

Supporting Information. Soga, M., M.J. Evans, K. Tsuchiya, and Y. Fukano. 2020. A room with a green view: the importance of nearby nature for mental health during the COVID-19 pandemic. *Ecological Applications*.

Appendix S1

Table S1. Socio-demographic and lifestyle characteristics of the participants.

Variable	<i>n</i>	%
<i>Lifestyle variables</i>		
Frequency of smoking		
None	2,408	80.3
Less than once a month	12	0.4
One or two times per month	8	0.3
2 or 3 times per month	9	0.3
One or two times per week	34	1.1
Three or four times per week	21	0.7
Five or six times per week	39	1.3
Every day	469	15.6
Frequency of drinking alcohol		
None	1,097	36.6
Less than once a month	186	6.2
One or two times per month	202	6.7
2 or 3 times per month	162	5.4
One or two times per week	417	13.9
Three or four times per week	284	9.5
Five or six times per week	225	7.5
Every day	427	14.2
Number of working days per week		
0	1,026	34.2
1	29	1
2	55	1.8
3	87	2.9
4	101	3.4
5	1,066	35.5
6	154	5.1
7	482	16.1
Presence of a pet in the home		
Presence	499	16.6
Absence	2,501	83.4
Number of children in the home		
None	2,112	70.4
One child	411	13.7
Two children	316	10.5
Three children	100	3.3

Four children	39	1.3
Five children	22	0.7
More than five children	0	0

Socio-demographic variables

Sex

Female	1,500	50
Male	1,500	50

Age

20s	500	16.7
30s	500	16.7
40s	500	16.7
50s	500	16.7
60s	500	16.7
70s	500	16.7

Annual household income

Less than ¥3,000,000	635	21.2
¥3,000,000 – 5,000,000	788	26.3
¥5,000,000 – 7,000,000	583	19.4
¥7,000,000 – 10,000,000	509	17
¥10,000,000 – 15,000,000	322	10.7
More than ¥15,000,000	163	5.4

Degree of income changes due to the COVID-19 crisis

Greatly increased (more than double)	8	0.3
Increased somewhat	18	0.6
Slightly increased	114	3.8
Generally unchanged	1,802	60.1
Slightly decreased	576	19.2
Decreased somewhat	269	9
Greatly decreased (less than half)	213	7.1

Housing type

Owned house	1093	36.4
Owned flat	674	22.5
Rented house	67	2.2
Rented flat	1089	36.3
Other	77	2.6

Table S2. Model-averaged coefficients (effect sizes) for all models below $\Delta AIC_c = 6$ of all subsets of model that contains all of our predictor variables against the five mental health response variables. All continuous variables were scaled to enable direct comparisons.

Variable	Estimate	SE	Lower CI	Upper CI	p-value
<i>Self-esteem</i>					
Intercept	-0.141	0.049	-0.236	-0.046	0.004
Green view	0.127	0.045	0.039	0.214	0.005
Greenspace use	0.064	0.017	0.030	0.098	0.000
Neighbourhood greenness	0.009	0.017	-0.025	0.042	0.614
Impact of COVID-19 on income	-0.030	0.017	-0.064	0.004	0.084
Income	0.150	0.018	0.115	0.185	0.000
Intensity of work	-0.019	0.019	-0.056	0.019	0.333
Age	0.293	0.019	0.257	0.330	0.000
Male compared to female	0.092	0.036	0.022	0.163	0.010
Alcohol use	0.024	0.018	-0.011	0.059	0.175
Smoking	-0.005	0.018	-0.040	0.029	0.767
Number of children	-0.018	0.018	-0.053	0.017	0.313
Owning a cat or dog	-0.041	0.047	-0.132	0.050	0.379
Housing (Owned flat compared to owned house)	-0.080	0.046	-0.170	0.010	0.081
Housing (Rented house compared to owned house)	0.050	0.119	-0.183	0.283	0.676
Housing (Rented flat compared to owned house)	-0.069	0.045	-0.157	0.020	0.127
Housing (Other compared to owned house)	-0.110	0.111	-0.328	0.107	0.321
<i>Life satisfaction</i>					
Intercept	-0.072	0.047	-0.165	0.021	0.129
Green view	0.231	0.046	0.140	0.322	0.000
Greenspace use	0.071	0.018	0.035	0.106	0.000
Neighbourhood greenness	-0.001	0.018	-0.037	0.034	0.939
Impact of COVID-19 on income	0.031	0.018	-0.005	0.067	0.091
Income	0.120	0.019	0.084	0.157	0.000
Intensity of work	-0.023	0.020	-0.061	0.016	0.248
Age	-0.015	0.019	-0.053	0.024	0.456
Male compared to female	-0.224	0.038	-0.298	-0.150	0.000
Alcohol use	0.009	0.019	-0.028	0.045	0.644
Smoking	-0.032	0.018	-0.068	0.004	0.082
Number of children	-0.001	0.018	-0.037	0.035	0.960
Owning a cat or dog	-0.023	0.049	-0.118	0.072	0.636
Housing (Owned flat compared to owned house)	-0.092	0.048	-0.186	0.003	0.057
Housing (Rented house compared to owned house)	-0.017	0.124	-0.259	0.226	0.893
Housing (Rented flat compared to owned house)	-0.001	0.044	-0.087	0.086	0.991
Housing (Other compared to owned house)	-0.109	0.116	-0.336	0.118	0.347
<i>Happiness</i>					
Intercept	-0.027	0.055	-0.135	0.080	0.619
Green view	0.161	0.045	0.072	0.250	0.000
Greenspace use	0.093	0.018	0.059	0.128	0.000
Neighbourhood greenness	-0.002	0.018	-0.037	0.033	0.901
Impact of COVID-19 on income	-0.027	0.018	-0.062	0.007	0.123
Income	0.163	0.019	0.126	0.199	0.000
Intensity of work	-0.025	0.020	-0.063	0.014	0.210

Age	0.173	0.021	0.133	0.213	0.000
Male compared to female	-0.175	0.037	-0.248	-0.102	0.000
Alcohol use	0.028	0.018	-0.007	0.064	0.118
Smoking	-0.072	0.018	-0.107	-0.037	0.000
Number of children	0.027	0.018	-0.009	0.062	0.143
Owning a cat or dog	-0.035	0.048	-0.130	0.059	0.465
Housing (Owned flat compared to owned house)	-0.066	0.047	-0.158	0.026	0.157
Housing (Rented house compared to owned house)	-0.076	0.121	-0.313	0.161	0.531
Housing (Rented flat compared to owned house)	-0.101	0.046	-0.191	-0.011	0.028
Housing (Other compared to owned house)	-0.147	0.113	-0.369	0.074	0.193
<i>Loneliness</i>					
Intercept	-0.086	0.069	-0.221	0.048	0.208
Green view	-0.108	0.046	-0.198	-0.019	0.018
Greenspace use	-0.077	0.018	-0.112	-0.042	0.000
Neighbourhood greenness	0.008	0.018	-0.028	0.043	0.673
Impact of COVID-19 on income	0.022	0.018	-0.013	0.057	0.221
Income	-0.152	0.019	-0.189	-0.115	0.000
Intensity of work	0.031	0.020	-0.007	0.070	0.111
Age	-0.175	0.022	-0.217	-0.132	0.000
Male compared to female	0.234	0.037	0.161	0.308	0.000
Alcohol use	-0.050	0.018	-0.085	-0.014	0.006
Smoking	-0.015	0.018	-0.050	0.020	0.401
Number of children	-0.034	0.018	-0.070	0.002	0.064
Owning a cat or dog	0.004	0.049	-0.092	0.099	0.940
Housing (Owned flat compared to owned house)	0.120	0.047	0.028	0.213	0.011
Housing (Rented house compared to owned house)	0.073	0.121	-0.165	0.311	0.550
Housing (Rented flat compared to owned house)	0.116	0.046	0.026	0.207	0.012
Housing (Other compared to owned house)	0.103	0.114	-0.120	0.326	0.364
<i>Depression and anxiety</i>					
Intercept	0.093	0.053	-0.011	0.197	0.080
Green view	-0.095	0.046	-0.185	-0.005	0.039
Greenspace use	-0.053	0.018	-0.088	-0.018	0.003
Neighbourhood greenness	-0.020	0.018	-0.055	0.014	0.253
Impact of COVID-19 on income	0.076	0.018	0.040	0.111	0.000
Income	-0.090	0.018	-0.125	-0.054	0.000
Intensity of work	0.009	0.020	-0.030	0.048	0.642
Age	-0.214	0.019	-0.250	-0.177	0.000
Male compared to female	-0.074	0.037	-0.146	-0.002	0.043
Alcohol use	-0.017	0.019	-0.053	0.020	0.367
Smoking	0.038	0.018	0.003	0.074	0.035
Number of children	0.000	0.018	-0.035	0.036	0.987
Owning a cat or dog	-0.002	0.048	-0.096	0.092	0.964

Figure S1. Boxplots of NDVI (scaled) for the people with a green view and those without. There was a significant relationship between green view and NDVI (Slope = 0.248, SE = 0.046, $p < 0.0001$, $F_{1,2998} = 28.63$, $R^2 = 0.0092$), but with significant variation within each group.

