Appendix

Introduction

This document provides tables supplementing the analyses presented in the article:
Mede NG (2023) Variations of science-related populism in comparative perspective: A
multilevel segmentation analysis of supporters and opponents of populist demands toward
science. *International Journal of Comparative Sociology*. DOI: 10.1177/00207152231200188

Replication Materials

The analyses were conducted in R (version 4.2.2). They are completely reproducible
with the materials publicly shared at the Open Science Framework: https://osf.io/prfh7/. The
materials include the survey data underlying the analyses, R code, figures in high resolution,
and pre-computed FE-LCA and Bayesian regression models.

Supplementary Tables

Supplementary Table S1. Items of the SciPop Scale

Dimension	Item
Conceptions of the ordinary people	What unites the ordinary people is that they trust their common sense in everyday life.
	Ordinary people are of good and honest character.
Conceptions of the academic elite	Scientists are only after their own advantage.
	Scientists are in cahoots with politics and business.
Demands for decision-making sovereignty	The people should have influence on the work of scientists.
	People like me should be involved in decisions about the topics scientists research.
Demands for truth-speaking sovereignty	In case of doubt, one should rather trust the life experience of ordinary people than the estimations of scientists.
	We should rely more on common sense and less on scientific studies.

Note: All items measured on 5-point Likert scales (1 = do not agree at all, 5 = agree completely)

Supplementary Table S2. Means and standard deviations of science-related populist attitudes (subscales) and attitudinal covariates (political orientation, trust in science)

Country	Political orientation	Trust in science	Science-related populism			
			Conceptions of the ordinary people	Conceptions of the academic elite	Demands for decision-making sovereignty	Demands for truth-speaking sovereignty
Austria	3.08 (0.82)	3.71 (1.14)	3.28 (0.97)	2.77 (1.10)	2.53 (1.08)	2.78 (1.13)
Germany	2.70 (0.81)	3.71 (0.96)	3.01 (1.09)	2.29 (1.11)	2.25 (1.11)	2.26 (1.10)
Switzerland	2.66 (0.97)	3.79 (0.75)	2.83 (1.02)	2.35 (0.92)	2.58 (0.90)	2.58 (0.95)
Taiwan	2.76 (0.79)	3.52 (0.81)	3.53 (0.77)	2.77 (0.88)	2.53 (0.94)	2.71 (0.97)
Full sample	2.83 (0.83)	3.66 (0.98)	3.25 (0.99)	2.59 (1.06)	2.43 (1.05)	2.57 (1.09)

Supplementary Table S3. Alpha and Spearman-Brown reliability of SciPop Scale and subscales

Country	Alpha reliability (Cronbach)		Split half reliability (Spearman-Brown)		
	Science-related populist attitudes	Conceptions of the ordinary people	Conceptions of the academic elite	Demands for decision-making sovereignty	Demands for truth-speaking sovereignty
Austria	0.90	0.75	0.84	0.82	0.85
Germany	0.88	0.77	0.81	0.82	0.84
Switzerland	0.75	0.63	0.71	0.65	0.74
Taiwan	0.75	0.35	0.68	0.52	0.73
Full sample	0.87	0.69	0.81	0.75	0.82

Supplementary Table S4. Pearson correlations of SciPop Scale subscales in full sample

	Conceptions of the ordinary people	Conceptions of the academic elite	Demands for decision-making sovereignty	Demands for truth-speaking sovereignty
Conceptions of the ordinary people		0.39 ***	0.39 ***	0.50 ***
Conceptions of the academic elite	0.39 ***		0.54 ***	0.66 ***
Demands for decision-making sovereignty	0.39 ***	0.54 ***		0.57 ***
Demands for truth-speaking sovereignty	0.50 ***	0.66 ***	0.57 ***	

Note: *** $p < .001$.

Supplementary Table S5. Confirmatory factor analysis (CFA) of SciPop Scale items: Model fit information

	Pooled model	Multi-group model
χ^2	61.443	279.134
df	14	80
p	0.000	0.000
Robust CFI	0.996	0.983
Robust TLI	0.991	0.976
Robust RMSEA	0.034	0.055
SRMR	0.012	0.030

Note: $n = 3729$ ($n_{Austria} = 1277$, $n_{Germany} = 1291$, $n_{Switzerland} = 141$, $n_{Taiwan} = 1020$). The CFA models contained four latent factors (the four theoretical dimensions) and eight indicators (the eight items of the SciPop Scale), with each item being permitted to load on the factor which represents its theoretical dimension (Mede et al., 2021). Grouping variable in multi-group CFA: country (Austria, Germany, Switzerland, Taiwan). Model identification and scale setting by means of the LSC method (Little et al., 2006). Estimation method: Maximum likelihood estimation with robust standard errors and a Satorra-Bentler scaled test statistic. R package used: 0.6-13 (Rosseel, 2023). All loadings significant at $p < .001$ level.

Supplementary Table S6. Absolute and relative size of segments

Country	Full-Fledged Populists		People-Centric Non-Populists		Deferent Anti-Populists	
	n	%	*n*	%	*n*	%
Austria	325	21.79	838	56.20	329	22.01
Germany	226	14.33	597	37.93	752	47.74
Switzerland	13	7.54	111	66.91	42	25.55
Taiwan	175	13.56	982	76.34	130	10.10
Full sample	739	16.32	2,528	55.96	1,253	27.71

Note: Model fitted with Fixed-Effects Latent Class Analysis (FE-LCA) using the R package glca (version 1.3.3; Kim et al., 2022).

Supplementary Table S7. Means and standard deviations of segmentation variables and covariates within full sample and country subsamples

Country	Segment	Age	Gender	Education	COVID-19 risk group	Political orientation	Trust in science	Conceptions of the ordinary people	Conceptions of the academic elite	Demands for decision-making sovereignty	Demands for truth-speaking sovereignty
		M (SD)	% female	% uni degree	% true	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Austria	Full-Fledged Populists	50.09 (15.00)	48.42	7.28	28.85	3.37 (0.76)	2.71 (1.26)	4.24 (0.68)	4.14 (0.76)	3.78 (0.9)	4.26 (0.69)
	People-Centric Non-Populists	48.28 (17.12)	49.24	11.37	22.03	3.11 (0.79)	3.87 (0.93)	3.26 (0.69)	2.73 (0.68)	2.44 (0.76)	2.76 (0.62)
	Deferent Anti-Populists	46.10 (17.18)	51.45	28.03	20.00	2.78 (0.86)	4.45 (0.68)	2.36 (0.96)	1.51 (0.57)	1.53 (0.69)	1.36 (0.47)
Germany	Full-Fledged Populists	50.37 (13.28)	43.38	11.42	32.88	3.02 (0.91)	2.94 (1.19)	4.17 (0.73)	3.99 (0.91)	3.81 (0.95)	4.07 (0.64)
	People-Centric Non-Populists	51.43 (13.59)	49.75	17.55	37.91	2.75 (0.74)	3.46 (0.82)	3.28 (0.75)	2.66 (0.69)	2.58 (0.78)	2.67 (0.63)
	Deferent Anti-Populists	51.81 (14.58)	43.62	33.64	36.70	2.56 (0.8)	4.15 (0.74)	2.46 (1.06)	1.51 (0.61)	1.54 (0.73)	1.42 (0.54)
Switzerland	Full-Fledged Populists	51.55 (10.37)	45.45	27.27	33.33	3.21 (0.84)	2.90 (0.99)	4.05 (0.96)	3.95 (0.88)	3.32 (1.19)	4.23 (0.56)
	People-Centric Non-Populists	50.67 (16.05)	48.28	35.34	11.71	2.67 (0.92)	3.75 (0.67)	2.96 (0.89)	2.47 (0.75)	2.71 (0.80)	2.81 (0.65)
	Deferent Anti-Populists	51.41 (15.43)	48.72	56.41	30.56	2.50 (1.09)	4.10 (0.72)	2.14 (0.97)	1.55 (0.57)	1.95 (0.78)	1.46 (0.52)
Taiwan	Full-Fledged Populists	41.89 (9.82)	41.25	21.25	8.75	2.86 (1.00)	3.39 (1.01)	4.30 (0.65)	3.71 (1.00)	3.70 (0.92)	4.18 (0.66)
	People-Centric Non-Populists	38.94 (11.29)	53.45	21.09	6.87	2.76 (0.76)	3.50 (0.77)	3.48 (0.67)	2.75 (0.69)	2.49 (0.77)	2.66 (0.72)
	Deferent Anti-Populists	36.45 (12.00)	43.44	31.97	10.66	2.62 (0.80)	3.89 (0.76)	2.96 (0.95)	1.67 (0.72)	1.43 (0.54)	1.21 (0.35)
Full sample	Full-Fledged Populists	48.34 (13.80)	45.18	12.04	25.57	3.13 (0.90)	2.94 (1.21)	4.23 (0.69)	3.99 (0.88)	3.77 (0.92)	4.18 (0.67)
	People-Centric Non-Populists	45.49 (15.18)	50.95	17.67	19.38	2.86 (0.79)	3.63 (0.85)	3.34 (0.72)	2.71 (0.69)	2.50 (0.77)	2.70 (0.67)
	Deferent Anti-Populists	48.81 (15.81)	45.75	32.76	29.67	2.62 (0.83)	4.19 (0.74)	2.48 (1.04)	1.52 (0.61)	1.54 (0.71)	1.38 (0.51)

Supplementary Table S8. Results of Bayesian logistic regression predicting segment membership in the full sample

Predictor	Segment	*b*	*Error*	Odds ratio	89% Credible Interval
Gender (female)	Full-Fledged Populists	-0.124	0.046	0.883 *	[0.821, 0.949]
	People-Centric Non-Populists	0.075	0.032	1.078 *	[1.025, 1.134]
	Deferent Anti-Populists	-0.007	0.037	0.993	[0.935, 1.052]
Age	Full-Fledged Populists	0.163	0.050	1.177 *	[1.089, 1.279]
	People-Centric Non-Populists	-0.198	0.034	0.820 *	[0.776, 0.864]
	Deferent Anti-Populists	0.154	0.039	1.166 *	[1.094, 1.239]
University education	Full-Fledged Populists	-0.209	0.053	0.811 *	[0.745, 0.881]
	People-Centric Non-Populists	-0.182	0.032	0.834 *	[0.792, 0.877]
	Deferent Anti-Populists	0.310	0.035	1.364 *	[1.288, 1.442]
COVID-19 risk group	Full-Fledged Populists	0.015	0.046	1.015	[0.945, 1.091]
	People-Centric Non-Populists	-0.128	0.032	0.880 *	[0.835, 0.925]
	Deferent Anti-Populists	0.162	0.036	1.176 *	[1.110, 1.246]
Political orientation (right)	Full-Fledged Populists	0.377	0.049	1.458 *	[1.346, 1.572]
	People-Centric Non-Populists	0.078	0.032	1.081 *	[1.024, 1.135]
	Deferent Anti-Populists	-0.343	0.039	0.709 *	[0.666, 0.755]
Trust in science	Full-Fledged Populists	-0.777	0.045	0.460 *	[0.428, 0.494]
	People-Centric Non-Populists	-0.102	0.032	0.903 *	[0.855, 0.948]
	Deferent Anti-Populists	0.914	0.048	2.495 *	[2.316, 2.699]

Supplementary Table S9. Results of Bayesian logistic regressions predicting segment membership in country samples

Predictor	Segment	Country	*b*	*Error*	Odds ratio	89% Credible Interval
Gender (female)	Full-Fledged Populists	Austria	0.023	0.080	1.023	[0.897, 1.160]
		Germany	-0.115	0.081	0.892	[0.786, 1.016]
		Switzerland	0.264	0.497	1.302	[0.613, 2.963]
		Taiwan	-0.259	0.090	0.772 *	[0.669, 0.891]
	People-Centric Non-Populists	Austria	-0.070	0.059	0.932	[0.848, 1.021]
		Germany	0.095	0.056	1.100 *	[1.006, 1.205]
		Switzerland	-0.088	0.209	0.916	[0.649, 1.261]
		Taiwan	0.201	0.070	1.223 *	[1.093, 1.367]

	Deferent Anti-Populists	Austria	0.087	0.077	1.091	[0.968, 1.237]
		Germany	-0.030	0.057	0.970	[0.885, 1.061]
		Switzerland	0.058	0.232	1.059	[0.727, 1.527]
		Taiwan	-0.074	0.099	0.929	[0.793, 1.091]
Age	Full-Fledged Populists	Austria	0.226	0.080	1.253 *	[1.100, 1.419]
		Germany	-0.058	0.093	0.944	[0.814, 1.095]
		Switzerland	0.015	0.538	1.015	[0.448, 2.492]
		Taiwan	0.382	0.118	1.464 *	[1.228, 1.794]
	People-Centric Non-Populists	Austria	-0.045	0.057	0.956	[0.873, 1.043]
		Germany	-0.008	0.060	0.992	[0.899, 1.093]
		Switzerland	0.148	0.213	1.159	[0.819, 1.621]
		Taiwan	-0.040	0.096	0.961	[0.826, 1.122]
	Deferent Anti-Populists	Austria	-0.145	0.075	0.865 *	[0.771, 0.976]
		Germany	0.053	0.065	1.054	[0.952, 1.171]
		Switzerland	-0.085	0.238	0.919	[0.633, 1.339]
		Taiwan	-0.416	0.139	0.659 *	[0.534, 0.830]
University education	Full-Fledged Populists	Austria	-0.176	0.117	0.839	[0.700, 1.020]
		Germany	-0.311	0.095	0.733 *	[0.636, 0.865]
		Switzerland	-0.619	0.558	0.538	[0.236, 1.283]
		Taiwan	-0.075	0.087	0.928	[0.806, 1.063]
	People-Centric Non-Populists	Austria	-0.218	0.069	0.805 *	[0.719, 0.893]
		Germany	-0.191	0.054	0.826 *	[0.755, 0.896]
		Switzerland	-0.204	0.170	0.816	[0.620, 1.065]
		Taiwan	-0.071	0.064	0.932	[0.838, 1.026]
	Deferent Anti-Populists	Austria	0.331	0.078	1.392 *	[1.226, 1.577]
		Germany	0.303	0.056	1.354 *	[1.238, 1.479]
		Switzerland	0.289	0.176	1.335 *	[1.006, 1.761]
		Taiwan	0.218	0.089	1.244 *	[1.072, 1.430]
COVID-19 risk group	Full-Fledged Populists	Austria	0.084	0.079	1.088	[0.962, 1.235]
		Germany	-0.041	0.072	0.959	[0.859, 1.082]
		Switzerland	0.686	0.543	1.985	[0.796, 4.562]
		Taiwan	0.039	0.132	1.040	[0.844, 1.281]
	People-Centric Non-Populists	Austria	-0.029	0.060	0.971	[0.878, 1.065]
		Germany	0.047	0.047	1.048	[0.975, 1.134]
		Switzerland	-0.611	0.230	0.543 *	[0.381, 0.792]
		Taiwan	-0.113	0.103	0.893	[0.756, 1.051]

	Deferent Anti-Populists	Austria	-0.027	0.082	0.974	[0.858, 1.116]
		Germany	-0.015	0.052	0.985	[0.907, 1.070]
		Switzerland	0.523	0.234	1.686 *	[1.150, 2.407]
		Taiwan	0.133	0.137	1.143	[0.917, 1.416]
Political orientation (right)	Full-Fledged Populists	Austria	0.502	0.094	1.653 *	[1.436, 1.938]
		Germany	0.376	0.087	1.456 *	[1.254, 1.659]
		Switzerland	0.734	0.441	2.082 *	[1.070, 4.275]
		Taiwan	0.090	0.093	1.094	[0.937, 1.259]
	People-Centric Non-Populists	Austria	0.028	0.062	1.028	[0.933, 1.136]
		Germany	0.059	0.056	1.061	[0.971, 1.159]
		Switzerland	0.010	0.172	1.010	[0.760, 1.322]
		Taiwan	-0.007	0.072	0.993	[0.888, 1.119]
	Deferent Anti-Populists	Austria	-0.365	0.079	0.695 *	[0.614, 0.789]
		Germany	-0.264	0.062	0.768 *	[0.692, 0.843]
		Switzerland	-0.201	0.188	0.818	[0.604, 1.100]
		Taiwan	-0.082	0.100	0.922	[0.793, 1.085]
Trust in science	Full-Fledged Populists	Austria	-0.975	0.073	0.377 *	[0.335, 0.422]
		Germany	-0.828	0.078	0.437 *	[0.389, 0.499]
		Switzerland	-1.350	0.633	0.259 *	[0.099, 0.714]
		Taiwan	-0.235	0.104	0.791 *	[0.673, 0.939]
	People-Centric Non-Populists	Austria	0.256	0.054	1.292 *	[1.185, 1.407]
		Germany	-0.402	0.058	0.669 *	[0.612, 0.735]
		Switzerland	-0.187	0.301	0.830	[0.515, 1.338]
		Taiwan	-0.127	0.084	0.880	[0.766, 1.005]
	Deferent Anti-Populists	Austria	1.043	0.111	2.836 *	[2.396, 3.427]
		Germany	1.089	0.077	2.971 *	[2.634, 3.364]
		Switzerland	0.770	0.364	2.159 *	[1.193, 3.825]
		Taiwan	0.618	0.134	1.855 *	[1.487, 2.275]

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