

SI Supporting Information

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SI.1 Question Text Wording

Merkel Approval; MCS: SCPX001

- *English translation:* How dissatisfied or satisfied are you with the work of Chancellor Angela Merkel?
 - completely dissatisfied (1) - fully satisfied (11)
 - don't know
- *Original (German):* Wie unzufrieden oder zufrieden sind Sie mit der Arbeit von Bundeskanzlerin Angela Merkel?
 - völlig unzufrieden (1) - völlig zufrieden (11)
 - weiß nicht

Perceived Threat; MCS: SCBX003

- *English translation:* To what extent do you see the coronavirus pandemic as a threat to yourself?
 - no threat to me at all (0) - extreme threat to me (10)
 - don't know
- *Original (German):* Inwiefern empfinden Sie die Corona-Virus-Pandemie als Bedrohung für sich selbst?
 - überhaupt keine Bedrohung für mich (0) - extreme Bedrohung für mich (10)
 - weiß nicht

Anxiety (Worry and Nervousness)

- *English translation:* Below are a number of statements people use to describe themselves. Please indicate how much each statement indicates how you feel at this moment. There are no right or wrong answers. Please do not think twice and remember to choose the answer that best describes your current emotional state.
 - I am concerned that something could go wrong (**MCS: SCBX009**).
 - I am nervous (**MCS: SCBX011**).
 - * not at all (1)
 - * a little (2)
 - * quite (3)
 - * very (4)

- *Original (German):* Im Folgenden finden Sie eine Reihe von Aussagen, mit denen Menschen sich selbst beschreiben. Bitte geben Sie an, wie sehr die jeweilige Aussage angibt, wie Sie sich jetzt in diesem Moment fühlen. Es gibt keine richtigen oder falschen Antworten. Überlegen Sie bitte nicht lange und denken Sie daran, diejenige Antwort auszuwählen, die Ihren augenblicklichen Gefühlszustand am besten beschreibt.

– Ich bin besorgt, dass etwas schiefgehen könnte (**MCS: SCBX009**).

– Ich bin nervös (**MCS: SCBX011**).

* überhaupt nicht (1)

* ein wenig (2)

* ziemlich (3)

* sehr (4)

HH Income Previous Month

- *English translation:* How much money did your household have in February [March / April / May / June] 2020? (**MCS: SCDX005/ SCDX007/ SCDX008/ SCDX009**)

– less than 150 euros (1)

– 150 to under 400 euros (2)

– 400 to under 1000 euros (3)

– 1000 to under 1500 euros (4)

– 1500 to under 2000 euros (5)

– 2000 to under 2500 euros (6)

– 2500 to under 3000 euros (7)

– 3000 to under 3500 euros (8)

– 3500 to under 4000 euros (9)

– 4000 to under 4500 euros (10)

– 4500 to under 5000 euros (11)

– 5000 to under 5500 euros (12)

– 5500 to under 6000 euros (13)

– 6000 to under 7500 euros (14)

– 7500 euros and more (15)

– don't know

- not specified
- *Original (German):* Wie viel Geld stand Ihrem Haushalt im Februar [März/ April/ Mai/ Juni] 2020 in etwa zur Verfügung? (**MCS: SCDX005/ SCDX007/ SCDX008/ SCDX009**)
 - unter 150 Euro (1)
 - 150 bis unter 400 Euro (2)
 - 400 bis unter 1000 Euro (3)
 - 1000 bis unter 1500 Euro (4)
 - 1500 bis unter 2000 Euro (5)
 - 2000 bis unter 2500 Euro (6)
 - 2500 bis unter 3000 Euro (7)
 - 3000 bis unter 3500 Euro (8)
 - 3500 bis unter 4000 Euro (9)
 - 4000 bis unter 4500 Euro (10)
 - 4500 bis unter 5000 Euro (11)
 - 5000 bis unter 5500 Euro (12)
 - 5500 bis unter 6000 Euro (13)
 - 6000 bis unter 7500 Euro (14)
 - 7500 Euro und mehr (15)
 - weiß nicht
 - keine Angabe

Policy Congruence: Border Closures

- *English translation:* In Germany, various measures are and have been discussed and taken to contain the corona pandemic. We would now like to know from you what you think of the measures that have already been decided and what you think of possible future measures. Which of the following measures do you consider appropriate in the current situation?
 - Closure of national borders to travelers (**MCS: SCPX006_b**)
- *Original (German):* In Deutschland werden und wurden zur Eindämmung der Corona-Pandemie verschiedene Maßnahmen diskutiert und ergriffen. Wir möchten nun von Ihnen wissen, was Sie von bereits beschlossenen Maßnahmen als auch von möglichen zukünftigen Maßnahmen halten. Welche der folgenden Maßnahmen halten Sie in der heutigen Situation für angemessen?

- Schließung der Landesgrenzen für Reisende (**MCS: SCPX006_b**)

Health Secretary Approval; MCS: SCPX002

- *English translation:* How dissatisfied or satisfied are you with the work of Federal Health Secretary Jens Spahn?
 - completely dissatisfied (1) - fully satisfied (11)
 - don't know
- *Original (German):* Wie unzufrieden oder zufrieden sind Sie mit der Arbeit von Bundesgesundheitsminister Jens Spahn?
 - völlig unzufrieden (1) - völlig zufrieden (11)
 - weiß nicht

Business Secretary Approval; MCS: SCPX003

- *English translation:* How dissatisfied or satisfied are you with the work of Federal Business Secretary Peter Altmaier?
 - completely dissatisfied (1) - fully satisfied (11)
 - don't know
- *Original (German):* Wie unzufrieden oder zufrieden sind Sie mit der Arbeit von Bundeswirtschaftsminister Peter Altmaier?
 - völlig unzufrieden (1) - völlig zufrieden (11)
 - weiß nicht

SI.2 Summary Statistics

Table SI1: Summary Statistics: German Panel Data

Statistic	N	Mean	St. Dev.	Min	Max
Merkel Approval	32,187	6.285	2.897	0	10
Perceived Threat	32,187	0.398	0.288	0.000	1.000
Anxiety	32,187	0.267	0.220	0.000	1.000
COVID-19 Incidence	32,187	19.240	14.375	2.952	44.544
HH Income Previous Month	32,187	1.654	0.921	0.050	7.500
Policy Congruence: Border Closures	32,187	0.737	0.440	0	1

Table SI2: First Difference Evidence: Perceived Threat and Anxiety

	Perceived threat		Anxiety	
	(1)	(2)	(3)	(4)
Change Merkel Approval (Lagged)	0.002 (0.002)	0.001 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Change COVID-19 Incidence (Lagged)		0.01*** (0.0002)		0.003*** (0.0002)
Change HH Income Previous Month (Lagged)		-0.01 (0.01)		-0.01 (0.02)
Change Policy Congruence: Border Closures (Lagged)		0.08*** (0.01)		0.04*** (0.01)
Number of Respondents	3258	3258	3293	3293
Observations	22,328	22,328	22,682	22,682
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01		

SI.3 Ruling out reverse causality: Pandemic Evidence Only

In this section, we use a different approach to obtain evidence that perceived threat and anxiety cause Merkel approval rather than the other way around. While the corresponding analyses in the main text exploit pre-pandemic survey information to learn if longstanding Merkel supporters formed different attitudes during the pandemic, we now rely on within-respondent variation during the pandemic only. We test whether changes in Merkel approval precede (or “granger-cause”) changes in perceived threat and anxiety. However, we find no evidence that changes in Merkel approval trace changes in either perceived threat nor anxiety.

Recall that respondents were invited to participate in the MCS in 16 consecutive weeks. Label a respondent’s week of first participation t_0 , and let t_n with $n \in [1, 15]$ be any of the following weeks she participated in. We then compute how much perceived threat and anxiety changed between t_0 and t_n for all available weeks, and whether these changes are systematically predicted by the change in Merkel approval between t_0 and t_{n-1} . Put differently, we estimate in an OLS regression whether the change in Merkel approval between a respondent’s first MCS participation and last week predicts how much her perceived threat and anxiety levels changed between her first participation and this week, respectively. We further add corresponding (lagged) changes in the control variables that we also use in the main models. To account for the fact that respondents appear multiple times in the dataset, we use respondent-clustered standard errors.

If changes in Merkel approval granger-caused changes in perceived threat and anxiety, respectively, the regression coefficients on the changes in Merkel approval (lagged) variable should be positive and statistically significant. As Table SI2 displays, however, the effects are very small and far from statistical significance. We, therefore, conclude that this additional analysis provides further evidence that Merkel approval does not drive either perceived threat levels nor anxiety levels.

We also exploit this logic to test whether perceived threat and anxiety “granger-cause” Merkel approval. For

these analyses, Merkel approval becomes the dependent variable and lagged changes in perceived threat and anxiety become independent variables. Otherwise, everything remains as before. Table SI3 displays the results. We observe that increases in perceived threat boost Merkel approval in the following week, while rises in anxiety depress it. Overall, the findings in this section are strong evidence that perceived threat and anxiety precede Merkel approval rather than the other way around.

Table SI3: First Difference Models

	Merkel approval	
	(1)	(2)
Change Perceived Threat (Lagged)	0.43** (0.19)	0.34* (0.20)
Change Anxiety (Lagged)	-0.56* (0.29)	-0.60** (0.29)
Change COVID-19 Incidence (Lagged)		0.002 (0.002)
Change HH Income Previous Month (Lagged)		0.14 (0.11)
Change Policy Congruence: Border Closures (Lagged)		0.11 (0.08)
Number of Respondents	3271	3271
Observations	22,094	22,094
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

SI.4 Weighted Means of Perceived Threat, Anxiety and Merkel Approval over time

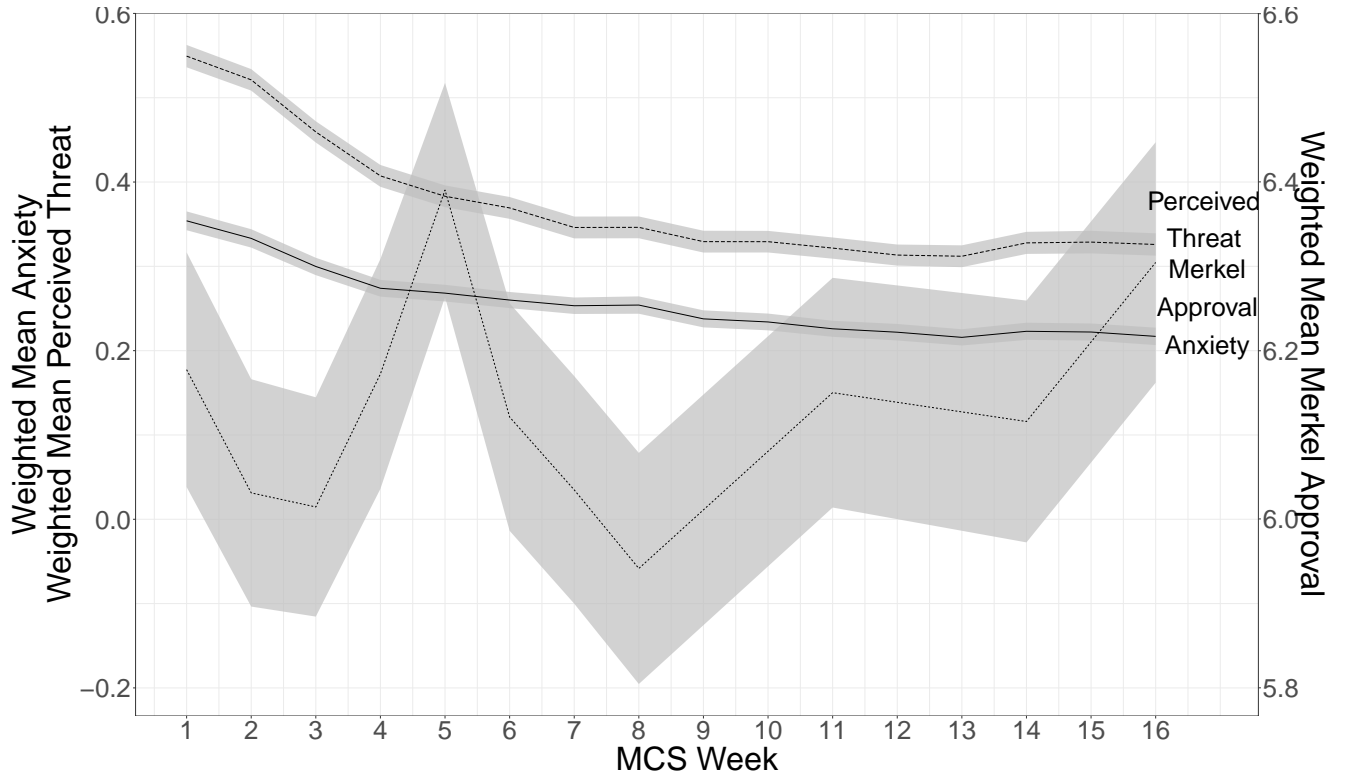


Figure SI1: Weighted Means of Perceived Threat, Anxiety and Merkel Approval over time

In the main text, we present evidence from two-way demeaned time trends, and argue that these contradict the objection that our results are driven by a common time trends. Here, we repeat this analysis with weekly averages that are not two-way demeaned.

For our sample, Figure SI1 shows that the weighted mean of perceived threat was higher than the weighted mean of anxiety throughout the entire field time. Further, while perceived threat and anxiety decline in course of the pandemic, Merkel approval is more variable including upward and downward spikes. This is evidence that we do not simply pick up a common time trend.

SI.5 Standardized independent variables

In the main text, the perceived threat and anxiety variables both range from 0 to 1. Here, fully standardize all variables, i.e., we recode them to the unit interval and divide them by their respective standard deviations. By design, the results we obtain from these variables allow for a interpretation in terms of standard deviations, yet, they should not alter any substantive conclusions.

As expected, the results in Table SI4 are identical to the findings in Table 1 the main text with respect to effect directions and statistical significance. Further, Table SI4 indicates that a standard deviation increase in Perceived Threat is associated with a .05 standard deviations higher approval of Angela Merkel. Similarly, a standard deviation

increase in Anxiety depresses Merkel support by about .03 standard deviations. Finally, a standard deviation increase in Policy Congruence increases Merkel approval by .01 standard deviations. The COVID incidence and household income exert no statistically significant effect on Merkel approval.

Please recall that the MCS data were collected only after COVID had started to be the major issue in German politics. Hence, they do not capture the onset of the rally effect for which very strong effects are expected. By contrast, our results are based on the much smaller changes in public attitudes *during* the pandemic, and hence much smaller effect sized are to be expected.

Table SI4: The Effect of Perceived Threat and Anxiety on Merkel Approval (Standardized Variables)

	(1)	(2)
Perceived Threat	0.05*** (0.01)	0.05*** (0.01)
Anxiety	-0.03*** (0.01)	-0.03*** (0.01)
COVID-19 Incidence		-0.01 (0.01)
HH Income Previous Month		0.03 (0.02)
Policy Congruence: Border Closures		0.01** (0.01)
Individual Fixed effects	Yes	Yes
Number of Respondents	3680	3680
Observations	32,187	32,187
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

SI.6 Response Rates over Time

A potential issue with panel surveys is panel attrition, i.e. that less and less of initial respondents participate the longer a panel survey lasts. This is problematic when selection into the panel skews survey items of interest, and eventually makes researchers draw wrong conclusions (Lynn, 2018).

Figure SI2 shows the rate at which initial respondents participate in the MCS per MCS week (solid line). The dashed line indicates the corresponding Average Absolute Relative Bias (AARB) which measures to what extent a given week's sample deviates from official German population statistics with respect to age, gender, education, household size, marital status, region, and citizenship (Blom et al., 2020).¹⁷

A first glance at the solid line in Figure SI2 reveals that MCS participation was always well above 50%, and usually about 60%. While there is some attrition, however, it is rather small in size: The difference between the waves with the most and least respondents is a mere eight percentage points.

More importantly, the dashed line in Figure SI2 indicates that the MCS's Average Absolute Relative Bias

¹⁷More detailed response rates and AARBs can be found at <https://www.uni-mannheim.de/en/gip/corona-study/methodology/> and in Blom et al. (2020).

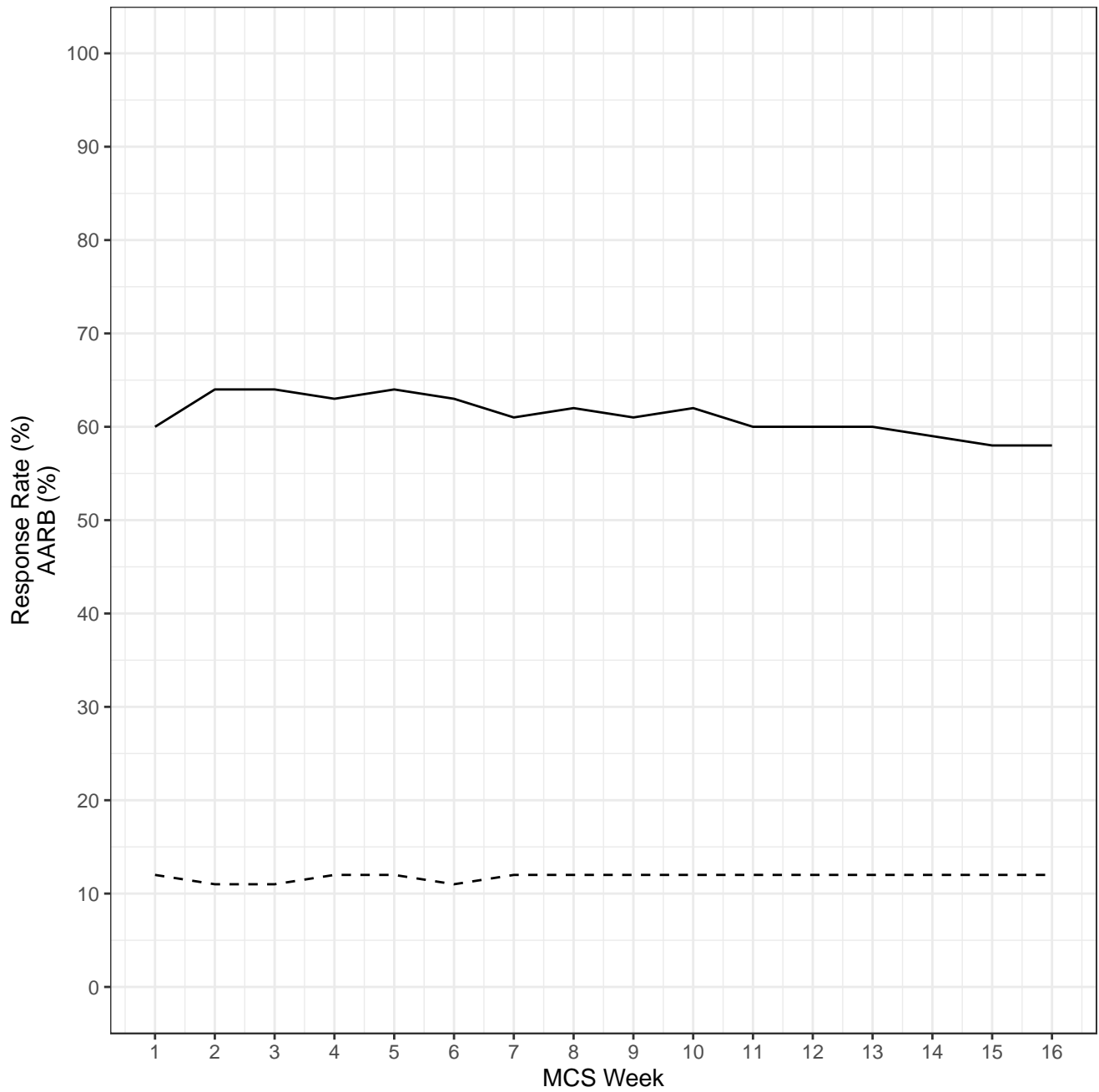


Figure SI2: MCS response rates (solid line) and AARBs (dashed line) over time

(AARB) does not change much as the participation decreases. Overall, this is evidence that some panel attrition occurs (as expected in panel surveys). However, we find no evidence that panel attrition biases the conclusions we draw.

SI.7 Lagged Dependent Variable Models

A potential concern in panel analyses is auto-correlation. In this section, we seek to model it by including a lagged dependent variable (LDV) in our models.¹⁸ Table SI5 indicates that the substantive conclusion drawn in the main text are robust to the addition of the LDV. While the effect of Perceived Threat increases somewhat in comparison to the baseline specification, the effect of Anxiety decreases a little bit.

Table SI5: The Effect of Perceived Threat and Anxiety on Merkel Approval (Lagged Dependent Variable Model)

	(1)	(2)
Lagged Merkel Approval	0.03* (0.02)	0.03* (0.02)
Perceived Threat	0.57*** (0.15)	0.60*** (0.16)
Anxiety	-0.35** (0.18)	-0.35** (0.18)
COVID-19 Incidence		-0.002 (0.002)
HH Income Previous Month		0.13 (0.14)
Policy Congruence: Border Closures		0.21*** (0.08)
Individual Fixed effects	Yes	Yes
Number of Respondents	3208	3208
Observations	18,943	18,943
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

¹⁸To ease the interpretation of results, we exclude observations from this analysis if their last MCS participation did not occur in the previous MCS week. If a respondent skipped the MCS questionnaire in a single week, she hence contributes two observations less to the analysis.

SI.8 Cross lagged panel model

Another way to test for a causal relationship with panel-data are cross lagged panel models (Kenny, 2005). Applied to our context, this research design would provide further evidence in favor of the Perceived Threat and Anxiety hypotheses if its results meet four conditions:

Condition 1: Perceived Threat at t_{-1} is positively associated with Merkel support at t_0 .

Condition 2: Anxiety at t_{-1} is negatively associated with Merkel support at t_0 .

Condition 3: Merkel support at t_{-1} is not associated with Perceived Threat at t_0 .

Condition 4: Merkel support at t_{-1} is not associated with Anxiety at t_0 .

Table SI6 presents the results of a structural equation model that tests all of these conditions at the same time.¹⁹ Its first highlighted row indicates that Condition 1 is met: There exists a substantially relevant and statistically significant association between Perceived Threat at t_{-1} and Merkel Approval at t_0 . The second highlighted row confirms that Condition 2 holds, i.e., it points to a statistically significant and substantially relevant association between Anxiety at t_{-1} and Merkel Approval at t_0 . The coefficient in the third highlighted row finds a statistically significant association between Merkel Approval at t_{-1} and Perceived Threat at t_0 . However, the coefficient is estimated to be 0.00 which implies that there is no substantial effect of past Merkel Approval on current levels of Perceived Threat. Hence, Condition 3 is met. Finally, the coefficient in the last highlighted row is far from statistically significant ($p=.89$) which implies that Condition 4 is met as well. Overall, the cross-lagged panel design provides further evidence that the perceived threat and anxiety drive leadership approval as theorized in the main paper.

¹⁹As in SI.7, we exclude observations from this analysis if their last MCS participation did not occur in the previous MCS week in order to ease the interpretation of results. If a respondent skipped the MCS questionnaire in a single week, she hence contributes two observations less to the analysis.

Table SI6: Cross-lagged panel model

		Model			
		Estimate	Std. Err.	z	p
		<u>Regression Slopes</u>			
<u>Merkel Approval</u>					
	Merkel Approval (Lagged)	0.67	0.01	126.78	0.000
	Perceived Threat (Lagged)	0.48	0.06	7.48	0.000
	Anxiety (Lagged)	−0.26	0.08	−3.09	0.002
<u>Perceived Threat</u>					
	Perceived Threat (Lagged)	0.70	0.01	137.28	0.000
	Merkel Approval (Lagged)	0.00	0.00	4.82	0.000
	Anxiety (Lagged)	0.20	0.01	29.76	0.000
<u>Anxiety</u>					
	Anxiety (Lagged)	0.72	0.01	139.91	0.000
	Merkel Approval (Lagged)	0.00	0.00	0.14	0.890
	Perceived Threat (Lagged)	0.09	0.00	22.43	0.000
		<u>Residual Variances</u>			
	Merkel Approval	4.45	0.05	97.11	0.000
	Perceived Threat	0.03	0.00	97.11	0.000
	Anxiety	0.02	0.00	97.11	0.000
	Merkel Approval (Lagged)	8.42 ⁺			
	Perceived Threat (Lagged)	0.08 ⁺			
	Anxiety (Lagged)	0.05 ⁺			
		<u>Residual Covariances</u>			
	Merkel Approval w/Perceived Threat	0.02	0.00	7.05	0.000
	Merkel Approval w/Anxiety	0.00	0.00	−0.34	0.734
	Perceived Threat w/Anxiety	0.01	0.00	31.09	0.000
	Merkel Approval (Lagged) w/Perceived Threat (Lagged)	0.08 ⁺			
	Merkel Approval (Lagged) w/Anxiety (Lagged)	0.01 ⁺			
	Perceived Threat (Lagged) w/Anxiety (Lagged)	0.04 ⁺			
		<u>Fit Indices</u>			
	$\chi^2(df)$	0.00(0)			
	CFI	1.00			
	TLI	1.00			
	RMSEA	0.00			

⁺Fixed parameter