

Information: This file contains the codebook for the data file Scharrer et al_2021_Easiness_Prior Beliefs_DATA.csv (Table 1) and an overview of the different questionnaire versions used in the experiment (Table 2).

Table 1: Codebook

Variable	Description
Participant_ID	Participant's ID
Duration	Duration of participation (in sec) -1 = Missing value
Version	Version of the questionnaire 8 versions, counterbalancing order of exposure to experimental conditions and combination of experimental condition and topic, see Table 2 for an overview
Consent_pre	Informed consent at the beginning of the experiment 1 = consent
Prior_beliefs1	Statement 1 measuring prior beliefs: "The currently observed climate change is a result of natural causes that have nothing to do with humans" 1 = don't believe at all 7 = strongly believe
Prior_beliefs2	Statement 2 measuring prior beliefs: "The present climate change is mainly caused by human behaviour" 1 = don't believe at all 7 = strongly believe
Prior_beliefs3	Statement 3 measuring prior beliefs: "The climate currently changes dues to natural fluctuations" 1 = don't believe at all 7 = strongly believe
Prior_beliefs4	Statement 4 measuring prior beliefs: "The current climate change is primarily caused by humans" 1 = don't believe at all 7 = strongly believe
Prior_beliefs5	Statement 5 measuring prior beliefs: "Human behaviour is the major cause of the currently observed climate change" 1 = don't believe at all 7 = strongly believe
Prior_beliefs6	Statement 6 measuring prior beliefs: "The current climate change can be attributed primarily to natural causes" 1 = don't believe at all 7 = strongly believe
Prior_beliefs7	Statement 7 measuring prior beliefs: "Natural factors that are independent of human behaviour are the major cause of the current climate change"

	1 = don't believe at all 7 = strongly believe
Prior_beliefs8	Statement 8 measuring prior beliefs: "Essentially, the current climate change is caused by humanity" 1 = don't believe at all 7 = strongly believe
SCORE_belief_human_causes	arithmetic mean of Prior_beliefs2, 4, 5, 8
SCORE_belief_natural_causes	arithmetic mean of Prior_beliefs1, 3, 6, 7
PriorKnowledge_climate_change	How would you describe your knowledge about the topic "climate change"? 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor
Gender	1 = male 2 = female 3 = diverse
Age	Age
Native_language	1 = German 2 = other
Study_major	Study major
Study_semester	Current semester of studies
Relevance_climate_change	How relevant do you personally find the topic of "climate change"? 1 = not at all relevant 7 = very relevant
consistent_comprehensible_AGREE_PRE	Condition belief-consistent, comprehensible: agreement with the text claim before reading "Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect." 1 = I don't agree at all 7 = I fully agree
inconsistent_comprehensible_AGREE_PRE	Condition belief-inconsistent, comprehensible: agreement with the text claim before reading "Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect." 1 = I don't agree at all 7 = I fully agree
consistent_lesscomprehensible_AGREE_PRE	Condition belief-consistent, less comprehensible: agreement with the text claim before reading "Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect." 1 = I don't agree at all 7 = I fully agree
inconsistent_lesscomprehensible_AGREE_PRE	Condition belief-inconsistent, less comprehensible: agreement with the text claim before reading "Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect." 1 = I don't agree at all

	7 = I fully agree
consistent_comprehensible_ AGREE_POST	Condition belief-consistent, comprehensible: agreement with the text claim after reading “Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect.” 1 = I don’t agree at all 7 = I fully agree
consistent_comprehensible_ REASON	Condition belief-consistent, comprehensible: Reasons for the claim judgement (“Please tell your friend the reasons for your judgement”)
consistent_comprehensible_ STRATEGY1	Condition belief-consistent, comprehensible: Strategy 1: Trust in one’s own judgement based on present knowledge (“Based on my present knowledge about the topic, I am confident about deciding whether it is correct that [claim statement inserted].”) 1 = don’t agree 7 = strongly agree
consistent_comprehensible_ STRATEGY2	Condition belief-consistent, comprehensible: Strategy 2: Trust in one’s own judgement based on further information (“I want to obtain further information about [topic] that I shall then use to decide myself whether it is correct that [claim statement inserted].”) 1 = don’t agree 7 = strongly agree
consistent_comprehensible_ STRATEGY3	Condition belief-consistent, comprehensible: Strategy 3: Desire to outsource the judgement to an expert (“I want to obtain information about experts in the field in order to identify a particularly competent and credible expert. I would then consult this expert and rely on their judgement as to whether it is correct that [claim statement inserted].”) 1 = don’t agree 7 = strongly agree
consistent_comprehensible_ CREDIBLE	Condition belief-consistent, comprehensible: Author credibility (“Please indicate how credible you find the author of the text you’ve just read.”) 1 = not at all credible 7 = very credible
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	<p>deciding whether it is correct that [claim statement inserted].")</p> <p>1 = don't agree 7 = strongly agree</p>
inconsistent_comprehensible_STRATEGY2	<p>Condition belief-inconsistent, comprehensible: Strategy 2: Trust in one's own judgement based on further information ("I want to obtain further information about [topic] that I shall then use to decide myself whether it is correct that [claim statement inserted].")</p> <p>1 = don't agree 7 = strongly agree</p>
inconsistent_comprehensible_STRATEGY3	<p>Condition belief-inconsistent, comprehensible: Strategy 3: Desire to outsource the judgement to an expert ("I want to obtain information about experts in the field in order to identify a particularly competent and credible expert. I would then consult this expert and rely on their judgement as to whether it is correct that [claim statement inserted].")</p> <p>1 = don't agree 7 = strongly agree</p>
inconsistent_comprehensible_CREDIBLE	<p>Condition belief-inconsistent, comprehensible: Author credibility ("Please indicate how credible you find the author of the text you've just read.")</p> <p>1 = not at all credible 7 = very credible</p>
consistent_lesscomprehensible_AGREE_POST	<p>Condition belief-consistent, less comprehensible: agreement with the text claim after reading "Please indicate, whether in your opinion, the statement [claim inserted] is correct or incorrect."</p> <p>1 = I don't agree at all 7 = I fully agree</p>
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inconsistent_lesscomprehensible_CREDIBLE	Condition belief-inconsistent, less comprehensible:

	Author credibility (“Please indicate how credible you find the author of the text you’ve just read.”) 1 = not at all credible 7 = very credible
Consent_post	Informed consent at the end of the experiment 1 = consent 2 = no consent
Technical_difficulties	Have you experienced any technical difficulties during this study? 1 = yes 2 = no
Prior_participation	Have you previously participated in a study similar to the present one? 1 = yes 2 = no

Table 2: Overview of the questionnaire versions, showing the order in which the target and distracter texts appeared in each version.

Version	Position 1: Target text 1	Position 2: Distracter A	Position 3: Target text 2	Position 4: Distracter B	Position 5: Target text 3	Position 6: Distracter C	Position 7: Target text 4
1	S - bic_com	2	M - bc_com	4	O - bic_lcom	1	W - bc_lcom
2	S - bic_lcom	4	M - bc_lcom	2	O - bic_com	3	W - bc_com
3	W - bc_com	1	O - bic_com	2	M - bc_lcom	3	S - bic_lcom
4	W - bc_lcom	2	O - bic_lcom	4	M - bc_com	3	S - bic_com
5	S - bic_com	1	M - bc_lcom	4	O - bic_lcom	2	W - bc_com
6	S - bic_lcom	1	M - bc_com	3	O - bic_com	4	W - bc_lcom
7	W - bc_com	3	O - bic_lcom	2	M - bc_lcom	1	S - bic_com
8	W - bc_lcom	1	O - bic_com	4	M - bc_com	3	S - bic_lcom
<p>Topics/belief-consistency conditions: S = Solar activity (= belief-inconsistent, bic) O = Orbit (= einstellungsinkonsistent, ic) M = Methane gas (= belief-consistent → bc) W = Wood clearing (= belief-consistent → bc)</p>							
<p>Comprehensibility conditions: com = comprehensible lcom = less comprehensible</p>							

Distracter texts (for each version, three distracter texts were selected randomly from a pool of four distracter texts):

- 1: vaccination I (less comprehensible)
- 2: gm food (comprehensible)
- 3: vaccination II (comprehensible)
- 4: vaccination III (less comprehensible)