

Supporting Information

The Relationship between the Color Landscape Characteristics of Autumn Plant Communities and Public Aesthetics in Urban Parks in Changsha, China.

Table S1. KMO and Bartlett Test.

KMO sampling suitability quantity	0.673	
Bartlett's test of sphericity	The approximate chi-square	1480.002
	Degree of freedom	105
	Saliency	0.000

Table S2. Explanation of total variance.

Component	Initial Eigenvalue			Sum of Squared of Extracted Loads			Sum of Squares of Rotational Loads		
	Total	Percent Variance%	Cumulative percentage of variance%	Total	Percent Variance%	Cumulative percentage of variance%	Total	Percent Variance%	Cumulative percentage of variance%
1	5.413	36.087	36.087	5.413	36.087	36.087	4.401	29.342	29.342
2	3.014	20.096	56.183	3.014	20.096	56.183	3.551	23.676	53.018
3	2.232	14.878	71.062	2.232	14.878	71.062	2.155	14.368	67.386
4	1.505	10.036	81.097	1.505	10.036	81.097	2.057	13.712	81.097
5	0.768	5.120	86.217						
6	0.609	4.057	90.274						
7	0.420	2.801	93.074						
8	0.286	1.907	94.981						
9	0.227	1.515	96.496						
10	0.183	1.220	97.715						
11	0.141	0.942	98.657						
12	0.121	0.809	99.466						
13	0.058	0.387	99.853						
14	0.020	0.131	99.984						
15	0.002	0.016	100.000						

Table S3. Composition matrix after rotation.

Serial Number	Color Element Indicator	Component			
		1	2	3	4
1	R_P (Ratio of Primary Color)	0.961	0.128	0.000	-0.156
2	N_P (Number of Primary Color)	0.903	0.101	-0.009	-0.207
3	R_{PH} (Ratio of Primary Hue)	0.833	0.009	0.055	-0.135
4	R_A (Ratio of Adjunctive Color)	-0.822	0.330	-0.045	-0.197
5	N_A (Number of Adjunctive Color)	-0.789	0.351	-0.121	-0.189
6	E_C (Color Evenness Index)	-0.339	0.858	-0.05	-0.024
7	I_B (Brightness Index)	0.078	0.845	-0.014	0.063
8	H_C (Color Diversity Index)	-0.433	0.816	-0.204	0.145
9	I_S (Saturation Index)	0.251	0.683	0.216	-0.15
10	N_C (Number of colors)	-0.475	0.601	-0.337	0.333
11	R_{WC} (Ratio of Warm and Cool Color)	0.121	-0.075	0.835	-0.195
12	R_C (Color-leafed Index)	0.132	0.432	0.796	-0.107
13	I_H (Hue Index)	-0.023	0.390	-0.748	-0.048
14	R_I (Ratio of Intersperse Color)	-0.053	0.060	-0.195	0.921
15	N_I (Number of Intersperse Color)	-0.196	0.000	-0.044	0.916

Note: Factor extraction method: PCA; rotation method: Kaiser's method of normalizing the fourth maximal power. The rotation converged after 5 iterations.

Table S4. One-way ANOVA of principal components.

Principal Component	Scope	Sum of Squares	Degree of Freedom	Mean Square	F	Significance
PC1	Between-Group	8656.192	4	2164.048	4.619	0.002
	intragroup	37483.511	80	468.544	--	--
	total	46139.704	84	--	--	--
PC2	Between-Group	1940.278	4	485.069	3.682	0.008
	intragroup	10539.269	80	131.741	--	--
	total	12479.546	84	--	--	--
PC3	Between-Group	4924.343	4	1231.086	2.712	0.036
	intragroup	36315.033	80	453.938	--	--
	total	41239.376	84	--	--	--
PC4	Between-Group	1242.417	4	310.604	4.904	0.001
	intragroup	5066.444	80	63.331	--	--
	total	6308.861	84	--	--	--

Note: PC1 (primary and adjunctive color index), PC2 (color structure and property index), PC3 (autumn color-leafed index), and PC4 (intersperse color index).