

Greenness and Job-related Chronic Stress in Young Adults: A Prospective Cohort Study in Germany

Supplementary material

Table S1. Median, Inter quartile range (IQR) and total of missing data for average of NVDI at 500 m buffer by each city and follow-up.

City	Follow-up	Median	IQR	Missing
Munich	SOLAR I	0.31	(0.26-0.34)	10
	SOLAR II	0.31	(0.26-0.34)	20
Dresden	SOLAR I	0.36	(0.31-0.41)	28
	SOLAR II	0.34	(0.30-0.40)	59
Total	SOLAR I	0.33	(0.29-0.37)	75
	SOLAR II	0.32	(0.27-0.37)	126

NVDI distributions at each follow-up

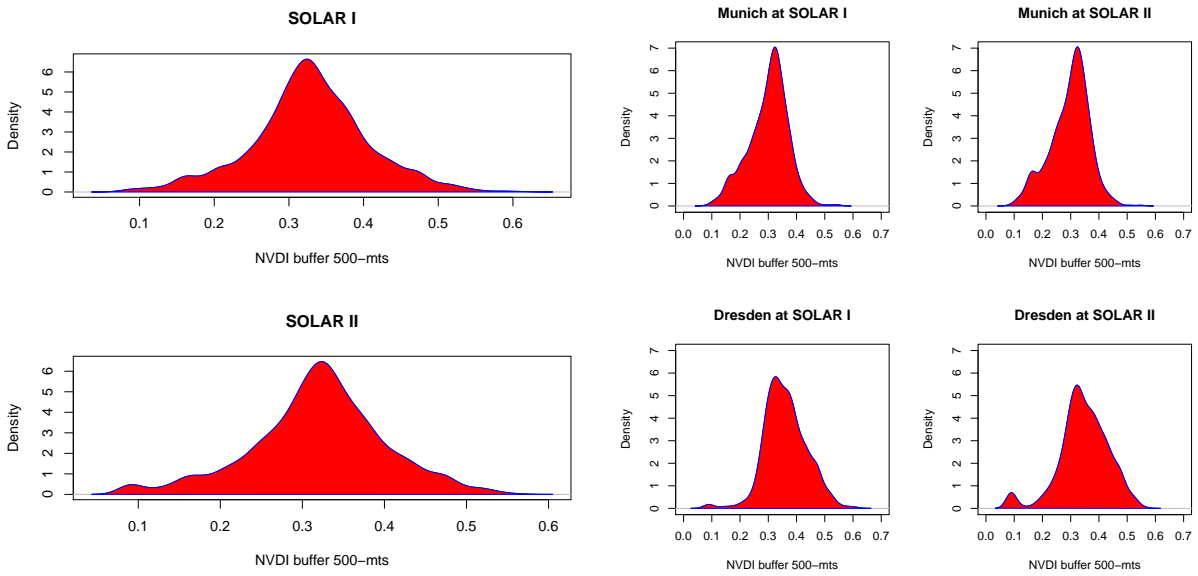


Figure S1. Distribution of NVDI in a 500 m buffer by city and follow-up

Table S2. Comparison between analyses of the unadjusted and adjusted association between residential greenness in a 500 m buffer around SOLAR participants home and job-related chronic stress.

Variable	Unadjusted				Adjusted			
	Work discontent		Work overload		Work discontent		Work overload	
	OR	(CI95%)	OR	(CI95%)	OR	(CI95%)	OR	(CI95%)
Munich								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.85	(0.78-0.94)	0.94	(0.86-1.03)	0.93	(0.83-1.05)	0.86	(0.77-0.96)
Greenness Q3	0.76	(0.69-0.83)	0.78	(0.71-0.86)	0.87	(0.76-0.99)	0.76	(0.67-0.87)
Greenness Q4	0.87	(0.79-0.96)	0.96	(0.87-1.05)	0.92	(0.78-1.07)	0.80	(0.68-0.93)
Dresden								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	1.06	(0.96-1.19)	0.96	(0.87-1.07)	1.04	(0.92-1.19)	0.92	(0.81-1.04)
Greenness Q3	1.00	(0.90-1.12)	1.00	(0.90-1.11)	0.98	(0.86-1.12)	0.77	(0.68-0.88)
Greenness Q4	0.94	(0.85-1.05)	0.94	(0.85-1.04)	1.05	(0.91-1.22)	0.89	(0.77-1.03)
Both cities								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.83	(0.78-0.90)	0.90	(0.84-0.96)	0.92	(0.85-1.00)	0.89	(0.82-0.96)
Greenness Q3	0.82	(0.77-0.88)	0.88	(0.83-0.95)	0.92	(0.84-1.01)	0.82	(0.75-0.90)
Greenness Q4	0.80	(0.75-0.86)	0.90	(0.84-0.96)	0.89	(0.80-0.99)	0.87	(0.78-0.96)
Total non-movers (n=675)								
Munich								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.90	(0.80-1.02)	1.02	(0.89 -1.17)	0.89	(0.77-1.03)	0.86	(0.74-1.00)
Greenness Q3	0.84	(0.74-0.96)	0.91	(0.80 -1.05)	0.83	(0.72-0.96)	0.74	(0.63-0.86)
Greenness Q4	0.85	(0.75-0.96)	1.11	(0.97 -1.26)	0.89	(0.76-1.04)	0.89	(0.74-1.07)
Dresden								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.75	(0.60-0.95)	0.92	(0.75-1.14)	0.83	(0.63-1.08)	0.76	(0.58-1.00)
Greenness Q3	1.03	(0.84-1.28)	0.97	(0.79-1.19)	1.16	(0.88-1.53)	0.71	(0.55-0.91)
Greenness Q4	0.85	(0.68-1.07)	1.05	(0.85-1.30)	1.15	(0.83-1.59)	0.61	(0.45-0.82)
Both cities								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.84	(0.75-0.93)	0.87	(0.78-0.97)	0.90	(0.80-1.01)	0.83	(0.74-0.94)
Greenness Q3	0.82	(0.74-0.91)	0.99	(0.89-1.11)	0.89	(0.79-1.01)	0.86	(0.75-0.98)
Greenness Q4	0.84	(0.75-0.94)	1.03	(0.92-1.15)	0.88	(0.76-1.02)	0.78	(0.67-0.89)

Multiple imputation results

Table S3. Comparison between analyses of the imputed data and the complete cases analyses of the adjusted association between residential greenness in a 500 m buffer around SOLAR participants home and job-related chronic stress. Complete cases in combined population (n=1430), Munich (n=779) and Dresden (n=651). Complete cases for non-movers in combined population (n=629), Munich (n=443) and Dresden (186)

Variable	Imputed				Complete cases			
	OR	(CI95%)	OR	(CI95%)	OR	(CI95%)	OR	(CI95%)
Movers and non-movers (n=1632)								
Munich								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.93	(0.75-0.94)	0.83	(0.67-1.03)	0.93	(0.83-1.05)	0.86	(0.77-0.96)
Greenness Q3	0.85	(0.66-1.08)	0.73	(0.57-0.94)	0.87	(0.76-0.99)	0.76	(0.67-0.87)
Greenness Q4	0.82	(0.61-1.11)	0.77	(0.58-1.03)	0.92	(0.78-1.07)	0.80	(0.68-0.93)
Dresden								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	1.01	(0.80-1.27)	0.93	(0.73-1.18)	1.04	(0.92-1.19)	0.92	(0.81-1.04)
Greenness Q3	0.93	(0.74-1.17)	0.81	(0.63-1.04)	0.98	(0.86-1.12)	0.77	(0.68-0.88)
Greenness Q4	1.00	(0.76-1.32)	0.87	(0.63-1.14)	1.05	(0.91-1.22)	0.89	(0.77-1.03)
Both cities								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.90	(0.77-1.05)	0.89	(0.76-1.03)	0.92	(0.85-1.00)	0.89	(0.82-0.96)
Greenness Q3	0.89	(0.76-1.05)	0.85	(0.72-1.00)	0.92	(0.84-1.01)	0.82	(0.75-0.90)
Greenness Q4	0.84	(0.70-1.01)	0.88	(0.73-1.06)	0.89	(0.80-0.99)	0.87	(0.78-0.96)
Total non-movers (n=675)								
Munich								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.90	(0.69-1.17)	0.88	(0.66-1.17)	0.89	(0.77-1.03)	0.86	(0.74-1.00)
Greenness Q3	0.83	(0.63-1.09)	0.73	(0.54-0.99)	0.83	(0.72-0.96)	0.74	(0.63-0.86)
Greenness Q4	0.81	(0.60-1.11)	0.93	(0.67-1.31)	0.89	(0.76-1.04)	0.89	(0.74-1.07)
Dresden								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.73	(0.43-1.23)	0.79	(0.47-1.32)	0.83	(0.63-1.08)	0.76	(0.58-1.00)
Greenness Q3	1.09	(0.67-1.77)	0.76	(0.47-1.23)	1.16	(0.88-1.53)	0.71	(0.55-0.91)
Greenness Q4	0.99	(0.54-1.84)	0.59	(0.32-1.00)	1.15	(0.83-1.59)	0.61	(0.45-0.82)
Both cities								
Greenness Q1	1	1	1	1	1	1	1	1
Greenness Q2	0.88	(0.76-0.93)	0.89	(0.77-1.03)	0.90	(0.80-1.01)	0.83	(0.74-0.94)
Greenness Q3	0.86	(0.74-1.00)	0.85	(0.73-0.99)	0.89	(0.79-1.01)	0.86	(0.75-0.98)
Greenness Q4	0.80	(0.68-0.94)	0.88	(0.75-1.03)	0.88	(0.76-1.02)	0.78	(0.67-0.89)