

Appendix

A1. Recoding Knowledge-Specific Causes and Climate Behaviour

For the variable *knowledge-specific causes*, each of the eight items was recoded as being *right* or *wrong*. The *right* answers were recoded as 1 ('emissions CO₂ industry', 'emissions of CH₄ [methane] by cows', 'deforestation', and 'melting North Pole' contributing to climate change; 'Plastic pollution oceans', 'extinction Black rhino' and 'PFOS pollution' not contributing to climate change). The *wrong* answers were recoded as 0 (including 'I don't know'). In total, a maximum score of 8 could be received in case all answers were right, and a minimum of 0 in case of no right answers.

Concerning *climate behaviour*, the four types of climate-relevant behaviour were summed up; in total a maximum of 4 could be received if all behaviours had been exhibited, and a minimum of 0 in case of no climate-friendly behaviour.

A2. Distribution of Media Use

Table A2 shows the distribution of media use by news outlet. The news outlets are categorized into four types: popular newspapers, broadsheet newspaper, PBS (VRT), and commercial broadcasters (VTM). This categorization is similar to the subdivision used by Beckers et al. (2021).

Table A2: Distribution media use per news outlet

Category	News Outlet/Platform	Rarely or Never (%)	Monthly (%)	Weekly (%)	Daily (%)
Broadsheet newspaper	De Standaard	76	7	10	7
	De Morgen	81	6	8	5
	De Tijd	81	8	7	4
Popular newspaper	Het Laatste Nieuws	34	10	20	36
	Nieuwsblad	53	10	18	19
	Gazet van Antwerpen	77	8	8	7
	Het belang van Limburg	83	4	6	7
	Metro	82	9	7	2
PBS	VRT	30	8	18	44
Commercial broadcaster	VTM	29	9	21	41
Social media	Facebook	34	9	18	39
	Instagram	66	8	11	15
	TikTok	82	5	6	7
	YouTube	57	13	17	13
	Twitter	83	5	7	5

A3. Analysis Strategy and Model Comparison

The statistical method used for the analysis is latent class analysis (LCA), which allows for investigating whether a population can be classified into meaningful homogeneous groups, called *latent classes*, which are similar in their responses to a number of measured indicator variables (Nylund-Gibson & Choi, 2018). Most climate segmentation studies have used this analysis (e.g. Kácha et al., 2022; Leiserowitz et al., 2009; Morrison et al., 2013). Note that when all of the indicator variables are continuous, LCA is sometimes referred to as latent profile analysis (Kácha et al., 2022; MacDonald, 2018; Weller et al., 2020). LCA is considered superior to other segmentation techniques such as hierarchical clustering, due to LCA's ability to evaluate model fit and accommodate both categorical and continuous variables and its compatibility with the inclusion of weights (Kácha et al., 2022).

To conduct the LCA, I employed Stata 118s 'gsem' command along with a series of post-estimation commands (MacDonald, 2018; Statacorp, 2019). Note that a sample of 1,315 should suffice to conduct an LCA as previous work argues that a minimum of 300 or more cases is a desirable sample size (Weller et al., 2020). Following the standard procedure for LCA, I start with a one-class model and then specify the models with one additional class at a time (Nylund-Gibson & Choi, 2018; see Table A3). This allows for comparing the models based on a series of statistical and substantive criteria. A broad range of fit statistics exist, but the Bayesian information criterion (BIC) is regarded as the most reliable one, as it rewards parsimony in models and is used to compare competing LCA solutions (Weller et al., 2020). Lower BICs indicate better fit. Akaike information criterion (AIC) works similarly and is also frequently reported (Kácha et al., 2022). As it is not possible to obtain fit indices of the LCA output for a weighted sample in Stata, the results of the BIC and AIC are based on the original unweighted sample with a slight bias towards the higher educated (see Table A3). When comparing the segment size and entropy of the weighted and unweighted sample, however, very small differences are found. The entropy per model with 1 to 7 classes of the unweighted sample is 1.000 (1 class); 0.85594454 (2 classes); 0.88197321 (3 classes); 0.88440283 (4 classes); 0.95097667 (5 classes); 0.96569176 (6 classes); 0.96124977 (7 classes). Besides fit statistics, diagnostic statistics should also be mentioned; they indicate how accurately the model defines the classes. Entropy (see earlier) is most commonly used and has a value between 0 and 1, so the higher the entropy the better, and a score above 0.8 is generally considered good (Nylund-Gibson & Choi, 2018). Last, one should consider the number of sample members in each class; there is no consensus on determining class size, but some scholars argue that class sizes with less than 50 cases or less than 5% is not advised (Weller et al., 2020).

Taking all these factors into account, the 4-class solution is selected based on the relatively low-fit indices, high entropy, size of the smallest class, and, importantly, it offered the most straightforward interpretation (Weller et al., 2020).

Table A3: LCA Model and Fit Indices

Models	BIC	AIC	Entropy	Percentage Smallest Class (N)
1 class	77,988	77,822	1.000	100 (1,316)
2 class	74,454	74,200	0.85217124	39.67 (522)
3 class	73,084	72,742	0.88083981	9.57 (126)
4 class	72,603	72,173	0.88285807	8.4 (111)
5 class	72,372	71,853	0.95841636	4.79 (63)
6 class	71,522	72,129	0.9654227	4.18 (55)
7 class	58,659	58,089	0.97832432	3.04 (40)

A4. Outcome LCA Four-Class Model**Table A4: Overview of the Outcomes of the Four-Class Model: Means of the Total Sample per Climate Indicator Variable and Estimated Means for Each Climate Class**

	Mean total sample (SE)	Class 1 Doubtful Means (SE) (CI: 95%)	Class 2 Indifferent Means (SE) (CI: 95%)	Class 3 Concerned Means (SE) (CI: 95%)	Class 4 Engaged Means (SE) (CI: 95%)
Knowledge human-caused (0-6)	3.824 (0.055)	0.719 (0.165) 0.396-1.042	3.242 (0.134) 2.979-3.503	4.488 (0.091) 4.310-4.666	5.311 (0.071) 5.172-5.451
Knowledge-specific causes (0-8)	5.440 (0.044)	4.450 (0.175) 4.156-4.844	5.152 (0.093) 4.969-5.335	5.617 (0.077) 5.465-5.769	6.207 (0.099) 6.012-6.402
Climate concern (0-6)	4.00 (0.055)	1.409 (0.257) 0.905-1.913	3.058 (0.115) 2.831-3.284	4.820 (0.107) 4.611-5.029	5.622 (0.085) 5.455-5.789
Need behavioural change (0-6)	4.272 (0.048)	3.344 (0.224) 2.905-3.783	3.876 (0.071) 3.737-4.016	4.453 (0.115) 4.228-4.679	5.253 (0.101) 5.054-5.451
Climate change one of the most important problems (0-6)	3.913 (0.053)	1.068 (.253) 0.570-1.565	3.155 (0.133) 2.895-3.416	4.615 (0.094) 4.429-4.800	5.548 (0.061) 5.428-5.668
Climate change not exaggerated (0-6)	3.756 (0.055)	1.052 (0.216) 0.627-1.476	2.668 (0.116) 2.439-2.896	4.636 (0.072) 4.285-4.886	5.641 (0.058) 5.503-5.799
Too few climate policies are being taken (0-6)	3.347	1.801 (0.249)	2.772 (0.088)	3.701 (0.087)	4.666 (0.093)

	(0.066)	1.313-2.290	2.600-2.945	3.531-3.871	4.482-4.849
European tax on kerosene (0-6)	3.654 (0.057)	1.807 (0.368) 1.086-2.529	3.373 (0.103) 3.171-3.575	3.714 (0.111) 3.497-3.931	5.166 (0.093) 4.983-5.350
Ban on all woodstoves (0-6)	2.738 (0.057)	0.834 (0.226) 0.390-1.277	2.583 (0.125) 2.485-2.822	2.745 (0.109) 2.530-2.959	4.125 (0.166) 3.799-4.450
Emission reduction large farms (0-6)	3.549 (0.053)	0.905 (0.200) 0.513-1.298	3.382 (0.107) 3.214-3.478	3.694 (0.092) 3.513-3.875	5.047 (0.092) 4.867-5.227
Reduced ability to stop placement windmills (0-6)	3.634 (0.055)	2.324 (0.309) 1.718-2.930	3.620 (0.092) 3.439-3.801	3.530 (0.100) 3.334-3.727	4.638 (0.168) 4.308-4.968
Extra taxes on meat (0-6)	2.026 (0.055)	0.536 (0.212) 0.121-0.951	1.685 (0.110) 1.468-1.902	1.939 (0.094) 1.756-2.123	3.823 (0.236) 3.360-3.286
Subsidies to insulate private house (0-6)	4.470 (0.046)	3.420 (0.392) 2.651-4.188	4.240 (0.073) 4.097-4.383	4.694 (0.072) 4.552-4.830	5.047 (0.095) 4.860-5.233
Making all public transport buses electric (0-6)	4.361 (0.048)	2.952 (0.371) 2.224-3.680	4.069 (0.083) 3.907-4.232	4.558 (0.085) 4.391-4.725	5.334 (0.078) 5.182-5.486
Tax on CO₂ for industry (0-6)	3.954 (0.050)	1.902 (0.407) 1.104-2.700	3.736 (0.095) 3.549-3.923	4.095 (0.085) 3.928-4.261	5.247 (0.084) 5.082-5.412
Climate behaviour (0-4)	1.954 (0.038)	0.838 (0.127) 0.587-0.109	1.578 (0.083) 1.416-1.740	2.188 (0.072) 2.046-2.329	2.896 (0.080) 2.708-3.022

Note: CI = confidence interval.

