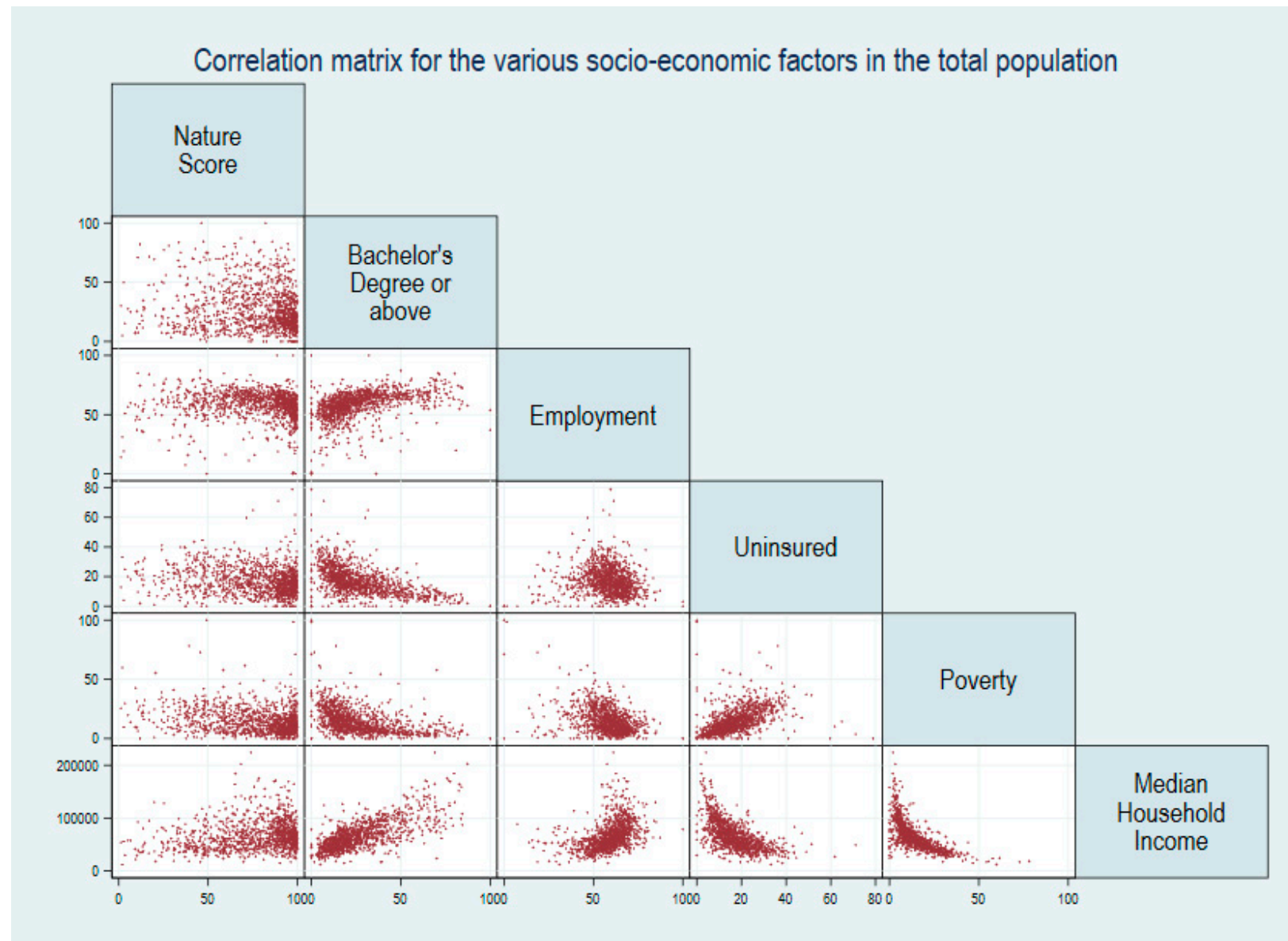


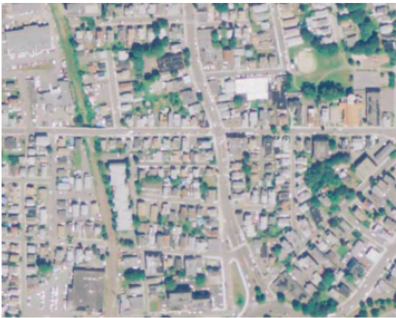
## Supplementary Figures

**Figure S1. Correlation matrix showing the relationship between the various socio-economic factors and NatureScore.**



**Figure S2. Satellite images of neighborhoods with different NatureScores**

**Nature  
Deficient**  
(0-19.9)



**Nature  
Light**  
(20-39.9)



**Nature  
Adequate**  
(40-59.9)



**Nature  
Rich**  
(60-79.9)



**Nature  
Utopia**  
(80-100)



## Supplementary Tables

**Table S1. List of ICD-10 CM and ICD-9 codes used to define depression.**

<b>ICD-10 CM / DESCRIPTION</b>	
<b>ICD-9</b>	
<b>F320</b>	Major depressive disorder, single episode, mild
<b>F321</b>	Major depressive disorder, single episode, moderate
<b>F322</b>	Major depressive disorder, single episode, severe without psychotic features
<b>F323</b>	Major depressive disorder, single episode, severe with psychotic features
<b>F324</b>	Major depressive disorder, single episode, in partial remission
<b>F325</b>	Major depressive disorder, single episode, in full remission
<b>F3289</b>	Other specified depressive episodes
<b>F329</b>	Major depressive disorder, single episode, unspecified
<b>F32A</b>	Depression, unspecified
<b>F330</b>	Major depressive disorder, recurrent, mild
<b>F331</b>	Major depressive disorder, recurrent, moderate
<b>F332</b>	Major depressive disorder, recurrent severe without psychotic features

<b>F333</b>	Major depressive disorder, recurrent, severe with psychotic symptoms
<b>F3340</b>	Major depressive disorder, recurrent, in remission, unspecified
<b>F3341</b>	Major depressive disorder, recurrent, in partial remission
<b>F3342</b>	Major depressive disorder, recurrent, in full remission
<b>F338</b>	Other recurrent depressive disorders
<b>F339</b>	Major depressive disorder, recurrent, unspecified
<b>29620</b>	Major depressive affective disorder, single episode, unspecified
<b>29621</b>	Major depressive affective disorder, single episode, mild
<b>29622</b>	Major depressive affective disorder, single episode, moderate
<b>29623</b>	Major depressive affective disorder, single episode, severe, without mention of psychotic behavior
<b>29624</b>	Major depressive affective disorder, single episode, severe, specified as with psychotic behavior
<b>29625</b>	Major depressive affective disorder, single episode, in partial or unspecified remission
<b>29626</b>	Major depressive affective disorder, single episode, in full remission
<b>29630</b>	Major depressive affective disorder, recurrent episode, unspecified
<b>29631</b>	Major depressive affective disorder, recurrent episode, mild
<b>29632</b>	Major depressive affective disorder, recurrent episode, moderate

<b>29633</b>	Major depressive affective disorder, recurrent episode, severe, without mention of psychotic behavior
<b>29634</b>	Major depressive affective disorder, recurrent episode, severe, specified as with psychotic behavior
<b>29635</b>	Major depressive affective disorder, recurrent episode, in partial or unspecified remission
<b>29636</b>	Major depressive affective disorder, recurrent episode, in full remission
<b>29682</b>	Atypical depressive disorder
<b>311</b>	Depressive disorder, not elsewhere classified

**Table S2. List of ICD-10 CM and ICD-9 codes used to define bipolar disorder.**

<b>ICD-10 CM / DESCRIPTION</b>	
<b>ICD-9</b>	
<b>F310</b>	Bipolar disorder, current episode hypomanic
<b>F3110</b>	Bipolar disorder, current episode manic without psychotic features, unspecified
<b>F3111</b>	Bipolar disorder, current episode manic without psychotic features, mild
<b>F3112</b>	Bipolar disorder, current episode manic without psychotic features, moderate
<b>F3113</b>	Bipolar disorder, current episode manic without psychotic features, severe
<b>F312</b>	Bipolar disorder, current episode manic severe with psychotic features
<b>F3130</b>	Bipolar disorder, current episode depressed, mild or moderate severity, unspecified
<b>F3131</b>	Bipolar disorder, current episode depressed, mild
<b>F3132</b>	Bipolar disorder, current episode depressed, moderate
<b>F314</b>	Bipolar disorder, current episode depressed, severe, without psychotic features
<b>F315</b>	Bipolar disorder, current episode depressed, severe, with psychotic features
<b>F3160</b>	Bipolar disorder, current episode mixed, unspecified
<b>F3161</b>	Bipolar disorder, current episode mixed, mild

<b>F3162</b>	Bipolar disorder, current episode mixed, moderate
<b>F3163</b>	Bipolar disorder, current episode mixed, severe, without psychotic features
<b>F3164</b>	Bipolar disorder, current episode mixed, severe, with psychotic features
<b>F3170</b>	Bipolar disorder, currently in remission, most recent episode unspecified
<b>F3171</b>	Bipolar disorder, in partial remission, most recent episode hypomanic
<b>F3172</b>	Bipolar disorder, in full remission, most recent episode hypomanic
<b>F3173</b>	Bipolar disorder, in partial remission, most recent episode manic
<b>F3174</b>	Bipolar disorder, in full remission, most recent episode manic
<b>F3175</b>	Bipolar disorder, in partial remission, most recent episode depressed
<b>F3176</b>	Bipolar disorder, in full remission, most recent episode depressed
<b>F3177</b>	Bipolar disorder, in partial remission, most recent episode mixed
<b>F3178</b>	Bipolar disorder, in full remission, most recent episode mixed
<b>F3181</b>	Bipolar II disorder
<b>F3189</b>	Other bipolar disorder
<b>F319</b>	Bipolar disorder, unspecified
<b>29600</b>	Bipolar I disorder, single manic episode, unspecified

<b>29601</b>	Bipolar I disorder, single manic episode, mild
<b>29602</b>	Bipolar I disorder, single manic episode, moderate
<b>29603</b>	Bipolar I disorder, single manic episode, severe, without mention of psychotic behavior
<b>29604</b>	Bipolar I disorder, single manic episode, severe, specified as with psychotic behavior
<b>29605</b>	Bipolar I disorder, single manic episode, in partial or unspecified remission
<b>29606</b>	Bipolar I disorder, single manic episode, in full remission
<b>29640</b>	Bipolar I disorder, most recent episode (or current) manic, unspecified
<b>29641</b>	Bipolar I disorder, most recent episode (or current) manic, mild
<b>29642</b>	Bipolar I disorder, most recent episode (or current) manic, moderate
<b>29643</b>	Bipolar I disorder, most recent episode (or current) manic, severe, without mention of psychotic behavior
<b>29644</b>	Bipolar I disorder, most recent episode (or current) manic, severe, specified as with psychotic behavior
<b>29645</b>	Bipolar I disorder, most recent episode (or current) manic, in partial or unspecified remission
<b>29646</b>	Bipolar I disorder, most recent episode (or current) manic, in full remission
<b>29650</b>	Bipolar I disorder, most recent episode (or current) depressed, unspecified
<b>29651</b>	Bipolar I disorder, most recent episode (or current) depressed, mild



<b>29652</b>	Bipolar I disorder, most recent episode (or current) depressed, moderate
<b>29653</b>	Bipolar I disorder, most recent episode (or current) depressed, severe, without mention of psychotic behavior
<b>29654</b>	Bipolar I disorder, most recent episode (or current) depressed, severe, specified as with psychotic behavior
<b>29655</b>	Bipolar I disorder, most recent episode (or current) depressed, in partial or unspecified remission
<b>29656</b>	Bipolar I disorder, most recent episode (or current) depressed, in full remission
<b>29660</b>	Bipolar I disorder, most recent episode (or current) mixed, unspecified
<b>29661</b>	Bipolar I disorder, most recent episode (or current) mixed, mild
<b>29662</b>	Bipolar I disorder, most recent episode (or current) mixed, moderate
<b>29663</b>	Bipolar I disorder, most recent episode (or current) mixed, severe, without mention of psychotic behavior
<b>29664</b>	Bipolar I disorder, most recent episode (or current) mixed, severe, specified as with psychotic behavior
<b>29665</b>	Bipolar I disorder, most recent episode (or current) mixed, in partial or unspecified remission
<b>29666</b>	Bipolar I disorder, most recent episode (or current) mixed, in full remission
<b>2967</b>	Bipolar I disorder, most recent episode (or current) unspecified

<b>29680</b>	Bipolar disorder, unspecified
<b>29681</b>	Atypical manic disorder
<b>29689</b>	Other bipolar disorders

**Table S3. List of ICD-10 CM and ICD-9 codes used to define anxiety disorders.**

<b>ICD-10 CM / DESCRIPTION</b>	
<b>ICD-9</b>	
<b>F410</b>	Panic disorder [episodic paroxysmal anxiety]
<b>F411</b>	Generalized anxiety disorder
<b>F412</b>	Mixed anxiety and depressive disorder
<b>F413</b>	Other mixed anxiety disorders
<b>F418</b>	Other specified anxiety disorders
<b>F419</b>	Anxiety disorder, unspecified
<b>30000</b>	Anxiety state, unspecified
<b>30001</b>	Panic disorder without agoraphobia
<b>30002</b>	Generalized anxiety disorder
<b>30009</b>	Other anxiety states

**Table S4. List of ICD-10 CM and ICD-9 codes used to define stress disorders.**

<b>ICD-10 CM / DESCRIPTION</b>	
<b>ICD-9</b>	
<b>F430</b>	Acute stress reaction
<b>F4310</b>	Post-traumatic stress disorder, unspecified
<b>F4311</b>	Post-traumatic stress disorder, acute
<b>F4312</b>	Post-traumatic stress disorder, chronic
<b>F4320</b>	Adjustment disorder, unspecified
<b>F4321</b>	Adjustment disorder with depressed mood
<b>F4322</b>	Adjustment disorder with anxiety
<b>F4323</b>	Adjustment disorder with mixed anxiety and depressed mood
<b>F4324</b>	Adjustment disorder with disturbance of conduct
<b>F4325</b>	Adjustment disorder with mixed disturbance of emotions and conduct
<b>F4329</b>	Adjustment disorder with other symptoms
<b>F4381</b>	Prolonged grief disorder
<b>F4389</b>	Other reactions to severe stress

<b>F439</b>	Reaction to severe stress, unspecified
<b>3090</b>	Adjustment disorder with depressed mood
<b>3091</b>	Prolonged depressive reaction
<b>30921</b>	Separation anxiety disorder
<b>30922</b>	Emancipation disorder of adolescence and early adult life
<b>30924</b>	Adjustment disorder with anxiety
<b>30928</b>	Adjustment disorder with mixed anxiety and depressed mood
<b>30929</b>	Other adjustment reactions with predominant disturbance of other emotions
<b>3093</b>	Adjustment disorder with disturbance of conduct
<b>3094</b>	Adjustment disorder with mixed disturbance of emotions and conduct
<b>30981</b>	Posttraumatic stress disorder
<b>30982</b>	Adjustment reaction with physical symptoms
<b>30983</b>	Adjustment reaction with withdrawal
<b>30989</b>	Other specified adjustment reactions
<b>3099</b>	Unspecified adjustment reaction
<b>3083</b>	Other acute reactions to stress

<b>3084</b>	Mixed disorders as reaction to stress
<b>3089</b>	Unspecified acute reaction to stress

**Table S5. Distribution of Neighborhood NatureScore groups**

<b>NatureScore group</b>	<b>N (%)</b>	<b>Mean (SD)</b>	<b>Median (IQR)</b>	<b>Range (Min-Max)</b>
<b>Overall</b>	1,169 (100)	77.21 (21.96)	85.8 (64.8–94.7)	1.2 – 100
<b>Nature Deficient / Nature Light (0-39)</b>	94 (8.04)	26.65 (10.94)	30.35 (19.5–36.8)	1.2 – 39.9
<b>Nature Adequate (40-59)</b>	159 (13.60)	51.07 (6.01)	50.3 (46.7–57.0)	40 – 59.9
<b>Nature Rich (60-79)</b>	246 (21.04)	71.03 (5.57)	71.5 (66.6–75.9)	60.3 – 79.7
<b>Nature Utopia (80-100)</b>	670 (57.31)	92.76 (5.25)	93.4 (89.1–97.4)	80 – 100

N: Number of zipcodes; %: percentage; SD: standard deviation; IQR: inter-quartile range; Min: minimum; Max: maximum

**Table S6. Multivariable regression results for depression stratified by black population in each zipcode.**

Black population <10%			Black population 10+%	
No. of Zipcodes	700		416	
	aRR (95%CI)	P-value	aRR (95%CI)	P-value
<b>NatureScore Categories</b>				
<b>Nature Deficient / Nature Light</b>	Reference		Reference	
<b>Nature Adequate</b>	1.221 (0.913 - 1.632)	0.178	0.905 (0.529 - 1.548)	0.716
<b>Nature Rich</b>	1.103 (0.866 - 1.404)	0.427	0.737 (0.432 - 1.259)	0.265
<b>Nature Utopia</b>	0.930 (0.751 - 1.152)	0.509	0.724 (0.419 - 1.253)	0.249

aRR: adjusted rate ratio; CI: confidence interval; No: number; %: percentage



**Table S7. Multivariable regression results for bipolar stratified by black population in each zipcode.**

Stratification by Hispanic Population in Zipcode				
	Hispanic population <10%		Hispanic population 10+%	
No. of Zipcodes	594		422	
	aRR (95%CI)	P-value	aRR (95%CI)	P-value
NatureScore Categories				
Nature Deficient / Nature Light	Reference		Reference	
Nature Adequate	1.074 (0.566 – 2.039)	0.826	0.689 (0.448 - 1.062)	0.092
Nature Rich	1.090 (0.572 – 2.078)	0.793	0.719 (0.475 – 1.091)	0.121
Nature Utopia	0.744 (0.392 - 1.412)	0.366	0.629 (0.404 – 0.979)	<b>0.040</b>
Stratification by Educational Attainment in Zipcode				
	Educational Attainment <25%		Educational Attainment 25+%	
No. of Zipcodes	561		455	
	aRR (95%CI)	P-value	aRR (95%CI)	P-value
NatureScore Categories				
Nature Deficient / Nature Light	Reference		Reference	

<b>Nature Adequate</b>	1.398 (1.019 – 1.916)	<b>0.037</b>	0.425 (0.214 – 0.844)	<b>0.014</b>
<b>Nature Rich</b>	1.363 (1.011 – 1.837)	<b>0.042</b>	0.391 (0.197 – 0.772)	<b>0.007</b>
<b>Nature Utopia</b>	1.264 (0.952 - 1.679)	0.106	0.311 (0.159 – 0.608)	<b>0.001</b>

aRR: adjusted rate ratio; CI: confidence interval; No: number; %: percentage