

Supplementary Materials

for

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Introduction

In this document, we provide tables and figures supplementing the analyses presented in our research article “The SciPop Scale for measuring science-related populist attitudes in surveys: Development, test, and validation”, published in the *International Journal of Public Opinion Research* (available at: <https://doi.org/10.1093/ijpor/edaa026>).

Data Handling

Although survey weights were available, we refrained from weighting the data in any of our EFAs, CFAs, and other inferential statistical analyses because weighting can skew variances, reduce standard errors, and inflate significance tests (e.g., Hibberts, Johnson, & Hudson, 2012). We did not exclude any univariate or multivariate outliers from the analyses as outlier exclusion is uncommon in scale development (e.g., Castanho Silva et al., 2019; Elchardus & Spruyt, 2016; Schulz et al., 2018), can be regarded an ethically questionable research practice (American Psychological Association, 2010, p. 12), and would not have affected the results of this particular analysis.

Model Identification

For model identification and scale setting in the confirmatory factor analyses (Supplementary Tables SA5 to SA8), we applied an effects-coding technique known as the LSC method. It was introduced by Little, Slegers, and Card (2006) as an alternative to the common approaches of imposing a unit loading identification (ULI) constraint (i.e., fixing the loading of one arbitrarily selected indicator per latent factor to 1.0) or a unit variance identification (UVI) constraint (i.e., standardizing latent factors by fixing their variances to 1.0). The LSC method suggests constraining the average unstandardized loading of the indicators of each latent factor to

equal 1.0 and the corresponding indicator intercepts to sum to zero (Little et al., 2006). The LSC method offers two main advantages compared to ULI and UVI constraint approaches: First, it enables us to test the significance of every factor loading, whereas ULI constraining allows significance tests for only four out of eight factor loadings. Second, it is compatible with multi-group CFA, which allows to compare the German, French, and Italian scale versions, whereas UVI constraining is inappropriate when running multi-group CFAs (Kline, 2011, p. 130). Importantly, fit measures of a model specified with the LSC method do not differ from fit measures of models specified by means of ULI or UVI constraints (Little et al., 2006).

Supplementary Tables

Supplementary Table SA1

Initial 17-item set (English translations for the article)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	ppl1	The ordinary people think alike about important questions.	adapted from Schulz et al., 2018
	ppl2	Ordinary people share the same values and interests.	verbatim from Schulz et al., 2018
	ppl3	What unites the ordinary people is that they trust their common sense in everyday life.	new
	ppl4	Ordinary people are of good and honest character.	verbatim from Schulz et al., 2018
	ppl5	The differences between ordinary people and scientists are much greater than the differences between ordinary people.	adapted from Akkerman, Mudde, & Zaslove, 2014
Conceptions of the academic elite	eli1	Scientists don't know what's good for society.	adapted from Brossard & Nisbet, 2007
	eli2	Scientists are only after their own advantage.	adapted from the American National Election Study, 1972
	eli3	Scientists are in cahoots with politics and business.	adapted from Fawzi, 2019
	eli4	Scientists are often dishonest about their research findings.	verbatim from Morgan, Collins, Sparks, & Welch, 2018
Demands for decision-making sovereignty	dec1	The people should have influence on the work of scientists.	adapted from Schulz et al., 2018
	dec2	People like me should be involved in decisions about the topics scientists research.	verbatim from Schäfer, Fuchslin, Metag, Kristiansen, & Rauchfleisch, 2018
	dec3	Scientists should listen more to what ordinary people think.	adapted from Schäfer et al., 2018
	dec4 ^a	Scientists should do what they think is best and not follow the will of the people.	adapted from Brossard & Nisbet, 2007; European Values Study, 2008 (see also Bertsou & Pastorella, 2017; Hawkins, Riding, & Mudde, 2012)
Demands for truth-speaking sovereignty	tru1	In case of doubt, one should rather trust the life experience of ordinary people than the estimations of scientists.	adapted from Oliver & Rahn, 2016
	tru2	We should rely more on common sense and less on scientific studies.	adapted from Evans & Durant, 1995
	tru3	The opinions of ordinary people should be worth more than the estimations of scientists and experts.	adapted from Elchardus & Spruyt, 2016
	tru4	For the most important problems in life you need clear answers, not scientific theories.	adapted from Eigenberger & Sealander, 2001

Note. Items were measured with 5-point Likert scales ranging from 1 (“fully disagree”) to 5 (“fully agree”).

^a Item reversed for analyses.

Supplementary Table SA2

Initial 17-item set (original German items)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	pp1	Über wichtige Fragen denken die einfachen Leute ähnlich.	adapted from Schulz et al., 2018
	pp2	Die einfachen Leute teilen gemeinsame Werte und Interessen.	verbatim from Schulz et al., 2018
	pp3	Was die einfachen Leute verbindet, ist, dass sie im Alltag ihrem gesunden Menschenverstand trauen.	new
	pp4	Einfache Leute verbindet ein guter und ehrlicher Charakter.	verbatim from Schulz et al., 2018
	pp5	Die Unterschiede zwischen einfachen Leuten und Wissenschaftlern sind viel grösser als die Unterschiede zwischen einfachen Leuten.	adapted from Akkerman et al., 2014
Conceptions of the academic elite	eli1	Wissenschaftler wissen nicht, was gut für die Gesellschaft ist.	adapted from Brossard & Nisbet, 2007
	eli2	Wissenschaftler sind nur auf ihren eigenen Vorteil aus.	adapted from the American National Election Study, 1972
	eli3	Wissenschaftler stecken mit Politik und Wirtschaft unter einer Decke.	adapted from Fawzi, 2019
	eli4	Wenn es um ihre Forschungsergebnisse geht, sind Wissenschaftler oft nicht ehrlich.	verbatim from Morgan et al., 2018
Demands for decision-making sovereignty	dec1	Das Volk sollte Einfluss auf die Arbeit von Wissenschaftlern haben.	adapted from Schulz et al., 2018
	dec2	Leute wie ich sollten mitentscheiden, zu welchen Themen Wissenschaftler forschen.	verbatim from Schäfer et al., 2018
	dec3	Wissenschaftler sollten mehr darauf hören, was einfache Leute denken.	adapted from Schäfer et al., 2018
	dec4 ^a	Wissenschaftler sollten tun, was sie für das Beste halten, und nicht dem Willen des Volkes folgen.	adapted from Brossard & Nisbet, 2007; European Values Study, 2008 (see also Bertsou & Pastorella, 2017; Hawkins et al., 2012)
Demands for truth-speaking sovereignty	tru1	Im Zweifel sollte man eher der Lebenserfahrung einfacher Menschen vertrauen als Einschätzungen von Wissenschaftlern.	adapted from Oliver & Rahn, 2016
	tru2	Wir sollten uns mehr auf den gesunden Menschenverstand und weniger auf wissenschaftliche Studien verlassen.	adapted from Evans & Durant, 1995
	tru3	Die Meinung der einfachen Leute sollte mehr wert sein als die Einschätzung von Wissenschaftlern und Experten.	adapted from Elchardus & Spruyt, 2016
	tru4	Für die wichtigsten Probleme im Leben braucht man klare Antworten, keine wissenschaftlichen Theorien.	adapted from Eigenberger & Sealander, 2001

Note. Items were measured with 5-point Likert scales ranging from 1 (“lehne voll ab”) to 5 (“stimme voll und ganz zu”).

^a Item reversed for analyses.

Supplementary Table SA3

Exploratory factor analysis with 17 items

			Factor 1	Factor 2	Factor 3	Factor 4		
Initial eigenvalue			7.51	1.50	1.25	0.84		
% of total variance explained after rotation			16.43	15.19	9.08	13.92		
Label	Item	<i>M</i> (<i>SD</i>)	$\lambda_{\text{Factor 1}}$	$\lambda_{\text{Factor 2}}$	$\lambda_{\text{Factor 3}}$	$\lambda_{\text{Factor 4}}$	h^2	
pp1	The ordinary people think alike about important questions.	2.90 (1.08)		0.63				0.40
pp2	Ordinary people share the same values and interests.	3.00 (1.10)		0.81				0.62
pp3	What unites the ordinary people is that they trust their common sense in everyday life.	3.29 (1.13)		0.71				0.59
pp4	Ordinary people are of good and honest character.	2.87 (1.13)		0.74				0.59
pp5	The differences between ordinary people and scientists are much greater than the differences between ordinary people.	3.24 (1.18)	0.39	0.46				0.37
eli1	Scientists don't know what's good for society.	2.49 (1.02)	0.64					0.53
eli2	Scientists are only after their own advantage.	2.47 (1.09)	0.82					0.70
eli3	Scientists are in cahoots with politics and business.	2.93 (1.21)	0.65					0.59
eli4	Scientists are often dishonest about their research findings.	2.94 (1.08)	0.74					0.58
dec1	The people should have influence on the work of scientists.	2.73 (1.15)			0.83			0.69
dec2	People like me should be involved in decisions about the topics scientists research.	2.83 (1.15)			0.73			0.48
dec3	Scientists should listen more to what ordinary people think.	3.23 (1.12)	0.20		0.22	0.32		0.48
dec4 ^a	Scientists should do what they think is best and not follow the will of the people.	2.80 (1.18)			0.43			0.20
tru1	In case of doubt, one should rather trust the life experience of ordinary people than the estimations of scientists.	2.87 (1.08)				0.65		0.66
tru2	We should rely more on common sense and less on scientific studies.	3.25 (1.15)				0.72		0.65
tru3	The opinions of ordinary people should be worth more than the estimations of scientists and experts.	2.58 (1.11)				0.50		0.62
tru4	For the most important problems in life you need clear answers, not scientific theories.	3.16 (1.20)				0.63		0.53

Note. $n = 853$. Analysis based on study 1 survey data. Items measured using 5-point Likert scales with higher values indicating stronger agreement. Four factors extracted as suggested by Horn's (1965) parallel analysis and Glorfeld's (1995) conservative parallel analysis (5000 iterations using the 95-percentile estimate). Extraction method: principal axis factoring. Rotation method: Promax. Loadings $\lambda < |0.20|$ not displayed. R package used: psych v1.9.12.31 (Revelle, 2020).

^a Original item reversed.

Supplementary Table SA4

Exploratory factor analysis with the 8 SciPop Scale items: Factor correlations

	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	1			
Conceptions of the academic elite	0.59	1		
Demands for decision-making sovereignty	0.47	0.56	1	
Demands for truth-speaking sovereignty	0.69	0.77	0.53	1

Note. $n = 853$. Analysis based on study 1 survey data. Four factors extracted as suggested by Horn's (1965) parallel analysis and Glorfeld's (1995) conservative parallel analysis (5000 iterations using the 95-percentile estimate). Extraction method: principal axis factoring. Rotation method: Promax. R package used: psych v1.9.12.31 (Revelle, 2020).

Supplementary Table SA5

Confirmatory factor analyses with the 8 SciPop Scale items: Model fit information

	Single-group CFA	Multi-group CFA
χ^2	22.877	37.340
df	14	28
p	0.062	0.112
Robust CFI	0.994	0.990
Robust TLI	0.988	0.969
Robust RMSEA	0.027	0.044
SRMR	0.017	0.027

Note. $n = 986$ ($n_{\text{French}} = 235$, $n_{\text{German}} = 601$, $n_{\text{Italian}} = 150$). Analyses based on study 2 survey data. Grouping variable in multi-group CFA: Questionnaire language (French, German, Italian). Model identification and scale setting by means of the LSC method (Little et al., 2006). For the multi-group CFA, the error variance of soypower1 was fixed to zero in the German and the Italian-speaking group. Estimation method: Maximum likelihood estimation with robust standard errors and a Satorra-Bentler scaled test statistic (to compensate for multivariate non-normality; Mardia's skewness: $z_{1,8} = 231.632$, $p < .001$, Mardia's kurtosis: $z_{2,8} = 12.640$, $p < .001$). R package used: lavaan v0.6-5 (Rosseel, 2019).

Supplementary Table SA6

Confirmatory factor analysis with the 8 SciPop Scale items: Loadings

Item	<i>M</i> (<i>SD</i>)	Conceptions of the ordinary people		Conceptions of the academic elite		Demands for decision-making sovereignty		Demands for truth-speaking sovereignty	
		Standardized Loading	<i>SE</i>	Standardized Loading	<i>SE</i>	Standardized Loading	<i>SE</i>	Standardized Loading	<i>SE</i>
ppl3	3.44 (1.06)	0.688***	0.047						
ppl4	3.06 (1.09)	0.692***	0.047						
eli2	2.56 (1.04)			0.677***	0.048				
eli3	2.93 (1.08)			0.646***	0.048				
dec1	2.75 (1.12)					0.952***	0.068		
dec2	2.81 (1.16)					0.454***	0.068		
tru1	3.02 (1.08)							0.728***	0.028
tru2	3.12 (1.11)							0.753***	0.028

Note. *** $p < .001$. $n = 986$. Analysis based on study 2 survey data. 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 (to compensate for multivariate non-normality; Mardia's skewness: $z_{1,8} = 231.632$, $p < .001$, Mardia's kurtosis: $z_{2,8} = 12.640$, $p < .001$). R package used: lavaan v0.6-5 (Rosseel, 2019).

Supplementary Table SA7

Confirmatory factor analysis with the 8 SciPop Scale items: Factor correlations

	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	1			
Conceptions of the academic elite	0.60***	1		
Demands for decision-making sovereignty	0.45***	0.55***	1	
Demands for truth-speaking sovereignty	0.76***	0.85***	0.55***	1

Note. *** $p < .001$. $n = 986$. Analysis based on study 2 survey data. 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 (to compensate for multivariate non-normality; Mardia's skewness: $z_{1,8} = 231.632$, $p < .001$, Mardia's kurtosis: $z_{2,8} = 12.640$, $p < .001$). R package used: lavaan v0.6-5 (Rosseel, 2019).

Supplementary Table SA8

Multi-group confirmatory factor analysis with the 8 SciPop Scale items: Loadings

Item	Conceptions of the ordinary people		Conceptions of the academic elite		Demands for decision-making sovereignty		Demands for truth-speaking sovereignty	
	Standardized Loading	SE	Standardized Loading	SE	Standardized Loading	SE	Standardized Loading	SE
French SciPop Scale								
ppl3	0.643***	0.110						
ppl4	0.766***	0.110						
eli2			0.731***	0.072				
eli3			0.710***	0.072				
dec1					0.840***	0.089		
dec2					0.549***	0.089		
tru1							0.669***	0.060
tru2							0.730***	0.060
German SciPop Scale								
ppl3	0.689***	0.060						
ppl4	0.694***	0.061						
eli2			0.626***	0.078				
eli3			0.615***	0.078				
dec1					1.000***	0.021		
dec2					0.428***	0.043		
tru1							0.753***	0.045
tru2							0.786***	0.041
Italian SciPop Scale								
ppl3	0.750***	0.113						
ppl4	0.594***	0.133						
eli2			0.799***	0.083				
eli3			0.601***	0.096				
dec1					1.000***	0.039		
dec2					0.419***	0.099		
tru1							0.682***	0.091
tru2							0.727***	0.080

Note. *** $p < .001$. $n = 986$ ($n_{\text{French}} = 235$, $n_{\text{German}} = 601$, $n_{\text{Italian}} = 150$). Analysis based on study 2 survey data. Grouping variable: Questionnaire language (French, German, Italian). Model identification and scale setting by means of the LSC method (Little et al., 2006). Error variance of sovpower1 fixed to zero in German and Italian-speaking groups. Estimation method: Maximum likelihood estimation with robust standard errors and a Satorra-Bentler scaled test statistic (to compensate for multivariate non-normality; Mardia's skewness: $z_{1,8} = 231.632$, $p < .001$, Mardia's kurtosis: $z_{2,8} = 12.640$, $p < .001$). R package used: lavaan v0.6-5 (Rosseel, 2019).

Supplementary Table SA9

Correlations of SciPop Score, subscale scores, and related constructs/items

	Science-related populist attitudes (SciPop Scale Score ^a)	Conceptions of the ordinary people (Ordinary People Subscale Score ^b)	Conceptions of the academic elite (Academic Elite Subscale Score ^b)	Demands for decision-making sovereignty (Decision-Making Subscale Score ^b)	Demands for truth-speaking sovereignty (Truth-Speaking Subscale Score ^b)
Trust in science ^c	-0.20***		-0.29***	-0.11***	-0.31***
Trust in university scientists ^c	-0.26***	-0.11***	-0.35***	-0.10**	-0.37***
Trustworthiness scientists (METI) ^d	-0.18***		-0.24***	-0.09**	-0.22***
“Science and research make our lives better” ^e	-0.23***	-0.06*	-0.24***	-0.09**	-0.31***
“Science makes our ways of life change too fast” ^e	0.25***	0.17***	0.21***	0.23***	0.25***
“We rely too heavily on science” ^e	0.26***	0.14***	0.26***	0.19***	0.32***
“Media coverage on science and research is trustworthy” ^f	-0.17***		-0.21***	-0.08*	-0.16***

Note. *** $p < .001$. ** $p < .01$. * $p < .05$. Pearson coefficients displayed. Non-significant correlations not displayed.

^a The SciPop Score was obtained following the “Goertz approach” (Wutke, Schimpf, & Schoen, 2020). In a first step, unweighted mean values were computed for each of the four 2-item subscales. In a second step, the smallest of these four values was used as the SciPop Score. Higher values indicate stronger science-related populist attitudes.

^b The four subscale scores are unweighted mean values of the 2-item subscales. Higher values indicate more favorable conceptions of the ordinary people (Ordinary People Subscale Score), more unfavorable conceptions of the academic elite (Academic Elite Subscale Score), stronger demands for decision-making sovereignty (Decision-Making Subscale Score), and stronger demands for truth-speaking sovereignty (Truth-Speaking Subscale Score).

^c Measured using a 5-point Likert scale with higher values indicating higher trust.

^d Measured with a shortened version of the Muenster Epistemic Trustworthiness Inventory (METI; Hendriks, Kienhues, & Bromme, 2015). Items were measured using 5-point semantic differentials with higher values indicating greater perceived trustworthiness. Note that in its original form, the METI contains 14 items indicating trustworthiness on three dimensions, i.e., expertise, integrity, and benevolence. Analyzing the original data from Hendriks et al. (2015) with CFA, we identified the three best-performing items for each dimension and constructed a shortened 9-item METI.

^e Measured with items adapted from Prpić (2011) using 5-point Likert scales with higher values indicating stronger agreement.

^f Measured using a 5-point Likert scale with higher values indicating stronger agreement.

Supplementary Table SA10

Items of the final SciPop Scale (English translations for the article)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	ppl3	What unites the ordinary people is that they trust their common sense in everyday life.	new
	ppl4	Ordinary people are of good and honest character.	verbatim from Schulz et al., 2018
Conceptions of the academic elite	eli2	Scientists are only after their own advantage.	adapted from the American National Election Study, 1972
	eli3	Scientists are in cahoots with politics and business.	adapted from Fawzi, 2019
Demands for decision-making sovereignty	dec1	The people should have influence on the work of scientists.	adapted from Schäfer et al., 2018
	dec2	People like me should be involved in decisions about the topics scientists research.	verbatim from Schäfer et al., 2018
Demands for truth-speaking sovereignty	tru1	In case of doubt, one should rather trust the life experience of ordinary people than the estimations of scientists.	adapted from Oliver & Rahn, 2016
	tru2	We should rely more on common sense and less on scientific studies.	adapted from Evans & Durant, 1995

Note. Items were measured with 5-point Likert scales ranging from 1 (“fully disagree”) to 5 (“fully agree”).

Supplementary Table SA11

Items of the final SciPop Scale (German version)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	ppl3	Was die einfachen Leute verbindet, ist, dass sie im Alltag ihrem gesunden Menschenverstand trauen.	new
	ppl4	Einfache Leute verbindet ein guter und ehrlicher Charakter.	verbatim from Schulz et al., 2018
Conceptions of the academic elite	eli2	Wissenschaftler sind nur auf ihren eigenen Vorteil aus.	adapted from the American National Election Study, 1972
	eli3	Wissenschaftler stecken mit Politik und Wirtschaft unter einer Decke.	adapted from Fawzi, 2019
Demands for decision-making sovereignty	dec1	Das Volk sollte Einfluss auf die Arbeit von Wissenschaftlern haben.	adapted from Schäfer et al., 2018
	dec2	Leute wie ich sollten mitentscheiden, zu welchen Themen Wissenschaftler forschen.	verbatim from Schäfer et al., 2018
Demands for truth-speaking sovereignty	tru1	Im Zweifel sollte man eher der Lebenserfahrung einfacher Menschen vertrauen als Einschätzungen von Wissenschaftlern.	adapted from Oliver & Rahn, 2016
	tru2	Wir sollten uns mehr auf den gesunden Menschenverstand und weniger auf wissenschaftliche Studien verlassen.	adapted from Evans & Durant, 1995

Note. Items were measured with 5-point Likert scales ranging from 1 (“stimme überhaupt nicht zu”) to 5 (“stimme voll und ganz zu”).

Supplementary Table SA12

Items of the final SciPop Scale (French version)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	ppl3	Ce qui unit les gens simples, c'est qu'ils font confiance à leur bon sens dans la vie quotidienne.	new
	ppl4	Les gens simples ont en commun un caractère bon et honnête.	verbatim from Schulz et al., 2018
Conceptions of the academic elite	eli2	Les scientifiques ne voient que leur propre avantage.	adapted from the American National Election Study, 1972
	eli3	Les scientifiques sont de mèche avec la politique et l'économie.	adapted from Fawzi, 2019
Demands for decision-making sovereignty	dec1	Le peuple devrait avoir une influence sur le travail des scientifiques.	adapted from Schäfer et al., 2018
	dec2	Les personnes comme moi devraient prendre part à la décision sur quels thèmes les scientifiques doivent faire des recherches.	verbatim from Schäfer et al., 2018
Demands for truth-speaking sovereignty	tru1	En cas de doute, on devrait plutôt faire confiance à l'expérience des gens simples qu'aux estimations des scientifiques.	adapted from Oliver & Rahn, 2016
	tru2	Nous devrions nous baser davantage sur le bon sens commun et moins sur les études scientifiques.	adapted from Evans & Durant, 1995

Note. Items were measured with 5-point Likert scales ranging from 1 (“n’approuve pas du tout”) to 5 (“approuve totalement”).

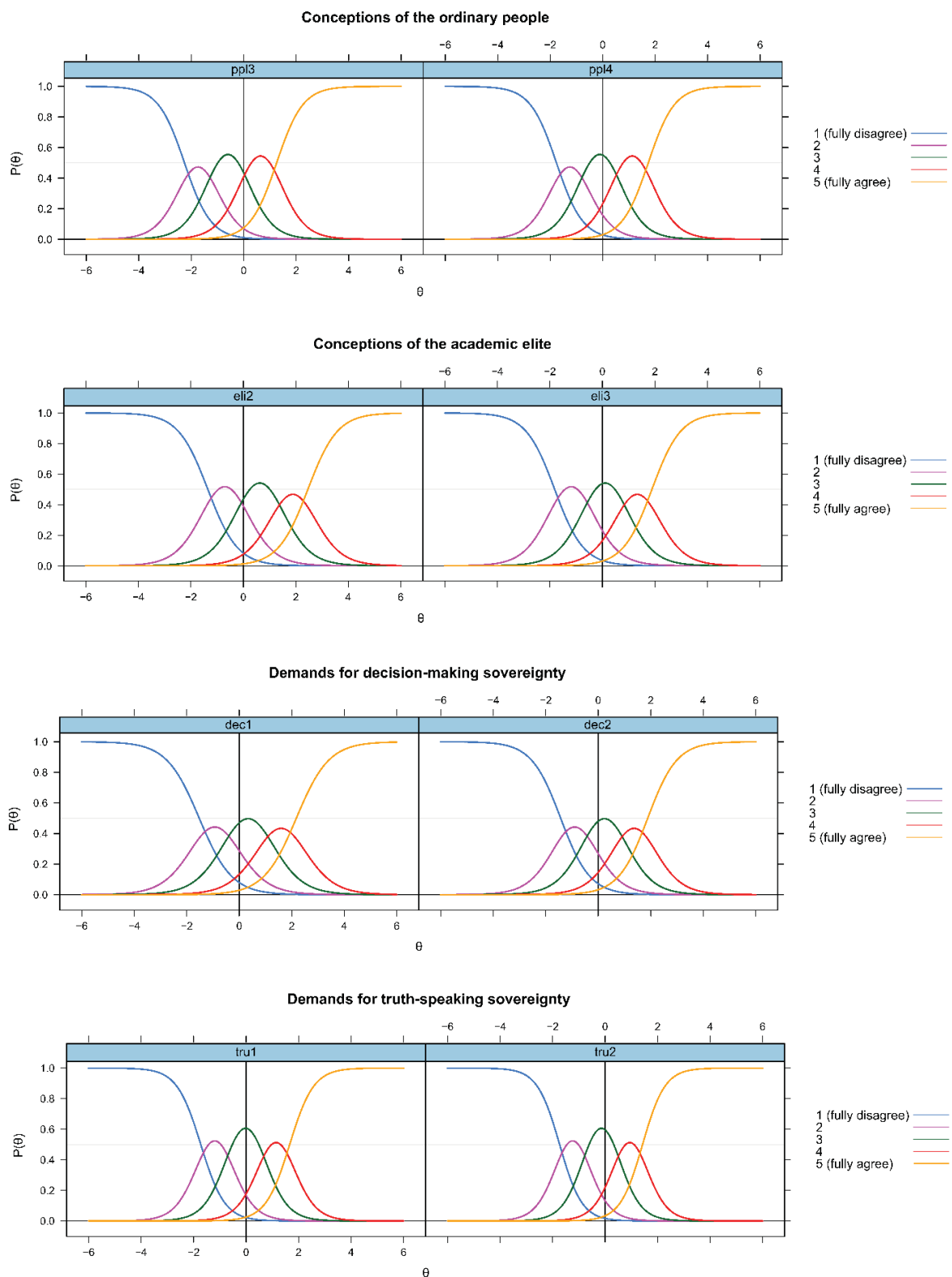
Supplementary Table SA13

Items of the final SciPop Scale (Italian version)

Dimension	Label	Item	Reference
Conceptions of the ordinary people	ppl3	Ciò che unisce la gente comune è la fiducia nel buon senso nella vita quotidiana.	new
	ppl4	La gente comune è generalmente buona e onesta.	verbatim from Schulz et al., 2018
Conceptions of the academic elite	eli2	Gli scienziati sono orientati solo al loro tornaconto personale.	adapted from the American National Election Study, 1972
	eli3	Gli scienziati fanno affari sottobanco con il mondo politico ed economico.	adapted from Fawzi, 2019
Demands for decision-making sovereignty	dec1	Il popolo dovrebbe poter influire sul lavoro degli scienziati.	adapted from Schäfer et al., 2018
	dec2	La gente come me dovrebbe partecipare alle decisioni sui temi oggetto di ricerca scientifica.	verbatim from Schäfer et al., 2018
Demands for truth-speaking sovereignty	tru1	In caso di dubbio, ci si dovrebbe fidare dell'esperienza di vita della gente comune piuttosto che delle stime degli scienziati.	adapted from Oliver & Rahn, 2016
	tru2	Dovremmo affidarci di più al buon senso e meno agli studi scientifici.	adapted from Evans & Durant, 1995

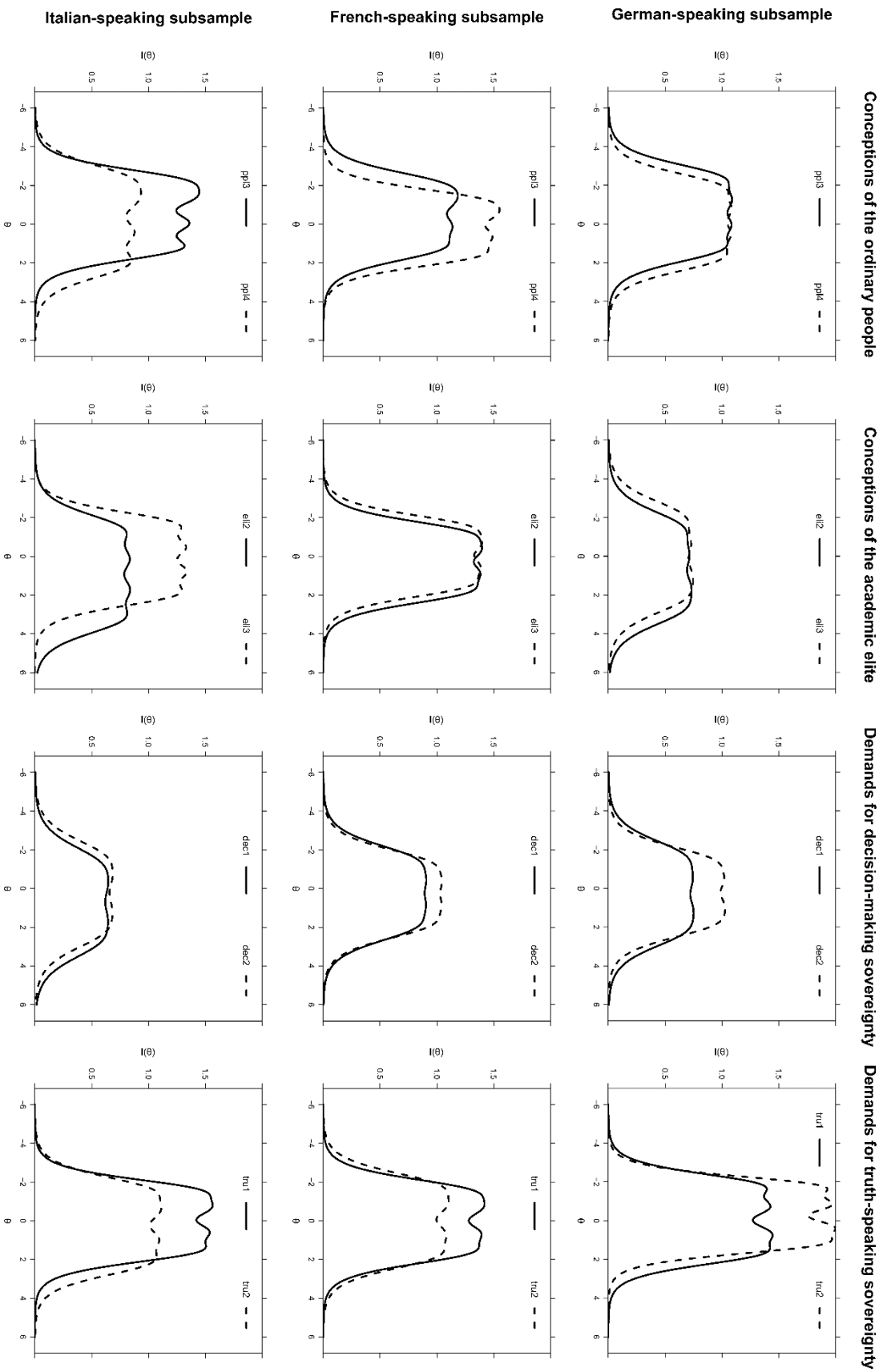
Note. Items were measured with 5-point Likert scales ranging from 1 (“non sono assolutamente d'accordo”) to 5 (“sono assolutamente d'accordo”).

Supplementary Figures



Supplementary Figure SA1. *Category Characteristic Curves of the 8 SciPop Scale items*

Note. Category Characteristic Curves visualize the probability $P(\theta)$ that individuals choose an item response category that corresponds with their latent trait level θ . Analyses relied on Graded Rating Scales Models (Muraki, 1992) and were conducted with the R package mirt v1.31 (Chalmers, 2019).



Supplementary Figure SA2. Item Information Curves for German, French, and Italian-language subsamples

Note. Analyses relied on Graded Rating Scales Models (Muraki, 1992) and were conducted with the R package mirt v.1.31 (Chalmers, 2019).

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