

Appendix B. Analysis

Table B1. Descriptive statistics for party position knowledge and randomization within each treatment group.

Variable	Treatment group			p-value ²
	Control group N = 1,340 ¹	De Stemtest N = 464 ¹	De Jongerenstemtest N = 487 ¹	
Party position knowledge				
Overall PPK score	0.27 (0.14)	0.27 (0.14)	0.29 (0.13)	0.100
Stemtest PPK items score	0.31 (0.16)	0.31 (0.16)	0.32 (0.15)	0.600
Jongerenstemtest PPK items score	0.24 (0.15)	0.23 (0.14)	0.26 (0.15)	0.004
Randomization check				
Age	20.4 (3.3)	20.5 (3.1)	20.6 (3.3)	0.400
Gender				0.800
Male	493 (37%)	169 (37%)	171 (35%)	
Female	832 (63%)	291 (63%)	311 (65%)	
Migration background				0.500
No	977 (73%)	351 (76%)	355 (73%)	
Yes	363 (27%)	113 (24%)	132 (27%)	
Mother's education level				0.300
Up to secondary education	283 (24%)	117 (27%)	108 (24%)	
Higher education	912 (76%)	315 (73%)	348 (76%)	
Financial stress	8.81 (1.85)	8.88 (1.78)	8.74 (1.95)	0.700
Political interest	6.00 (2.33)	6.22 (2.33)	6.11 (2.18)	0.300
Economic left-right self-placement	6.24 (2.41)	6.24 (2.56)	6.21 (2.49)	>0.900
Cultural left-right self-placement	5.1 (2.8)	5.1 (2.7)	5.1 (2.8)	>0.900

¹ Mean (SD); n (%)

² Kruskal-Wallis rank sum test for continuous variables; Pearson's Chi-squared test for categorical variables

Note: The PPK variables represent respondent-level mean scores. For each respondent, we calculated the proportion of correct answers across all item-by-party combinations (i.e., 42 knowledge items in total) for the overall PPK measure. *De Stemtest* and *Jongerenstemtest* PPK scores were computed analogously, based on the 21 item-by-party combinations corresponding to the three statements included in each VAA. These respondent-level averages are used descriptively in the randomization check and offer an intuitive summary of baseline knowledge levels across treatment groups.

Table B2. Model fit statistics (AIC, BIC, χ^2 , p) for the models in Table B9. Each model is compared to the null model with a random intercept; only Model 3 is nested within Model 2, allowing a direct comparison.

Model	AIC	BIC	χ^2	p
Null model	69487,5	69505,3		
Model 1	66489,4	66578,7	3014,1	<0.001
Model 2	66637,6	66691,2	2857,9	<0.001
Model 3	65519,1	65590,6	3980,4	<0.001
Model 4	66711,7	66756,4	2781,8	<0.001
Model 3 vs Model 2			1122,5	<0.001

Table B3. Variance inflation factors (VIF) for the predictors in the models in Table B9.

Model	Term	VIF
Model 1	Jongerenstemtest knowledge item (vs. Stemtest item)	1,14
Model 1	Sociocultural knowledge item (vs. Socioeconomic item)	1,14
Model 1	Party (7-category factor)	1
Model 2	Jongerenstemtest knowledge item (vs. Stemtest item)	1,14
Model 2	Sociocultural knowledge item (vs. Socioeconomic item)	1,14
Model 2	Economic party extremity	1,03
Model 2	Cultural party extremity	1,04
Model 3	Jongerenstemtest knowledge item (vs. Stemtest item)	1,14
Model 3	Sociocultural knowledge item (vs. Socioeconomic item)	11,51
Model 3	Economic party extremity	2
Model 3	Cultural party extremity	1,95
Model 3	Economic extremity $\times$ Sociocultural knowledge item	7,6
Model 3	Cultural extremity $\times$ Sociocultural knowledge item	5,27
Model 4	Jongerenstemtest knowledge item (vs. Stemtest item)	1,14
Model 4	Sociocultural knowledge item (vs. Socioeconomic item)	1,14
Model 4	Niche party (vs. Mainstream)	1

Note. Elevated VIF values for the sociocultural knowledge item and its interactions in Model 3 reflect expected collinearity between main effects and interaction terms. Such values are common when including interaction terms and do not indicate a misspecified model; they mainly imply that standard errors for these predictors are larger.

Table B4. Model fit statistics (AIC, BIC, χ^2 , p) for the models in Table B12. Results for the null model and the two treatment-group models are reported. Each model is compared to the null model; as Model 2 is nested within Model 1, their direct comparison is also reported.

Model	AIC	BIC	χ^2	p
Null model	119314,4	119333,4		
Model 1	114436,7	114550,4	4897,7	<0.001
Model 2	114420,3	114553	4918,1	<0.001
Model 2 vs Model 1			20,35	<0.001

Table B5. Variance inflation factors (VIF) for the predictors in the models in Table B12.

Model	Term	VIF
Model 1	Treatment group	1
Model 1	Jongerenstemtest knowledge item (vs. Stemtest item)	1,1
Model 1	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1,1
Model 1	Party (7-category factor)	1
Model 2	Treatment group	1,2
Model 2	Jongerenstemtest knowledge item (vs. Stemtest item)	1,9
Model 2	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1,1
Model 2	Party (7-category factor)	1
Model 2	Treatment group X Jongerenstemtest knowledge item	2

Table B6. Model fit statistics (AIC, BIC, χ^2 , p) for the models in Table B13. Results for the null model and the two treatment-group models are reported. Each model is compared to the null model; as Model 2 is nested within Model 1, their direct comparison is also reported.

Model	AIC	BIC	χ^2	p
Null model	46647,6	46664,7		
Model 1	42881,8	42967,4	3781,8	<0.001
Model 2	42889,6	43026,5	3786	<0.001
Model 3	43548,5	43591,3	3105,1	<0.001
Model 4	43550,3	43601,6	3105,4	<0.001
Model 2 vs Model 1			4,22	0.648
Model 4 vs Model 3			0,28	0.595

Table B7. Variance inflation factors (VIF) for the predictors in the models in Table B13.

Model	Term	VIF
Model 1	De Jongerenstemtest treatment group (vs. Control group)	1
Model 1	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1
Model 1	Party (7-category factor)	1
Model 2	De Jongerenstemtest treatment group (vs. Control group)	2
Model 2	Party (7-category factor)	6,9
Model 2	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1
Model 2	De Jongerenstemtest X Party	12
Model 3	De Jongerenstemtest treatment group (vs. Control group)	1
Model 3	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1
Model 3	Party classification: Niche (vs. Mainstream)	1
Model 4	De Jongerenstemtest treatment group (vs. Control group)	1,3
Model 4	Niche party (vs. Mainstream)	1,4
Model 4	Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1
Model 4	De Jongerenstemtest X Niche party	1,7

Table B8. Multilevel logistic regression null models predicting party position knowledge (PPK). Each null model includes only a random intercept for the respondent and serves as the baseline for the models in Table B9, Table B12, and Table B13.

	Null model (Table B9)		Null model (Table B12)		Null model (Table B13)	
<i>Predictors</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.56	<0.001	0.57	<0.001	0.48	<0.001
Random Effects						
σ^2	3.29		3.29		3.29	
τ_{00}	0.91 q_p_id		0.90 q_p_id		0.90 q_p_id	
ICC	0.22		0.21		0.22	
N	1340 q_p_id		2291 q_p_id		1827 q_p_id	
Observations	56280		96222		38367	
Marginal R ² / Conditional R ²	0.000 / 0.217		0.000 / 0.214		0.000 / 0.216	
AIC	69487.451		119314.410		46647.593	

Notes. The null model for Table B9 (control group only) was estimated on N = 1,340 respondents; the null model for Table B12 (control and all treatment groups) on N = 2,291; and the null model for Table B13 (De Jongerenstemtest vs. control) on N = 1,827. The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B9. Multilevel logistic regression models predicting baseline PPK levels, including only respondents from the control group (N=1340) in the analysis.

<i>Predictors</i>	Model 1		Model 2		Model 3		Model 4	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.70	<0.001	0.20	<0.001	0.23	<0.001	0.37	<0.001
Jongerenstemtest knowledge item (vs. Stemtest item)	0.58	<0.001	0.59	<0.001	0.58	<0.001	0.59	<0.001
Sociocultural knowledge item (vs. Socioeconomic item)	1.34	<0.001	1.34	<0.001	0.98	0.733	1.34	<0.001
Party: Groen	1.33	<0.001						
Party: Vooruit	0.52	<0.001						
Party: CD&V	0.54	<0.001						
Party: Open VLD	0.50	<0.001						
Party: N-VA	1.15	<0.001						
Party: Vlaams Belang	1.66	<0.001						
Economic party extremity			1.14	<0.001	1.28	<0.001		
Cultural party extremity			1.36	<0.001	1.13	<0.001		
Economic extremity × Sociocultural knowledge item					0.78	<0.001		
Cultural extremity × Sociocultural knowledge item					1.45	<0.001		
Niche party (vs. Mainstream)							2.43	<0.001
Random Effects								
σ^2	3.29		3.29		3.29		3.29	
τ_{00}	1.03 _{q_p_id}		1.02 _{q_p_id}		1.08 _{q_p_id}		1.02 _{q_p_id}	
ICC	0.24		0.24		0.25		0.24	
N	1340 _{q_p_id}		1340 _{q_p_id}		1340 _{q_p_id}		1340 _{q_p_id}	
Observations	56,280		56,280		56,280		56,280	
Marginal R ² / Conditional R ²	0.061 / 0.284		0.058 / 0.281		0.079 / 0.306		0.057 / 0.279	
AIC	66489.363		66637.565		65519.089		66711.690	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B10. Robustness check of multilevel logistic regression models (Table B9) using an alternative party classification (recategorization Groen and N-VA).

<i>Predictors</i>	Old classification		Classification 3 categories		Extreme versus rest	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.37	<0.001	0.37	<0.001	0.53	<0.001
Jongerenstemtest knowledge item (vs. Stemtest item)	0.59	<0.001	0.59	<0.001	0.59	<0.001
Sociocultural knowledge item (vs. Socioeconomic item)	1.34	<0.001	1.34	<0.001	1.33	<0.001
PVDA, Groen, N-VA and VB (vs. other parties)	2.43	<0.001				
PVDA and VB (vs. Vooruit, CD&V, and Open VLD)			2.48	<0.001		
Groen and N-VA (vs. Vooruit, CD&V, and Open VLD)			2.38	<0.001		
PVDA and VB (vs. other parties)					1.72	<0.001
Random Effects						
σ^2	3.29		3.29		3.29	
τ_{00}	1.02 _{q_p_id}		1.02 _{q_p_id}		0.96 _{q_p_id}	
ICC	0.24		0.24		0.23	
N	1340 _{q_p_id}		1340 _{q_p_id}		1340 _{q_p_id}	
Observations	56280		56280		56280	
Marginal R ² / Conditional R ²	0.057 / 0.279		0.057 / 0.279		0.028 / 0.248	
AIC	66711.690		66710.892		68114.771	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B11. Robustness check of multilevel logistic regression models (Table B9) using an alternative socioeconomic classification of the nitrogen emissions item.

<i>Predictors</i>	Model 1		Model 2		Model 3		Model 4	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.78	<0.001	0.22	<0.001	0.37	<0.001	0.40	<0.001
Jongerenstemtest knowledge item (vs. Stemtest item)	0.32	<0.001	0.32	<0.001	0.33	<0.001	0.33	<0.001
Sociocultural item (reclassified; nitrogen as socioeconomic)	2.70	<0.001	2.69	<0.001	0.48	<0.001	2.69	<0.001
Party: Groen	1.33	<0.001						
Party: Vooruit	0.51	<0.001						
Party: CD&V	0.53	<0.001						
Party: Open VLD	0.50	<0.001						
Party: N-VA	1.15	<0.001						
Party: Vlaams Belang	1.67	<0.001						
Economic party extremity			1.14	<0.001	1.06	<0.001		
Cultural party extremity			1.36	<0.001	1.19	<0.001		
Economic extremity × Sociocultural item (reclassified)					1.25	<0.001		
Cultural extremity × Sociocultural item (reclassified)					1.54	<0.001		
Niche party (vs. Mainstream)							2.46	<0.001
Random Effects								
σ^2	3.29		3.29		3.29		3.29	
τ_{00}	1.06 _{q_p_id}		1.05 _{q_p_id}		1.10 _{q_p_id}		1.05 _{q_p_id}	
ICC	0.24		0.24		0.25		0.24	
N	1340 _{q_p_id}		1340 _{q_p_id}		1340 _{q_p_id}		1340 _{q_p_id}	
Observations	56280		56280		56280		56280	
Marginal R ² / Conditional R ²	0.081 / 0.305		0.078 / 0.301		0.094 / 0.321		0.077 / 0.300	
AIC	65634.700		65785.196		64876.567		65861.374	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B12. Multilevel logistic regression models predicting the effect of VAA exposure on PPK

<i>Predictors</i>	Model 1		Model 2	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.38	<0.001	0.39	<0.001
De Stemtest treatment group (vs. Control group)	0.99	0.895	1.02	0.724
De Jongerenstemtest treatment group (vs. Control group)	1.14	0.020	1.07	0.267
Jongerenstemtest knowledge item (vs. Stemtest item)	0.60	<0.001	0.59	<0.001
Sociocultural knowledge item (vs. Socioeconomic knowledge item)	1.33	<0.001	1.33	<0.001
Party: Groen (vs. PVDA)	2.49	<0.001	2.50	<0.001
Party: Vooruit (vs. PVDA)	2.05	<0.001	2.05	<0.001
Party: CD&V (vs. PVDA)	0.94	0.028	0.94	0.028
Party: Open VLD (vs. PVDA)	1.79	<0.001	1.79	<0.001
Party: N-VA (vs. PVDA)	2.95	<0.001	2.96	<0.001
Party: VB (vs. PVDA)	0.96	0.124	0.96	0.124
De Stemtest × Jongerenstemtest knowledge item			0.94	0.110
De Jongerenstemtest × Jongerenstemtest knowledge item			1.14	<0.001
Random Effects				
σ^2	3.29		3.29	
τ_{00}	1.00 _{q_p_id}		1.00 _{q_p_id}	
ICC	0.23		0.23	
N	2291 _{q_p_id}		2291 _{q_p_id}	
Observations	96,222		96,222	
Marginal R ² / Conditional R ²	0.059 / 0.278		0.059 / 0.279	
AIC	114436.680		114420.326	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B13. Multilevel logistic regression models predicting the effect of *De Jongerenstemtest* exposure on PPK by party and party classification

<i>Predictors</i>	Model 1		Model 2		Model 3		Model 4	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.23	<0.001	0.24	<0.001	0.12	<0.001	0.12	<0.001
De Jongerenstemtest treatment group (vs. Control group)	1.23	0.001	1.17	0.087	1.23	0.001	1.25	0.002
Sociocultural knowledge item (vs. Socioeconomic knowledge item)	2.76	<0.001	2.76	<0.001	2.71	<0.001	2.71	<0.001
Party: Groen (vs. PVDA)	1.38	<0.001	1.33	<0.001				
Party: Vooruit (vs. PVDA)	0.26	<0.001	0.26	<0.001				
Party: CD&V (vs. PVDA)	0.69	<0.001	0.67	<0.001				
Party: Open VLD (vs. PVDA)	0.63	<0.001	0.61	<0.001				
Party: N-VA (vs. PVDA)	1.48	<0.001	1.46	<0.001				
Party: Vlaams Belang (vs. PVDA)	1.93	<0.001	1.93	<0.001				
De Jongerenstemtest × Groen			1.14	0.173				
De Jongerenstemtest × Vooruit			0.99	0.920				
De Jongerenstemtest × CD&V			1.10	0.335				
De Jongerenstemtest × Open VLD			1.12	0.279				
De Jongerenstemtest × N-VA			1.04	0.725				
De Jongerenstemtest × Party: Vlaams Belang			0.99	0.957				
Niche party (vs. Mainstream)					2.80	<0.001	2.82	<0.001
De Jongerenstemtest × Niche party							0.97	0.594
Random Effects								
σ^2	3.29		3.29		3.29		3.29	
τ_{00}	1.15 _{q_p_id}		1.15 _{q_p_id}		1.10 _{q_p_id}		1.10 _{q_p_id}	
ICC	0.26		0.26		0.25		0.25	
N	1827 _{q_p_id}		1827 _{q_p_id}		1827 _{q_p_id}		1827 _{q_p_id}	
Observations	38367		38367		38367		38367	
Marginal R ² / Conditional R ²	0.125 / 0.352		0.125 / 0.352		0.100 / 0.326		0.100 / 0.326	
AIC	42881.822		42889.607		43548.529		43550.245	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.

Table B14. Robustness check of multilevel logistic regression models (Table A11) using CD&V as the reference category

<i>Predictors</i>	Model 1		Model 2	
	<i>Odds Ratios</i>	<i>p</i>	<i>Odds Ratios</i>	<i>p</i>
Intercept	0.16	<0.001	0.16	<0.001
De Jongerenstemtest treatment group (vs. Control group)	1.23	0.001	1.29	0.006
Sociocultural knowledge item (vs. Socioeconomic knowledge item)	2.76	<0.001	2.76	<0.001
Party: PVDA (vs. CD&V)	1.46	<0.001	1.49	<0.001
Party: Groen (vs. CD&V)	2.01	<0.001	1.99	<0.001
Party: Vooruit (vs. CD&V)	0.38	<0.001	0.39	<0.001
Party: Open VLD (vs. CD&V)	0.92	0.075	0.92	0.115
Party: N-VA (vs. CD&V)	2.15	<0.001	2.19	<0.001
Party: Vlaams Belang (vs. CD&V)	2.81	<0.001	2.89	<0.001
De Jongerenstemtest × Party: PVDA			0.91	0.335
De Jongerenstemtest × Party: Groen			1.04	0.713
De Jongerenstemtest × Party: Vooruit			0.90	0.341
De Jongerenstemtest × Party: Open VLD			1.01	0.903
De Jongerenstemtest × Party: N-VA			0.94	0.531
De Jongerenstemtest × Party: Vlaams Belang			0.90	0.306
Random Effects				
σ^2	3.29		3.29	
τ_{00}	1.15 _{q_p_id}		1.15 _{q_p_id}	
ICC	0.26		0.26	
N	1827 _{q_p_id}		1827 _{q_p_id}	
Observations	38367		38367	
Marginal R ² / Conditional R ²	0.125 / 0.352		0.125 / 0.352	
AIC	42881.822		42889.607	

Note: The dependent variable is coded at the item level (1 = correct; 0 = incorrect or “don’t know”), with multiple items nested within each respondent.