# **Supporting Information for**

# Global Perceptions of State Apologies for Human Rights Violations

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# This PDF file includes:

- 1. Descriptives (Tables S1)
- 2. Measurement invariance and internal consistency scales (Tables S2–S5)
- 3. Country means and correlations for outcome measures and key predictors (Figure S1, Table S6)
- 4. Additional analyses (Table S7)
- 5. Questionnaire
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# 1. Descriptives

**Table S1.** Survey language and initial and final sample of participants who completed the survey.

	Survey language	Participants who F completed survey	Participants after data cleaning <sup>a</sup>
Argentina	Spanish	338	337
Australia	English	331	318
Burkina Faso	French	300	292
Canada	English	326	309
Chile	Spanish	333	328
China	Chinese (Mandarin)	330	315
Colombia	Spanish	325	321
Costa Rica	Spanish	326	326
El Salvador	Spanish	325	324
France	French	349	326
Germany	German	352	335
India	English	319	314
Indonesia	Indonesian	352	335
Ivory Coast	French	344	340
Japan	Japanese	351	338
Jordan	Arabic	329	321
Kazakhstan	Kazakh	357	333
Kenya	English	501	498
Morocco	Arabic	330	328
Netherlands	Dutch	329	321
New Zealand	English	324	314
Nigeria	English	329	330
Pakistan	Urdu	335	331
Philippines	English	323	311
Poland	Polish	335	328
Russia	Russian	360	352
Saudi Arabia	Arabic	413	389
Serbia	Serbian	326	326
South Korea	Korean	341	337
Spain	Spanish	350	341
Uganda	English	322	318
United Kingdom	English	353	344
United States	English	363	343
Total		11,321	11,023

<sup>&</sup>lt;sup>a</sup> Data were checked for incompletes, straightlining, speeding, and gibberish (e.g., 'afkashfkasjdfh) responses. Straightlining was assessed by checking the standard deviation across a set of scales designed to capture variation. If *SD*=0 for all, then the data were excluded. A relative completion speeding index (country's median completion time/individual completion time) was used to assess speeding, whereby responses with a speed factor greater than two were disqualified.

## 2. Measurement invariance and internal validity of the scales

We checked (in R) whether our scales for people's attitudes toward apologies by countries in general and by their own country, and their sense that their country had been a victim or a perpetrator of harmdoing measured the same latent constructs across all countries. We first checked for configural invariance, whereby we estimated the same two-factor structure for all countries but left the factor loadings and intercepts free to vary for each country. We then tested for metric invariance, by constraining the factor loadings to be equal across each country but allowing the intercepts to vary freely. Finally, we tested for scalar invariance, whereby we constrained both the intercepts and factor loadings to be equal across countries.

To evaluate the fit of the models, we relied on the Root Mean Square Error of Approximation (RMSEA, acceptable fit < .08) the Comparative Fit Index (CFI. acceptable fit > .95), and the Standardized Root Mean Square (SRMR, acceptable fit < .08) (Browne & Cudeck, 1992; Hu & Bentler, 1999). In view of the relatively large number of countries and the somewhat unequal sample sizes across countries, we took a more liberal change score of <- .020 in CFI and of <- .030 in RMSEA to be indicative of metric invariance. For scalar invariance, we relied on a change score of <- .010 in CFA, supplemented by a change of <- .010 in RMSEA, following recommendations by Rutkowski and Svetina (2014).

We were able to establish metric but not scalar invariance for the apology and victimhood/perpetratorhood scales (see Tables S2 and S3). We also noticed, however, that one of the items on the perceived victimhood scale ('To what extent do you feel that *your* country has been responsible for the harm inflicted on *another* country or group') had a negative loading in China, possibly due to translation issues. We hence conducted additional analyses without China as well (see Table S4), and this resulted in a better fit. For the follow-up analyses, we removed this item for China. We also estimated multilevel models without the Chinese sample as an additional check (see Table S7).

**Table S2.** Statistics of measurement invariance results for attitudes toward apologies in general and by own country (two latent factor models) across 33 countries.

Model	X <sup>2</sup>	df	CFI	RMSEA	SRMR
Overall Model	249.142	8	0.992	0.053	0.012
Configural	672.427	264	0.987	0.069	0.024
Metric	1025.017	392	0.980	0.071	0.045
Scalar	2096.621	520	0.950	0.097	0.062

**Table S3.** Statistics of measurement invariance results for perceived victimhood and perceived perpetratorhood (two latent factor models) across 33 countries.

Model	X <sup>2</sup>	df	CFI	RMSEA	SRMR
Overall Model	20.000	8	0.999	0.012	0.006
Configural	345.856	264	0.992	0.031	0.030
Metric	601.011	392	0.979	0.041	0.040
Scalar	1193.738	520	0.932	0.064	0.055

**Table S4.** Statistics of measurement invariance results for perceived victimhood and perceived perpetratorhood (two latent factor models), across 32 countries (China excluded).

Model	<b>X</b> <sup>2</sup>	df	CFI	RMSEA	SRMR
Overall Model	12.591	8	1	0.007	0.004
Configural	312.347	256	0.994	0.026	0.027
Metric	532.734	380	0.985	0.035	0.036
Scalar	1103.716	504	0.940	0.060	0.050

**Table S5.** Cronbach's alphas for apology attitudes and perceived victimhood/ perpetratorhood scales.

	Apology General	Apology Country	Victimhood	Perpetrator- hood
Argentina	.74	.84	.88	.90
Australia	.87	.90	.91	.94
Burkina Faso	.71	.74	.93	.94
Canada	.91	.92	.91	.92
Chile	.73	.89	.89	.91
China	.75	.83	.37	.84
Colombia	.70	.87	.85	.89
Costa Rica	.71	.86	.86	.90
El Salvador	.60	.83	.88	.89
France	.89	.91	.86	.92
Germany	.81	.86	.89	.93
India	.67	.77	.78	.92
Indonesia	.81	.88	.79	.81
Ivory Coast	.71	.79	.85	.91
Japan	.81	.89	.70	.81
Jordan	.78	.89	.89	.89
Kazakhstan	.76	.81	.81	.91
Kenya	.73	.81	.83	.88
Morocco	.72	.87	.88	.88
Netherlands	.89	.93	.88	.91
New Zealand	.90	.93	.92	.94
Nigeria	.77	.90	.84	.86
Pakistan	.60	.84	.82	.86
Philippines	.69	.83	.84	.90
Poland	.89	.92	.86	.90
Russia	.88	.95	.72	.88
Saudi Arabia	.71	.89	.91	.93
Serbia	.82	.92	.90	.92
South Korea	.73	.79	.84	.89
Spain	.87	.91	.88	.91
Uganda	.74	.79	.87	.87
United Kingdom	.89	.94	.89	.93
United States	.87	.92	.87	.94

# 3. Country means for outcome measures and correlations between key predictors

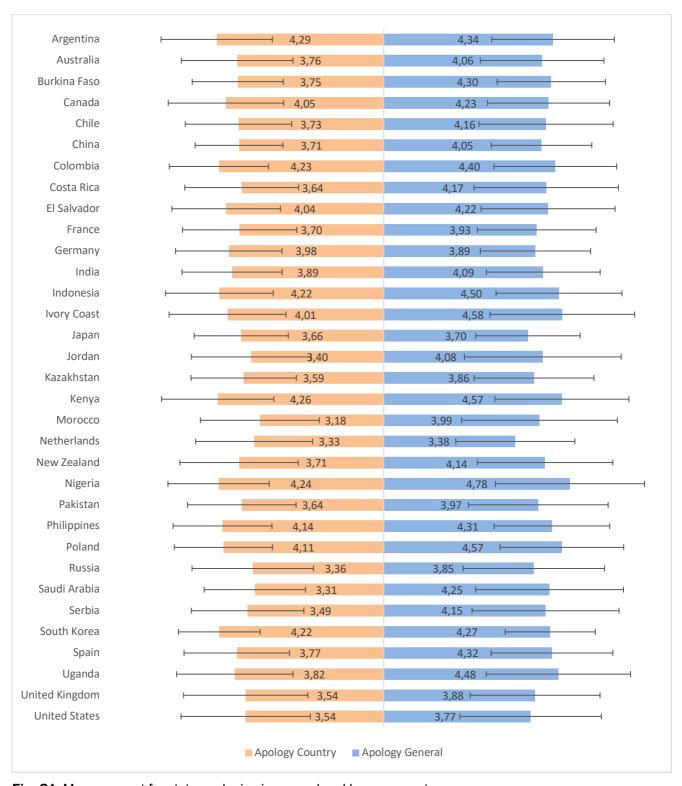


Fig. S1. Mean support for state apologies in general and by own country.

 Table S6. Correlations between key predictors across countries.

	Honor-Face	Honor-Vict.	Honor-Perp.	Face-Vict.	Face-Perp.	Vict-Perp.
Argentina	.483**	.095	109*	.133*	.010	.203**
Australia	.413**	.079	047	.131*	062	.514**
Burkina Faso	.609**	.271**	.047	.179**	040	.209**
Canada	.408**	.103	194**	.140*	.003	.255**
Chile	.350**	.068	013	.085	.059	.397**
China	.295**	.311**	159**	.270**	.046	.235**
Colombia	.295**	.162**	014	.125*	.032	.399**
Costa Rica	.302**	.030	.029	.064	.041	.460**
El Salvador	.391**	.107	.044	.064	.016	.424**
France	.472**	.277**	.002	.267**	.065	.356**
Germany	.273**	.220**	049	.270**	.000	.090
India	.390**	.301**	.068	.232**	.047	.540**
Indonesia	.580**	.131*	.071	.164**	.038	.336**
Ivory Coast	.331**	.065	.016	.040	147**	.281**
Japan	.286**	.344**	.305**	.294**	.195**	.576**
Jordan	.288**	.034	058	.062	045	.271**
Kazakhstan	.433**	.075	039	.062	.071	.526**
Kenya	.296**	078	080	.039	081	.447**
Morocco	.468**	.115*	107	.016	145**	.163**
Netherlands	.241**	.262**	.047	.142*	.046	.404**
New Zealand	.357**	.220**	.072	.286**	.140*	.551**
Nigeria	.418**	.129*	063	.177**	055	.278**
Pakistan	.174**	.134*	122*	.025	005	.256**
Philippines	.418**	.091	014	.109	.033	.266**
Poland	.368**	.197**	068	.016	.080	183**
Russia	.365**	.235**	202**	.138**	035	131*
Saudi Arabia	.359**	050	224**	.001	173**	.394**
Serbia	.280**	.272**	084	009	142*	.009
South Korea	.432**	.141**	.022	.164**	090	.222**
Spain	.373**	.194**	126*	.208**	.011	.316**
Uganda	.411**	019	057	.032	090	.348**
United Kingdom	.376**	.289**	015	.213**	001	.099
United States	.383**	.296**	.032	.275**	.019	.209**

# 4. Additional analyses

**Table S7.** Multilevel model predicting (difference in) support for state apologies in general and by own country (China excluded).

	M	odel 1	Mo	odel 2	Model 3		N	Model 4	
	β	SE	β	SE	β	SE	β	SE	
Intercept	3.986	0.050***	3.922	0.069***	3.915	0.047***	3.877	0.041***	
Individual-level effects									
Gender			0.046	0.021*	0.046	0.022*	0.059	0.023**	
Age			0.005	0.001**	0.005	0.001**	0.005	0.001***	
Education (low is reference)									
Medium			0.059	0.034	0.059	0.034	0.058	0.032	
High			0.098	0.043*	0.101	0.044*	0.105	0.041*	
National identification			0.071	0.012***	0.071	0.012***	0.033	0.012**	
Severity harmdoing			0.176	0.013***	0.177	0.013***	0.167	0.013***	
Location harmdoing			-0.021	0.021					
Time harmdoing			-0.012	0.019					
Personal victim harmdoing			-0.016	0.006**	-0.016	0.006**	-0.015	0.006*	
Difficulty imagining harmdoing			0.031	0.008**	0.032	0.008***	0.026	0.008**	
Actual harmdoing in mind			0.023	0.047					
Responsibility country harmdoing			0.309	0.023***	0.309	0.023***	0.304	0.022***	
Honor norms							0.061	0.010***	
Face norms							0.095	0.010***	
Victim- vs. perpetratorhood							0.012	0.012	
Country-level effects									
Voice and Accountability					0.059	0.023*	0.072	0.024**	
Honor norms							-0.010	0.069	
Face norms							0.047	0.041	
Victim- vs. perpetratorhood							0.037	0.026	
Cross-level interactions									
Difference apology general-country (DIF)	-0.178	0.020***	-0.251	0.042***	-0.235	0.037***	-0.217	0.036***	
Individual-level effects									
DIF * Gender			-0.003	0.016					
DIF * Age			0.000	0.001					
Education (low is reference)									
DIF * Medium			0.016	0.025					
DIF * High			0.017	0.028					
DIF * National identification			-0.012	0.007					
DIF * Severity harmdoing			0.031	0.006***	0.031	0.007***	0.036	0.007***	
DIF * Location harmdoing			0.017	0.014					
DIF * Time harmdoing			0.003	0.016					
DIF * Personal victim harmdoing			-0.004	0.003					
DIF * Difficulty imagining harmdoing			0.005	0.006					
DIF * Actual harmdoing in mind			0.072	0.033*	0.078	0.033*	0.058	0.032	
DIF * Responsibility country harmdoing			0.086	0.009***	0.087	0.009***	0.083	0.008***	
DIF * Honor norms							-0.018	0.006**	
DIF * Face norms							-0.019	0.006***	
DIF * Victim- vs. perpetratorhood							-0.022	0.005***	
Country-level effects									
DIF * Voice and Accountability					0.024	0.017			
DIF * Honor norms							-0.125	0.038**	
DIF * Face norms							0.031	0.027	
DIF * Victim- vs. perpetratorhood							0.055	0.020**	
Fit indices							0.000		
AIC		72,758.8		69,044.2		69,022.9		68,617.1	
BIC		72,776.9		69,261.5		69,173.8		68,836,4	
Log likelihood		-36,370.4		-34,414.1		-34,436.5		-34,199.5	
Deviance		72,740.8		68,828.2		68,872.9		68,399.1	
Model Comparison	With Mo	*	With Mo	*	With Mo	•	With Mo	-	
-2LogL (Deviance)	* * 1 (1 1 1 1 1 1	1020.9***	**1011 1010	3912.6***	V VILIT IVIC	-44.7	V VILIT IVIC	473.8***	
Number of estimators		9		108		75		109	

<sup>\*</sup>p < .05; \*\*\*p < .01; \*\*\*p < .001. DIF = Difference in people's evaluation of state apologies in general and by own country (contrast code, 1 = own country, uncentered). At level 2 and 3, continuous predictors were entered grand-mean centered and dummy-coded predictors were entered uncentered. These were gender (1 = female), educational level (1 = low), time of harmdoing (1 = within lifetime participant), location harmdoing (1 = within own country), and actual harmdoing in mind (1 = yes). AIC = Akaike information criterion. BIC = Bayesian information criterion.

#### 5. Questionnaire

Below, we report the full questionnaire with all our measures. Note that not all variables were reported in the main text and analyses.

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Thank you very much for your interest in our survey. Please read the following before you start:

You are being asked to participate in a survey study conducted by a research team from Tilburg University, the Netherlands. This study is taking place in 26 countries across the world. In this study, we are interested in people's opinions about what should happen after past wrongdoings by both their own and other countries.

During this survey, we will ask you to think of situations in which both your country and other countries has caused harm and suffering to people. This can be any situation that comes to your mind. You do not have tell us what the situation is. This is optional. We also ask you some questions about values that are important to you and in your country. Please know that there are no right or wrong answers. We would like to ask you to read each question carefully and give your honest opinion. Completing the survey will take around 10 minutes.

Participation is voluntary, and you are free to stop or withdraw your participation at any time, without any consequences. Your name will not be asked and any potentially identifying information will be removed from the final dataset. Your anonymous responses will be kept strictly confidential, and digital data will be stored in secure and encrypted computer files for a period of at least 10 years.

This study has received ethical approval from the ethics review board of the School of Humanities and Digital Sciences at Tilburg University (#). If you have any remarks or complaints regarding this research, you may contact the Research Ethics and Data Management Committee of Tilburg School of Humanities and Digital Sciences via tshd.redc@tilburguniversity.edu.

If you have any questions about this research project, please contact Marlies de Groot (m.e.degroot@tilburguniversity.edu), Tilburg University, The Netherlands.

#### **Consent form**

I have had the opportunity to read the consent form and have had the research study explained. I am prepared to participate in the research project described above and I confirm that my responses may be used for current and future research purposes.

- Yes
- No [screen out: We are sorry. Unfortunately, you do not meet the required criteria for this study.]

## <page break>

#### Q1. Are you:

- Man
- Woman
- Other [Option excluded in Indonesia, Jordan, Saudi Arabia, Pakistan, Morocco, Nigeria, Kazakhstan]

Q2. What is your age? [participants aged 17 or younger → screen out: We are sorry. Unfortunately, you do not meet the required criteria for this study. We sincerely thank you and appreciate your time and willingness to participate in our survey.]

- Q3. Where do you currently live?
  - City/town
  - Village/countryside

## <page break>

## Q4. What is your nationality?

- [insert name of survey country]
- [insert name of survey country] and other nationality, please specify [open box]
- Other, please specify [screen out: We are sorry. Unfortunately, you do not meet the required criteria for this study. We sincerely thank you and appreciate your time and willingness to participate in our survey.]

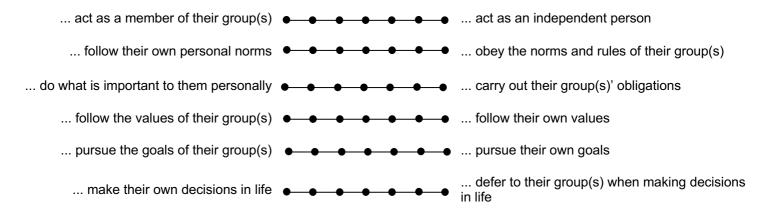
# Q5. To what extent do you identify with [insert name of survey country]:

[0 = not at all to 6 = very strongly]

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**Q6a.** Listed below are a number of values that may exist in a country. Each of these values consists of two opposites. Please indicate to what extent <u>people are expected</u> to follow either of these values <u>in your country</u>. [randomized]

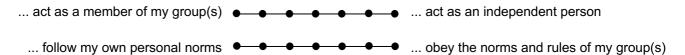
## In my country, people are expected to....:

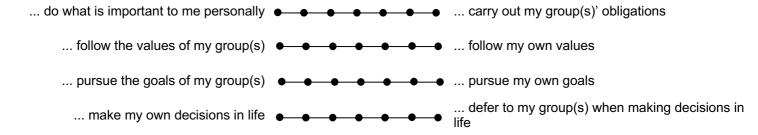


#### <page break>

**Q6b.** Listed below are a number of values. Each of these values consists of two opposites. Please indicate to what extent <u>you personally aim</u> to follow the values below <u>in your personal life</u>: [randomized]

#### In my personal life, I aim to...:





## <page break>

**Q7.** Please describe **yourself** in terms of the personal characteristics below. Each statement consists of two opposites. Please choose the one that describes you more accurately. If you think that you are somewhere in between these two opposites, please choose the option in the middle. [randomized]

I usually try to avoid conflicts.	I am somewhere here, in between these two.	If necessary, I will argue with people of my rank even if that can lead to a conflict.	
0	0	0	
I am an obedient person. I think it is right for me to obey people who have power.	I am somewhere here, in between these two.	I dislike obeying anybody. I like to be my own boss.	
0	0	0	
I usually respect all rules and norms of my society, even those that I do not like.	I am somewhere here, in between these two.	I decide myself which social rules to respect.	
0	0	0	
If I could, I would make all people in our society follow all our laws and rules very strictly.	I am somewhere here, in between these two.	If I could, I would allow people to break useless or meaningless laws and rules.	
0	0	0	

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**Q8.** Please indicate to what extent it is expected in **your country** that: [0 = not at all important to 6 = very important] [randomized]

- People defend their honor.
- People are humble in order to maintain good relationships.
- People are true to themselves, regardless of what other people think.

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Across the world, there are many situations in which countries have caused harm and suffering to people, either within their own country or in other countries. For example, countries have discriminated against, abused, persecuted, injured or killed people during political conflict, war, or other occasions, both in the recent and distant past.

Opinions differ on what should happen after situations such as these. We would now like to ask you some questions about your personal opinion on this. Remember there are no right or wrong answers.

#### <page break>

**Q9.** To what extent do you think that countries in general:

[0 = not at all to 6 = very much]

- ... can be held responsible for wrongdoings by current generations?
- ... should feel responsible for wrongdoings by current generations?
- ... should take responsibility for wrongdoings by current generations?
- ... can be held responsible for wrongdoings by previous generations?
- ... should feel responsible for wrongdoings by **previous** generations?
- ... should take responsibility for wrongdoings by previous generations?

#### <page break>

**Q10.** To what extent do you think it is important that countries in general: [0 = not at all to 6 = very important] [randomized]

- ... try to come to terms with the past.
- ... focus on the future rather than on past wrongdoings.
- ... try to forget past wrongdoings.
- ... apologize to groups or countries for past wrongdoings.
- ... focus on past accomplishments rather than past wrongdoings.
- ... express remorse to groups or countries for past wrongdoings.
- ... publicly acknowledge the suffering they have caused.

#### <page break>

Now we would like to ask you some questions about your country specifically.

#### **Q11.** To what extent do you feel that...:

[0 = not at all to 6 = very much]

- ... other countries have been the cause for the suffering of your country or group.
- ... other countries have been responsible for the harm inflicted on your country or group.
- ... other countries have made your country or group suffer during political conflict, war, or other occasions.

# <page break>

# Q12. To what extent do you feel that...:

[0 = not at all to 6 = very much]

- ... your country has been the cause for the suffering of another country or group.
- ... your country has been responsible for the harm inflicted on another country or group.
- ... your country has made *another* country or group suffer during political conflict, war, or other occasions.

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We now ask you to think about a situation in which your country has caused harm and suffering to people either within your own country (for example, from a religious, ethnic, political or other group), or in another country. This can either be in the recent or distant past.

Please keep this situation in mind, when answering the next couple of questions.

In these questions, we will ask you about your thoughts and feelings when you think about this situation. You **do not** have tell us what the situation is. This is optional. Please also remember that all responses are anonymous.

**Q13.** When you think about this situation, to what extent do you feel the following: [randomized] [0 = not at all to 6 = very much]:

- Guilt
- Shame
- Sadness
- Regret
- Anger
- Fear

#### <page break>

**Q14.** Thinking again about this situation, to what extent do you feel that: [0 = not at all to 6 = very much] [randomized]

- ... your country is responsible for this situation.
- ... your country is responsible for the suffering caused.
- ... your country is responsible for the consequences of its actions.

**Q15.** Thinking again about this situation, to what extent do *you*, as <u>a citizen of your country</u>: [0 = not at all to 6 = very much] [randomized]

- ... feel responsible for this situation.
- ... feel responsible for the suffering caused.
- ... feel responsible for the consequences of your country's actions.

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**Q16.** Thinking again about this situation, to what extent are you concerned that...: [0 = not at all to 6 = very much]

- ... this situation negatively affects your country's reputation.
- ... people from other countries judge your country negatively because of what it did.
- ... people from other countries respect *your country* less because of what it did.
- ... this situation negatively affects your reputation.
- ... people from other countries judge *you* negatively because of what your country did.
- ... people from other countries respect you less because of what your country did.

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**Q17.** There are many things that countries can do after situations in which they have caused harm and suffering.

Thinking again about the situation in which your country caused harm and suffering to people, how important is it according to you that *your country*...:

[0 = not at all to 6 = very important] [randomized]

- ... apologizes for what it has done.
- ... tries to forget what happened.
- · ... expresses remorse for what it has done.
- ... publicly acknowledges the suffering it has caused.
- ... does not talk about this situation.
- ... focuses on the future, rather than on the past.

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**Q18.** In the previous questions, we asked you to think about a situation in which your country has caused harm and suffering either to people within your own country or in another country.

If you feel comfortable, please briefly describe the situation you were thinking about: [open box]

If you do not wish to describe or cannot describe the situation, please indicate why:

I cannot describe the situation because:

- I do not feel comfortable sharing.
- Other, please specify: [open box]

#### <page break>

Q19. Please indicate where the situation that you thought about took place...:

- ...in your country.
- ...in another country/other countries.
- ...in your country and in another country/other countries.

## <page break>

**Q19a.** Please indicate when the situation that you thought about happened...:

- ... in my lifetime.
- ... before I was born.

**Q20.** Please indicate how severe the situation that you were thinking about was in your opinion: [0 = not at all to 6 = very severe]

**Q21.** Do you consider yourself a victim in the situation that you were thinking of? [0 = not at all to 6 = very much; Does not apply]

**Q22.** How difficult was it for you to think of a situation? [0 = not at all to 6 = very difficult]

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We have a few final questions about you.

**Q23.** What is the highest level of education that you have completed? [options differ per country]

- Less than elementary school
- Elementary school
- Middle school
- High school
- Vocational diploma
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate degree
- Other, please specify\_\_\_\_\_\_\_

#### <page break>

Q24. What is your religion? [order differs per country]

- Christianity (e.g. Catholic, Protestant, Orthodox or other)
- Islam (e.g. Sunni, Shia or other)
- Hinduism
- Buddhism
- Shinto
- Judaism
- None [skip to Q26]
- Other, please specify\_\_\_\_\_\_

**Q25.** To what extent do you consider yourself a religious person? [0 = not at all - 6 = very much]

<page break> [Block randomize Q26a & Q26b; 50:50 among all participants]

**Block 1/ Q26a.** Do you think it is good to always agree with others? [0 = not at all good to 6 = extremely good]

**Block 2/ Q26b.** Do you think it is bad to always agree with others? [0 = not at all bad to 6 = extremely bad]

# <page break>

**Q27.** If you have any comments, you can write them below: [open box]

#### <page break>

Thank you for taking the time to participate in this survey. Your responses are a very important contribution to our research.

If you feel uncomfortable or experience any distress as a result of this survey and wish to seek help, please contact Marlies de Groot (m.e.degroot@tilburguniversity.edu).

This survey is part of a larger five-year research project on 'Political Apologies across Cultures', in which we aim to understand how people across the world think about political apologies, and whether or not political apologies have a universal potential to redress injustice or restore harmony. For more information, please see our website: <a href="https://www.politicalapologies.com">www.politicalapologies.com</a>.

If you have any further questions or comments, please contact Marlies de Groot (m.e.degroot@tilburguniversity.edu).

## 6. SI References

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