Supplementary file for "How Perceived Adequacy of Open Public Space is Related to Objective Green Space and Individuals' Opinions of Area-level Quality"

1. Additional descriptive statistics

Table S1. Average perceived problems with open space by category of the other variables used in the paper.

Sample categories	Perceived problems with lack of open public space	
	No problem (%)	Problem (%)
Objective green space		
Non-urban	91.35	8.65
Green space quintile 1 (Least urban green space)	82.67	17.33
Green space quintile 2	90.21	9.79
Green space quintile 3	90.39	9.61
Green space quintile 4	91.75	8.25
Green space quintile 5 (Most green space)	88.25	11.75
Area-level deprivation		
Deprivation quintile 1 (Most deprived)	86.68	13.32
Deprivation quintile 2	90.85	9.15
Deprivation quintile 3	91.75	8.25
Deprivation quintile 4	91.42	8.58
Deprivation quintile 5 (Most affluent)	92.28	7.72
Age		
16-24	85.93	14.07
25-44	87.16	12.84
45-64	92.13	7.87
65 or over	94.93	5.07
Gender		
Female	90.63	9.37
Male	90.83	9.17
Marital status		
Not married	90.22	9.78
Married	91.17	8.83
Region		
Dublin	90.12	9.88
Rest of Leinster	88.43	11.57
Munster	90.39	9.61
Connaught/Ulster	94.24	5.76

Sample categories	Perceived problems with lack of open public space	
	No problem (%)	Problem (%)
Area level rubbish		
No problem	94.41	5.59
A bit of a problem	82.90	17.1
A big problem	72.93	27.07
Area level graffiti		
No problem	92.62	7.38
A bit of a problem	78.63	21.37
A big problem	57.67	42.33
Area level vandalism		
No problem	93.13	6.87
A bit of a problem	79.85	20.15
A big problem	51.69	48.31
Area level racism		
No problem	92.29	7.71
A bit of a problem	68.77	31.23
A big problem	38.14	61.86
Area level break-ins		
No problem	93.72	6.28
A bit of a problem	86.48	13.52
A big problem	79.14	20.86
Area-level people being drunk		
No problem	94.05	5.95
A bit of a problem	70.06	29.94
A big problem	35.00	65.00
Area level public transport problem		
No problem	93.72	6.28
A bit of a problem	87.31	12.69
A big problem	82.91	17.09
Area level food shop shortage		
No problem	92.71	7.29
A bit of a problem	84.01	15.99
A big problem	72.92	27.08
Education level		
Primary	92.96	7.04
Secondary	91.35	8.65
Tertiary	89.38	10.62

	Perceived problems with lack of open public space	
Sample categories	No problem (%)	Problem (%)
Medical card status		
No medical card	90.95	9.05
GP visit card	91.91	8.09
Full medical card	90.23	9.77
Immigrant status		
Non-immigrant	91.03	8.97
Immigrant	89.10	10.90
N	7,347	7,347

2. Summary statistics from variables generated by Principal Components Analysis

Table S2. Summary statistics for area-level quality proxy variables.

Variable	Mean	Standard deviation
Safety	0	1.27
Cleanliness	0	1.42
Service provision	0	1.22

3. Full regression results

Table S3. Full regression results for models in Table 4 (OR = odds ratios and SE = robust standard errors).

	Basic model		Model with social controls		Model with all controls	
Model	**(1)**		**(2)**		**(3)**	
	OR	**SE**	**OR**	**SE**	**OR**	**SE**
Green space category						
Quintile 1 (Least green space)	[REF]		[REF]		[REF]	
Quintile 2	0.57**	0.126	0.51***	0.113	0.71	0.177
Quintile 3	0.57**	0.124	0.46***	0.103	0.42***	0.107
Quintile 4	0.44***	0.1	0.36***	0.082	0.31***	0.082
Quintile 5	0.65**	0.143	0.58**	0.131	0.48***	0.124
Non-urban	0.5***	0.083	0.3***	0.066	0.28***	0.069
Age						
16-24	1.09	0.146	1.19	0.174	0.88	0.147
25-44	[REF]		[REF]		[REF]	
45-64	0.59***	0.058	0.62***	0.064	0.6***	0.067
65+	0.37***	0.045	0.36***	0.053	0.41***	0.064
Sex						
Female	[REF]		[REF]		[REF]	
Male	0.99	0.081	1.02	0.087	1.04	0.096

Model	Basic model		Model with social controls		Model with all controls	
	(1)		**(2)**		**(3)**	
	OR	SE	OR	SE	OR	SE
Deprivation category						
Quintile 1 (Least affluent)			1.93***	0.288	1.17	0.196
Quintile 2			1.6***	0.243	1.12	0.183
Quintile 3			1.31*	0.204	0.87	0.152
Quintile 4			1.39**	0.209	1.16	0.186
Quintile 5 (Most affluent)			[REF]		[REF]	
Highest level of education						
Primary			1.03	0.167	0.99	0.18
Secondary			[REF]		[REF]	
Tertiary			1.37***	0.132	1.25**	0.13
Marital status						
Married			1.07	0.095	1.03	0.104
Non-married[1]			[REF]		[REF]	
Employment status						
Unemployed			1.05	0.185	0.83	0.167
Employed			[REF]		[REF]	
Smoker						
Yes			0.98	0.107	0.93	0.116
No			[REF]		[REF]	
Private health insurance						
Yes			0.84*	0.086	0.89	0.099
No			[REF]		[REF]	
Medical card status						
No medical card			[REF]		[REF]	
GP visit card holder			1.09	0.211	1.08	0.233
Medical card holder			1.35***	0.15	1.27*	0.152
Region						
Dublin			0.66**	0.107	0.42***	0.077
Rural Leinster			1.28**	0.146	1.27*	0.156
Munster			[REF]		[REF]	
Connaught-Ulster			0.59***	0.078	0.62***	0.09
Area quality proxy variables					0***	0
Safety					0.87***	0.031
Cleanliness					0.64***	0.023
Service provision					0.69***	0.022
Constant	0.28***	0.045	0.24***	0.063	0.31***	0.085
Note: * p < 0.05, ** p < 0.01, *** p < 0.001						

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[1] The reference category includes single, divorced, separated and widowed.

4. Additional regressions run as checks of robustness

Table S4. Marginal effects from models with the green space reference category switched to the highest urban green space quintile.

	Basic model	Model with social controls	Model with all controls
Model	(4)	(5)	(6)
Reference category: Areas with top quintile of green space in urban areas			
Green space quintile 1 (Least green space)	0.049* (0.025)	0.076** (0.033)	0.079*** (0.029)
Green space quintile 2	-0.012 (0.020)	-0.014 (0.025)	0.038 (0.026)
Green space quintile 3	-0.012 (0.020)	-0.023 (0.024)	-0.012 (0.021)
Green space quintile 4	-0.032* (0.019)	-0.047** (0.023)	-0.033* (0.020)
Green space quintile 5 (Most green space)	[REF]	[REF]	[REF]
Non-Urban	-0.022 (0.016)	-0.061*** (0.021)	-0.040** (0.018)
Age and sex variables	Yes	Yes	Yes
Demographic variables		Yes	Yes
Area variables			Yes

Table S5. Marginal effects for green space variables in two alternative models.

	Full model estimated with OLS	Full model with only urban observations
Model	(7)	(8)
Green space quintile 1 (Least green space)	[REF]	[REF]
Green space quintile 2	-0.035 (0.023)	-0.056** (0.025)
Green space quintile 3	-0.067*** (0.022)	-0.094*** (0.023)
Green space quintile 4	-0.087*** (0.022)	-0.111*** (0.022)
Green space quintile 5	-0.059*** (0.023)	-0.092*** (0.024)
Non-urban	-0.100*** (0.023)	
Demographic variables	Yes	Yes
Area variables	Yes	Yes
N	7,347	2,189
R^2	0.17	