	[0.91,1.49]		0.92 [0.70,1.19]	-
	Single households (living alone)	1.78 [1.47,2.16]	2.53 [1.97,3.24]	0.89 [0.3, 2.67]	4 [1.26, 13.07]	9.40 [8.16,10.83]	7.38 [6.04,9.02]	2.70 [0.91,8.01]	3.50 [2.81,4.36]	2.58 [2.23,2.98
Dwelling type	House	N/A	N/A	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	Apartment	N/A	N/A	1.63 [0.8, 3.32]	0.63 [0.36, 1.07]	2.27 [2.02,2.57]	1.83 [1.66,2.01]	0.70 [0.31,1.54]	0.87 [0.68,1.13]	0.94
Urbanicity	Urban	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
	Semi-urban	0.92	1.05	0.37 [0.12,	-	N/A	N/A	1.20	1.07	1.03
	Rural	0.97	1.01	0.36 [0.09,	0.83 [0.38,	0.88	0.84	2.70	1.01	0.91
		[0.90,1.00]	[0.93,1.10]		1.75] XIET	[0.75,1.04]	[0.74,0.95]	[1.27,5.74]	[0.77,1.31]	[[0.79,1.00
Exposure		DNBC		ТЕМРО		Constances		UCL Covid-19 Social Study		
		Young people	Women	Men	Women	Men	Women	Young people	Men	Women
• •	Yes	Ref	Ref	N/A	N/A	Ref	Ref	Ref	Ref	Ref
Access to outdoor facilities	Ne	1.39	1.20	-	-	1.55 [1.21,	1.12	1.48	1.33	1.14
outdoor racintics	INO			N/A	N/A	•		10 - 1 0 0 0 1		10 00 1 00
	<43 m2		[0.80,1.80] Ref	N/A N/A	N/A N/A	1.99] Ref	[0.91,1.38] Ref	[0.71,3.08] N/A	[0.92,1.92] N/A	[0.93,1.39] N/A
Household density		[1.13,1.71] Ref 0.88	[0.80,1.80] Ref 0.95			1.99] Ref 0.93 [0.77,	[0.91,1.38] Ref 0.85 [0.74,		-	
Household	<43 m2 ≥43 m2	[1.13,1.71] Ref 0.88 [0.81,0.95]	[0.80,1.80] Ref 0.95 [0.88,1.02]	N/A N/A	N/A N/A	1.99] Ref 0.93 [0.77, 1.13]	[0.91,1.38] Ref 0.85 [0.74, 0.97]	N/A N/A	N/A N/A	N/A N/A
Household density	<43 m2 ≥43 m2 Ideal	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A	[0.80,1.80] Ref [0.95 [0.88,1.02] N/A	N/A N/A N/A	N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref	N/A N/A Ref	N/A N/A Ref	N/A N/A Ref
Household	<43 m2 ≥43 m2	[1.13,1.71] Ref 0.88 [0.81,0.95]	[0.80,1.80] Ref 0.95 [0.88,1.02]	N/A N/A	N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82]	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49]	N/A N/A Ref 1.64 [0.76,3.52]	N/A N/A Ref 1.19 [0.66,2.16]	N/A N/A Ref 1.07 [0.82,1.42]
Household density Household	<43 m2 ≥43 m2 Ideal	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A	[0.80,1.80] Ref [0.95 [0.88,1.02] N/A	N/A N/A N/A	N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13	N/A N/A Ref 1.64 [0.76,3.52] 1.69	N/A N/A Ref 1.19	N/A N/A Ref 1.07 [0.82,1.42] 0.71
Household density Household	<43 m2 ≥43 m2 Ideal Crowded	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83	N/A N/A Ref 1.64 [0.76,3.52] 1.69	N/A N/A Ref 1.19 [0.66,2.16] 0.61	N/A N/A Ref 1.07 [0.82,1.42] 0.71
Household density Household crowding	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04	N/A N/A N/A N/A	N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83	N/A N/A Ref 1.07 [0.82,1.42] 0.71 [0.60,0.85] Ref 1.01
Household density Household	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households with children Single	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96 [0.85,1.08]	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04 [0.89,1.22]	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06 [0.86,1.30]	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12 [0.97,1.30]	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53 [0.25,1.13]	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83 [0.57,1.19]	N/A N/A Ref 1.07 [0.82,1.42 0.71 [0.60,0.85 Ref 1.01 [0.85,1.19
Household density Household crowding Household	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households with children	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04 [0.89,1.22] 1.16	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12 [0.97,1.30] 0.96	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83 [0.57,1.19] 0.90	N/A N/A Ref 1.07 [0.82,1.42 0.71 [0.60,0.85 Ref 1.01 [0.85,1.19 0.93
Household density Household crowding Household	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households with children Single households	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96 [0.85,1.08] 1.39	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04 [0.89,1.22] 1.16	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06 [0.86,1.30] 1.74	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12 [0.97,1.30] 0.96	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53 [0.25,1.13] 3.19	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83 [0.57,1.19] 0.90	N/A N/A Ref 1.07 [0.82,1.42 0.71 [0.60,0.85 Ref 1.01 [0.85,1.19 0.93
Household density Household crowding Household composition	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households with children Single households (living alone)	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96 [0.85,1.08] 1.39 [1.14,1.68]	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04 [0.89,1.22] 1.16 [0.91,1.48]	N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06 [0.86,1.30] 1.74 [1.39,2.17] Ref 1.46	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12 [0.97,1.30] 0.96 [0.80,1.14] Ref 0.97	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53 [0.25,1.13] 3.19 [0.92,11.13] Ref 0.49	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83 [0.57,1.19] 0.90 [0.63,1.27] Ref 0.85	N/A N/A Ref 1.07 [0.82,1.42 0.71 [0.60,0.85 Ref 1.01 [0.85,1.19 0.93 [0.78,1.11 Ref 1.01
Household density Household crowding Household	<43 m2 ≥43 m2 Ideal Crowded Underoccupied Adults-only households Households with children Single households (living alone) House	[1.13,1.71] Ref 0.88 [0.81,0.95] N/A N/A N/A Ref 0.96 [0.85,1.08] 1.39 [1.14,1.68] N/A	[0.80,1.80] Ref 0.95 [0.88,1.02] N/A N/A N/A Ref 1.04 [0.89,1.22] 1.16 [0.91,1.48] N/A	N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A	1.99] Ref 0.93 [0.77, 1.13] Ref 1.26 [0.87,1.82] 0.72 [0.60 ,0.86] Ref 1.06 [0.86,1.30] 1.74 [1.39,2.17] Ref	[0.91,1.38] Ref 0.85 [0.74, 0.97] Ref 1.13 [0.85,1.49] 0.83 [0.74,0.95] Ref 1.12 [0.97,1.30] 0.96 [0.80,1.14] Ref	N/A N/A Ref 1.64 [0.76,3.52] 1.69 [0.79,3.58] Ref 0.53 [0.25,1.13] 3.19 [0.92,11.13] Ref	N/A N/A Ref 1.19 [0.66,2.16] 0.61 [0.44,0.85] Ref 0.83 [0.57,1.19] 0.90 [0.63,1.27] Ref	N/A N/A Ref 1.07 [0.82,1.42 0.71 [0.60,0.85 Ref 1.01 [0.85,1.19 0.93 [0.78,1.11 Ref

	Durrel	0.89	0.97 [0.89,1.06] N/A			0.75	1.01	1.14	1.17	0.90	
	Rural	[0.80,0.98]		N/A	[0.59,0.95]	[0.87,1.17]	[0.50,2.56]	[0.77,1.77]	[0.74,1.08]		
LIFE SATISFACTION											
Exposure		DNBC		ТЕМРО		Constances		UCL Covid-19 Social Study			
		Young people	Women	Men	Women	Men	Women	Young people	Men	Women	
Access to outdoor facilities	Yes	Ref	Ref	Ref	Ref	N/A	N/A	Ref	Ref	Ref	
	No	1.22 [0.99, 1.52]	1.32 [0.88, 2.00]	0.47 [0.20, 1.05]	0.67 [0.36, 1.23]	N/A	N/A	1.18 [0.54, 2.56]	1.37 [1.08, 1.72]	1.25 [1.06, 1.49]	
Household density	<43 m2	Ref	Ref	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	≥43 m2	0.91 [0.84, 0.99]	0.97 [0.87, 1.09]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Household crowding	Ideal	N/A	N/A	N/A	N/A	N/A	N/A	Ref	Ref	Ref	
	Crowded	N/A	N/A	N/A	N/A	N/A	N/A	1.2 [0.58, 2.50]	1.52 [0.96, 2.38]	1.32 [1.02, 1.69]	
	Underoccupied	N/A	N/A	N/A	N/A	N/A	N/A	1.05 [0.51, 2.17]	0.87 [0.70, 1.08]	0.77 [0.67, 0.88]	
Household composition	Adults-only households	Ref	Ref	Ref	Ref	N/A	N/A	Ref	Ref	Ref	
	Households with children	1.02 [0.90, 1.15]	1.15 [0.98, 1.37]	0,65 [0.24, 1.92]	0.79 [0.34, 2.04]	N/A	N/A	1.12 [0.50, 2.50]	1.11 [0.86, 1.41]	0.92 [0.81, 1.04]	
	Single households (living alone)	1.52 [1.23, 1.85]	1.67 [1.32, 2.13]	1.18 [0.35, 4.00]	2.13 [0.62, 7.14]	N/A	N/A	2.70 [0.79, 9.09]	1.72 [1.39, 2.13]	1.41 [1.23, 1.59]	
Dwelling type	House	N/A	N/A	Ref	Ref	N/A	N/A	Ref	Ref	Ref	
	Apartment	N/A	N/A	1.75 [0.77, 4.00]	1.39 [0.74, 2.56]	N/A	N/A	1.16 [0.50, 2.70]	0.82 [0.64, 1.05]	0.88 [0.76, 1.03]	
Urbanicity	Urban	Ref	Ref	Ref	Ref	N/A	N/A	Ref	Ref	Ref	
	Semi-urban	0.95 [0.85, 1.06]	1.05 [0.95, 1.16]	0.77 [0.24, 2.17]	0.71 [0.23, 1.85]	N/A	N/A	1.16 [0.57, 2.33]	0.85 [0.69, 1.03]	1.12 [0.98, 1.28]	
	Rural	1.00 [0.92, 1.10]	0.98 [0.89, 1.06]	0.36 [0.05, 1.49]	1.33 [0.55, 3.03]	N/A	N/A	1.92 [0.83, 4.55]	0.66 [0.52, 0.84]	0.88 [0.78, 1.01]	