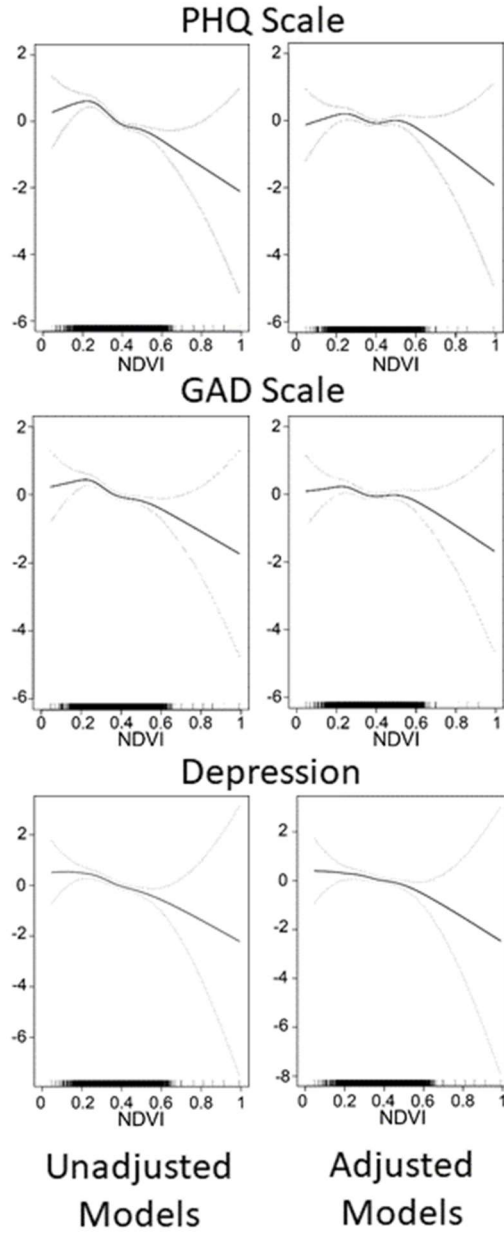*Supplemental Materials*

Green Space Associations with Mental Health and Cognitive Function: Results from the Quebec CARTaGENE Cohort

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eFigure 1. Unadjusted and adjusted penalized spline models for NDVI within 500 m and PHQ-9 depression and GAD-7 anxiety scales (linear) and self-reported doctor diagnosis of depression (binary).

eTable 1. Unadjusted and adjusted regression model results for residential green space (per 0.1 increase in NDVI) in all buffer distances and depression, anxiety, and cognitive function outcomes.

				NDVI		
	n	100 m	250 m	500 m	750 m	1000 m
Unadjusted Models						
Depression Outcomes						
Health Record Depression Diagnosis	8,144	0.90 (0.84-0.96)	0.90 (0.83, 0.96)	0.90 (0.84, 0.97)	0.91 (0.84, 0.98)	0.92 (0.85, 0.99)
Self-Reported Doctor Diagnosed Depression	8,144	0.80 (0.74, 0.87)	0.79 (0.72, 0.86)	0.78 (0.71, 0.85)	0.78 (0.71, 0.85)	0.77 (0.71, 0.85)
PHQ-9 Linear (β, SE)	8,144	-0.24 (0.04)	-0.29 (0.04)	-0.30 (0.04)	-0.30 (0.04)	-0.30 (0.04)
≥5 (minor depression)	8,144	0.88 (0.83, 0.93)	0.84 (0.80, 0.90)	0.84 (0.79, 0.89)	0.84 (0.79, 0.89)	0.84 (0.79, 0.89)
≥10 (moderate depression)	8,144	0.81 (0.73, 0.89)	0.76 (0.68, 0.84)	0.72 (0.65, 0.80)	0.72 (0.65, 0.80)	0.73 (0.65, 0.81)
Anxiety Outcomes						
Health Record Anxiety Diagnosis	8,144	0.95 (0.90-1.00)	0.93 (0.87-0.98)	0.91 (0.86-0.97)	0.92 (0.86-0.97)	0.92 (0.87-0.98)
GAD-7 Score, linear (β, SE)	8,144	-0.16 (0.03)	-0.19 (0.04)	-0.21 (0.04)	-0.21 (0.04)	-0.20 (0.04)
GAD-7 Scores ≥5 (minor anxiety)	8,144	0.92 (0.87, 0.98)	0.90 (0.84, 0.95)	0.88 (0.83, 0.93)	0.88 (0.83, 0.93)	0.88 (0.83, 0.94)
GAD-7 Scores ≥10 (moderate anxiety)	8,144	0.81 (0.73, 0.89)	0.78 (0.70, 0.87)	0.75 (0.67, 0.84)	0.75 (0.67, 0.84)	0.75 (0.67, 0.84)
Cognitive Function Measures[a]						
Reasoning (β, SE)	6,658	0.04 (0.02)	0.01 (0.02)	-0.01 (0.02)	-0.02 (0.02)	-0.02 (0.02)
Visual memory (β, SE)	6,832	-0.10 (0.07)	-0.11 (0.07)	-0.13 (0.07)	-0.13 (0.08)	-0.12 (0.08)
Reaction time (β, SE)	6,855	-3.96 (1.41)	-4.79 (1.47)	-3.86 (1.50)	-3.44 (1.52)	-3.42 (1.54)
Adjusted Models						
Depression Outcomes						
Health Record Depression Diagnosis	8,144	0.95 (0.88-1.03)	0.96 (0.87-1.05)	0.97 (0.88-1.06)	0.98 (0.89-1.08)	0.99 (0.90-1.09)
Self-Reported Doctor Diagnosed Depression	8,144	0.89 (0.81-0.98)	0.87 (0.78-0.97)	0.85 (0.76-0.95)	0.85 (0.76-0.95)	0.85 (0.75-0.95)
PHQ-9 Score, linear (β, SE)	8,144	-0.09 (0.04)	-0.05 (0.04)	-0.06 (0.05)	-0.06 (0.05)	-0.05 (0.05)
PHQ-9 Scores ≥5 (minor depression)	8,144	1.00 (0.94-1.07)	0.97 (0.90-1.04)	0.96 (0.89-1.03)	0.95 (0.88-1.03)	0.95 (0.88-1.03)
PHQ-9 Scores ≥10 (moderate depression)	8,144	1.06 (0.93-1.20)	0.99 (0.87-1.14)	0.92 (0.80-1.06)	0.93 (0.81-1.07)	0.95 (0.82-1.09)
Anxiety Outcomes						
Health Record Anxiety Diagnosis	8,144	1.03 (0.96-1.10)	1.00 (0.93-1.08)	0.97 (0.90-1.05)	0.98 (0.91-1.06)	0.99 (0.92-1.07)
GAD-7 Score, linear (β, SE)	8,144	-0.02 (0.04)	-0.04 (0.04)	-0.08 (0.05)	-0.08 (0.05)	-0.08 (0.05)
GAD-7 Scores ≥5 (minor anxiety)	8,144	1.01 (0.94-1.08)	0.98 (0.91-1.06)	0.94 (0.88-1.02)	0.94 (0.87-1.02)	0.94 (0.87-1.02)
GAD-7 Scores ≥10 (moderate anxiety)	8,144	0.90 (0.79-1.02)	0.87 (0.76-1.00)	0.81 (0.70-0.93)	0.81 (0.70-0.94)	0.81 (0.70-0.94)
Cognitive Function Measures[a]						
Reasoning (β, SE)	6,658	0.04 (0.02)	0.02 (0.02)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)

Visual memory (β, SE)	6,832	-0.05 (0.08)	-0.06 (0.09)	-0.10 (0.09)	-0.11 (0.09)	-0.09 (0.09)
Reaction time (β, SE)	6,855	-1.33 (1.55)	-2.10 (1.70)	-0.94 (1.78)	-0.31 (1.81)	-0.11 (1.83)

*Adjusted: Age, sex, city, year and month of baseline questions/cognitive tests, household income, education, white, marital status, population density

** Model estimates reported are odds ratios (OR) and 95% CIs for binary outcomes and β coefficients and standard errors (SE) for linear outcomes

[a] Reasoning (0-12, higher in better executive function); Visual memory (7-30, lower is better visual memory); Reaction time (ms, lower is quicker reaction times)

eTable 2. Analysis of potential mediators for NDVI within 500 m and depression and anxiety outcomes that were associated with green space exposures in the main or stratified analyses.

	n	Adjusted	Adjusted + Physical Activity	Adjusted + Air Pollution	Adjusted + Social Support	Adjusted + All Mediators
PHQ-9 Score, linear (β, SE)						
All individuals	7,840	-0.06 (0.05)	-0.05 (0.05)	-0.03 (0.05)	-0.07 (0.05)	-0.03 (0.05)
Female	4,091	-0.06 (0.07)	-0.03 (0.07)	0.01 (0.08)	-0.07 (0.07)	0.03 (0.08)
Low Income	2,135	-0.18 (0.10)	-0.16 (0.10)	-0.04 (0.12)	-0.18 (0.09)	0.02 (0.12)
White	6,845	-0.13 (0.05)	-0.12 (0.05)	-0.09 (0.06)	-0.14 (0.05)	-0.11 (0.06)
Not Married	2,356	-0.18 (0.09)	-0.16 (0.09)	-0.12 (0.11)	-0.20 (0.09)	-0.11 (0.11)
GAD-7 Score, linear (β, SE)						
All individuals	7,840	-0.08 (0.05)	-0.08 (0.05)	-0.06 (0.05)	-0.09 (0.05)	-0.07 (0.05)
Female	4,091	-0.12 (0.07)	-0.10 (0.07)	-0.08 (0.08)	-0.14 (0.07)	-0.08 (0.08)
Low Income	2,135	-0.25 (0.09)	-0.24 (0.10)	-0.16 (0.11)	-0.26 (0.10)	-0.15 (0.12)
White	6,845	-0.12 (0.05)	-0.12 (0.05)	-0.10 (0.06)	-0.14 (0.05)	-0.15 (0.06)
Not Married	2,356	-0.29 (0.09)	-0.28 (0.09)	-0.24 (0.10)	-0.30 (0.09)	-0.27 (0.10)
Self-Reported Doctor Diagnosed Depression						
All individuals	7,840	0.85 (0.76-0.95)	0.85 (0.76-0.95)	0.86 (0.75-0.97)	0.85 (0.76-0.95)	0.84 (0.74-0.97)
Female	4,091	0.88 (0.78-0.99)	0.88 (0.76-1.02)	0.85 (0.72-1.00)	0.86 (0.75-0.99)	0.87 (0.73-1.03)
Low Income	2,135	0.76 (0.64-0.91)	0.76 (0.63-0.91)	0.84 (0.68-1.03)	0.76 (0.64-0.91)	0.82 (0.66-1.02)
White	6,845	0.88 (0.78-0.99)	0.89 (0.78-1.01)	0.88 (0.76-1.01)	0.87 (0.77-0.99)	0.88 (0.76-1.02)
Not Married	2,356	0.82 (0.70-0.97)	0.82 (0.69-0.97)	0.88 (0.73-1.06)	0.82 (0.70-0.97)	0.85 (0.70-1.03)

*Adjusted: Age, sex, city, year and month of baseline questions/cognitive tests, household income, education, white, marital status, population density
** Model estimates reported are odds ratios (OR) and 95% CIs for binary outcomes and β coefficients and standard errors (SE) for linear outcomes