

Explaining Atheism: Wave 2 Codebook

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Welcome

**** This is a living document as is not necessarily complete.****

A timestamped final codebook will be published alongside the dataset when this is released

Welcome to the codebook for the second of the Explaining Atheism project. Here you will find all the information about what is in the accompanying dataset. This is a more focussed examination of variables tested in wave 1 (see [here](#)) across more countries.

Data

This dataset is being collected via international surveys in Brazil, Japan, China, the United States, Denmark and the UK.

The dataset is comprised of two surveys of possible explanations of belief and non-belief, with the same belief measures included in both surveys. Each survey is run in a nationally representative sample (age, sex, region) of 1250 participants in each of the six countries.

Additional Information

All information about the project, including scorings scripts for each measures used, is available on our Figshare page upon release, along with on my personal GitHub. This includes links to pre-registrations, materials and the data itself.

Welcome

If you have any questions or want any further information feel free to contact me at c.russell@qub.ac.uk, or get in touch via my [GitHub](#) or [Twitter](#) linked on the top left!

Part I.

Survey 1

1. Rebelliousness

Cluster: Morals/Values

1.1. Measure

The rebelliousness measure is a custom measure devised to examine the subscales pro-active rebelliousness and reactive rebelliousness identified by McDermott (2001). After wave 1 we excluded what we termed the “Activism” subscale and only included the “Trolling” subscale in this round.

Modifications

1.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and state to what extent they apply to you. There are no right or wrong answers and your responses remain anonymous.

1. *Rebelliousness*

Items

Qlabel	Subscale	question
reb_01	Trolling	I find it exciting to poke fun at people
reb_02	Trolling	I find it exciting to poke fun at authority
reb_03	Trolling	I experience a thrill when disobeying authority
reb_04	Trolling	I experience an urge to disobey social rules

Coding

This questionnaire follows our standard coding for extent based measures, with To No Extent At All = 1, and To a Great Extent = 7.

1	2	3	4	5	6	7
To No Extent At All	To a Slight Extent	To a Mild Extent	To a Moder- ate Extent	To an Appre- ciable Extent	To a Consid- erable Extent	To a Great Extent

No items are reverse coded

1.2.1. Scoring

The following variables are derived from this measure.

2. CREDs

Cluster: Socialisation

2.1. Measure

The measure is a further development of the CREDs measure used by Lanman & Buhrmester (2017).

Modifications

The CRED measures that we use vary across the countries within our survey, as such the following sections are subset by nation. Specifically we have different questions for the historically Christian nations (Brazil, Denmark, United Kingdom, United States), Japan, and China, and we have nation specific examples in some cases.

In this round we added an additional question on perceived parental sincerity- cred_32.

2.2. Implementation

Question wording

2. CREDs

Question ID	Question Text
intro	The following questions ask about experiences during your upbringing that relate to God.
cred_01	These questions ask about your perceptions of your primary caregiver or caregivers (i.e., parents or guardians). Please answer each of the following according to your overall impression of your caregiver(s) on the following scale:
cred_06	
cred_07	<i>Stand alone question</i>
cred_26	These questions ask about your perceptions of your local area growing up (i.e., hometown, school). Please answer each of the following according to your overall impression of your caregiver(s) on the following scale:
cred_31	

Items

The question items were as follows:

Question ID	Question	response
cred_01	what extent did your caregivers visit places sacred to God (e.g. temple, church, synagogue, mosque)?	extent
cred_02	what extent did your caregivers engage in volunteer/charity work associated with their devotion to God. (e.g. Habitat for humanity, Salvation Army, Catholic Relief Services, local religious charities)?	extent
cred_03	what extent did your caregivers give financial donations to Godly causes (e.g. to churches, temples, mosques, charities, etc.)?	extent
cred_04	what extent did your caregivers make personal sacrifices as part of their devotion to God (e.g. fasting, abstaining from alcohol and caffeine, giving away wealth, etc.)?	extent

2.2. Implementation

Qlabel	question	response
cred_05	what extent did your caregivers perform acts of devotion to God in the home (e.g. Bible readings, visible prayer, etc.)?	extent
cred_06	what extent do you think their devotion to God influenced important decisions in their lives (e.g. marriage, divorce, moving, changing jobs, having children, etc.)?	extent
cred_07	How sincere did you feel your caregivers were in their devotion to God?	sincerity
cred_08	Did you attend or participate in any groups devoted to God] you were growing up? (e.g. churches, religious organisations, camps, etc.) If yes, you will have the ability to answer for 2 different groups below.	yes/no
cred_09	Please name/describe the first group	open
cred_10	Did this group have leadership figures such as priests, pastors, imams, head counsellors, rabbis, gurus, etc.?	yes/no
cred_11	How sincere did you feel the leaders of this group were in their devotion to God?	sincerity
cred_12	To what extent did the leaders of this group make personal sacrifices as part of their devotion to God? (e.g. fasting, celibacy, abstaining from alcohol and/or caffeine)	extent
cred_13	How sincere did you feel the members of this group were in their devotion to God?	sincerity
cred_14	To what extent did members of this group engage in charitable work together?	extent
cred_15	To what extent did members of this group express emotion during group gatherings?	extent
cred_16	How often did members of this group appear to be in altered states of consciousness such as speaking in tongues, trance, or possession?	frequency

2. CREDs

cred_16	To what extent would members of this group wear particular clothes or clothing styles?	extent
cred_17	REPEAT CRED 08 - 16	-
- 25		

cred_26	What percentage of people in your hometown/city do you think believed in God?	percentage
cred_27	To what extent did believers in God in your hometown demonstrate their beliefs in everyday life?	extent
cred_28	How sincere did you feel the believers in God in your hometown were in their devotion to God?	sincerity
cred_29	What percentage of people in your high school do you think believed in God?	percentage
cred_30	To what extent did the believers in God in your high school demonstrate their beliefs in everyday life?	extent
cred_31	How sincere did you feel the believers in God in your high school were in their devotion to God?	sincerity

2.2.1. Country Specific Variations:

Coding

The above questions had a number of different response options, with no reverse coding:

2.2.1.1. Yes/No

2.2. Implementation

0	1
No	Yes

2.2.1.2. Frequency

1	2	3	4	5	6	7
Never	Very Infrequently	Infrequently	Sometimes	Frequently	Very Frequently	Always

2.2.1.3. Extent

1	2	3	4	5	6	7
To No Extent At All						To a Great Extent

2.2.1.4. Sincerity

1	2	3	4	5	6	7
Completely Insincere	Very Insincere	Insincere	Neutral	Sincere	Very Sincere	Completely Sincere

2.2.1.5. Percentage

0 -100%

2. CREDs

2.2.2. Scoring

The following variables are derived from this measure:

3. Normativity of Religion

3.1. Measure

Modifications

3.2. Implementation

Question wording

Participants are presented with the following text:

People are a part of a number of groups that affect their lives, such as nation-states, ethnic groups, companies, friend/peer groups, and hobby groups (e.g. sports/music fandoms). For these groups, being a good, respected member often comes with expectations. Below, we will ask you how important certain personal qualities are to being a good, respected member of the groups to which you belong.

Along with subscale specific text:

Subscale	text	response
Nation	The following questions will ask you about your nation. There are no right or wrong answers and your responses remain anonymous.	extent

3. Normativity of Religion

Subscale	text	response
Ethnic	The following questions will ask you about the ethnic group with which you identify (e.g. Black British, White (other), Han, Japanese, Pacific Islander). There are no right or wrong answers and your responses remain anonymous.	extent
Friends/peers	The following questions will ask you about your friendship/ peer group. There are no right or wrong answers and your responses remain anonymous.	extent
Choose own	The following questions will ask you about a hobby or interest group that is important to you (e.g. music, fashion, gaming communities). There are no right or wrong answers and your responses remain anonymous.	extent

Items

The question items were as follows, where [COUNTRY] is the name of the country:

Qlabel	Subscale	question	response
norm_01	Nation	To what extent is it expected for a citizen of [COUNTRY] to believe in God?	extent
norm_02	Nation	To what extent is it expected for a citizen of [COUNTRY] to perform rituals honouring God?	extent

3.2. Implementation

Qlabel	Subscale	question	response
norm__03	Nation	To what extent is it expected for a citizen of [COUNTRY] to belong to a religion?	extent
norm__04	Ethnic	To what extent is it expected of people in your ethnic group to believe in God?	extent
norm__05	Ethnic	To what extent is it expected of people in your ethnic group to perform rituals honouring God?	extent
norm__06	Ethnic	To what extent is it expected of people in your ethnic group to belong to a religion?	extent
norm__07	Friends/peers	To what extent is it expected amongst your friends to believe in God?	extent
norm__08	Friends/peers	To what extent is it expected amongst your friends to perform rituals honouring God?	extent
norm__09	Friends/peers	To what extent is it expected amongst your friends to belong to a religion?	extent
norm__10	Choose own	To what extent is it expected for members of the hobby or interest group most important to you to believe in God?	extent
norm__11	Choose own	To what extent is it expected for members of the hobby or interest group most important to you to perform rituals for God?	extent

3. Normativity of Religion

Qlabel	Subscale	question	response
norm_12	Choose own	To what extent is it expected for members of the hobby or interest group most important to you to belong to a religion?	extent

Coding

This questionnaire follows our standard coding for extent based measures, with To No Extent At All = 1, and To a Great Extent = 7.

1	2	3	4	5	6	7
To No Extent At All	To a Slight Extent	To a Mild Extent	To a Moder- ate Extent	To an Appre- ciable Extent	To a Consid- erable Extent	To a Great Extent

No items are reverse coded

3.2.1. Scoring

4. Collectivism

4.1. Measure

The collectivism measure used was that of Triandis (1994), available in Gelfand & Realo (1999).

Modifications

For consistency with our other measures we used a 7-point likert scale for agreement, where the original measure used a 9-point scale.

4.2. Implementation

Question wording

Participants read the following text:

We want to know if you agree or disagree with the following statements. The statements sometimes refer to your ‘group,’ which refers to your group of friends or any other group that you are involved in. Read each one carefully. Indicate your agreement or disagreement with the statement by using the following scale:

4. Collectivism

Items

Qlabel	question
ic_01	It is important for me to maintain harmony within my group
ic_02	I would sacrifice an activity that I enjoy very much if my family did not approve of it.
ic_03	Children should be taught to place duty before pleasure.
ic_04	My happiness depends very much on the happiness of those around me.
ic_05	The well-being of my group is a very important concern for me
ic_06	I really like to cooperate with others
ic_07	I usually sacrifice my self-interest for the benefit of my group
ic_08	Before making a decision, I like to consult with many others.
ic_09	Children should feel honored if their parents receive a distinguished award
ic_10	If any of my relatives were in financial difficulty, I would help them even if it made my life difficult.
ic_11	If a member of my group gets a prize, I would feel proud.
ic_12	Sharing little things with my group makes me very happy
ic_13	I feel we should keep our aging parents with us at home
ic_14	To me, pleasure is spending time with others
ic_15	I hate to disagree with others in my group
ic_16	I would do what would please my family, even if I detested the activity

Coding

This questionnaire used our standard response scale for agreement.

4.3.

1	2	3	4	5	6	7
strongly dis- agree	moderately disagree	slightly dis- agree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

No items are reverse coded

Scoring

The following variables were derived from this measure

4.3.

5. Existential Insecurity

Cluster: Motivational

5.1. Measure

The initial existential insecurity measures were derived from those used by Baimel et al. (2022) and by Willard & Cingl (2017).

Modifications

The food security measure from Baimel et al. (2022) was combined with financial and physical security from Willard & Cingl (2017), these were asked for ‘recently’ and ‘for the forthcoming months’.

In this wave we only included questions pertaining to childhood.

5.2. Implementation

Question wording

The question wording was as follows:

5. Existential Insecurity

Questions	Question Text
es_15 - es_21	<i>When growing up did you:</i>

Items

The question items were as follows:

Existential Security

Qlabel	question
es_15	worry that your household may not able to buy or produce enough food to eat?
es_16	feel that your household may not be able to afford to buy items you need
es_17	worry that your household may not have enough money
es_18	worry about members of your household losing their job
es_19	feel you will be safe walking alone in your local area after dark
es_20	worry about being burgled
es_21	worry about being a victim of violent crime

Coding

Items on the existential security subscale use the following frequency based Likert scale:

1	2	3	4	5	6	7
never	very infre- quently	infrequently	sometimes	frequently	very fre- quently	always

5.2. Implementation

es_19 is reverse coded

5.2.1. Scoring

The following variables are derived from this measure:

6. Non-theistic Socialisation

Cluster: Socialisation

6.1. Measure

Modifications

6.2. Implementation

The Non-theistic Socialisation measure that we use vary across the countries within our survey, as such the following sections are subset by nation. Specifically we have different questions for the historically Christian nations (Brazil, Denmark, United Kingdom, United States), and for Japan and China.

Question wording

6. Non-theistic Socialisation

Questions	Question Text
intro	To what extent did important people in your upbringing speak against the idea that God exists? That is, to what extent, adding it all up, did the important people in your life – such as your parents, teachers, and church officials (if any) – do the things listed below as you were growing up?

Items

The items were as follows:

Qlabel	question	response
nts_01	State that God does not exist?	extent
nts_02	State that prayers to God do not work?	extent
nts_03	Mock or joke about people's religious belief?	extent
nts_04	State that belief in God is not necessary for morality?	extent
nts_05	State that one should not be religious?	extent
nts_06	State that there are no good reasons to believe in God?	extent
nts_07	State that religious belief does more harm than good in the world?	extent
nts_08	State that religious practices are irrational?	extent

Coding

This measure uses our standard response scale for extent.

6.2.0.1. Extent

1	2	3	4	5	6	7
To No Extent At All						To a Great Extent

No items were reverse coded

6.2.1. Scoring

The following variables were derived from this measure:

6.3.

7. Religious Emphasis

7.1. Measure

7.2. Implementation

The Religious Emphasis measure that we use vary across the countries within our survey. Specifically we have different question wording for the historically Christian nations (Brazil, Denmark, United Kingdom, United States), Japan, and China.

Question wording

Question	Question Text
intro	To what extent did you have an upbringing devoted to God? That is, to what extent, adding it all up, did the important people in your life – such as your parents, teachers, and church officials (if any) – do the things listed below as you were growing up?

7.3. Items

The items were as follows:

7. Religious Emphasis

Qlabel	question	response
re_01	Review the teachings of Christianity, Judaism, Islam, Hinduism or another similar tradition at home?	extent
re_02	Emphasize that you should read scripture or books associated with Christianity, Judaism, Islam, Hinduism or another similar tradition?	extent
re_03	Discuss moral do's and don'ts in relation to God?	extent
re_04	Tell stories about God?	extent
re_05	Talk about the afterlife?	extent
re_06	Emphasise that spiritual matters were of high importance?	extent
re_07	Relate stories about God to contemporary life?	extent
re_08	Teach you to obey the wishes of God?	extent
re_09	Teach you to obey the persons who act as representatives of God (e.g. priests, ministers, rabbis, imams, etc.)?	extent

Coding

This measure used our standard response scale for extent.

1	2	3	4	5	6	7
To No Extent At All	To a Slight Extent	To a Mild Extent	To a Moder- ate Extent	To an Ap- preciable Extent	To a Con- siderable Extent	To a Great Extent

No items are reverse coded

7.3.1. Scoring

The following variables were derived from this measure.

8. Social Desirability

Cluster: Motivational

8.1. Measure

To measure social desirability we use is the impression management subscale of the balanced Inventory of Desirable Responding Short Form (BIDR-16) from Hart, Ritchie, Hepper, & Gebauer (2015) . This itself is an abbreviated version of the larger 40-item BIDR measure which can be found [here](#).

Modifications

The BIDR-16 used a truth based Likert scale. As with other measures we have standardized this to be a 7-point scale with anchors and response items consistent with the other truth-based Likert scales we used in the project.

The original BIDR measure asked participants to write a numbered response indicating the degree to which each statement is true. For consistency with other measures used, and the method of administration, we ask participants to respond by selecting their response.

8. Social Desirability

8.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and say to what degree they are true or untrue for you. There are no right or wrong answers and your responses remain anonymous.

Items

Qlabel	question
sd_01	I sometimes tell lies if I have to
sd_02	I never cover up my mistakes
sd_03	There have been occasions when I have taken advantage of someone
sd_04	I sometimes try to get even rather than forgive and forget
sd_05	I have said something bad about a friend behind his/her back
sd_06	When I hear people talking privately, I avoid listening
sd_07	I never take things that don't belong to me
sd_08	I don't gossip about other people's business

Coding

This questionnaire follows our standard coding for agreement based measures, with absolutely untrue = 1, and absolutely true = 7.

8.2. Implementation

1	2	3	4	5	6	7
absolutely untrue	mostly untrue	somewhat untrue	can't say true or false	somewhat true	mostly true	absolutely true

Items sd_01, sd_03, sd_04, and sd_05 are reverse coded

8.2.1. Scoring

The following variables are derived from this measure:

9. Meaning in Life

Cluster: Motivational

9.1. Measure

To examine need for meaning we used The Meaning in Life Questionnaire (MLQ) by Steger, Frazier, Oishi, & Kaler (2006). The original scale has a two factor structure, with the subscales noted below.

Modifications

The truth-based Likert scale in the MLQ is the standard 7-point truth scale we used throughout the project so this was not altered.

We used the original question wording for the MLQ.

9.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and rate how strongly you agree or disagree. There are no right or wrong answers and your responses remain anonymous.

9. Meaning in Life

9.2.1. Items

Meaning in Life Questionnaire

Qlabel	Subscale	question
mlq_01	presence	I understand my life's meaning.
mlq_02	search	I am looking for something that makes my life feel meaningful.
mlq_03	search	I am always looking to find my life's purpose.
mlq_04	presence	My life has a clear sense of purpose
mlq_05	presence	I have a good sense of what makes my life meaningful.
mlq_06	presence	I have discovered a satisfying life purpose.
mlq_07	search	I am always searching for something that makes my life feel significant.
mlq_08	search	I am seeking a purpose or mission for my life.
mlq_09	presence	My life has no clear purpose.
mlq_10	search	I am searching for meaning in my life.

9.3. Coding

The Meaning in Life Questionnaire (mlq_ items) used our standard response scale for truth:

1	2	3	4	5	6	7
absolutely untrue	mostly untrue	somewhat untrue	can't say true or false	somewhat true	mostly true	absolutely true

9.4. Scoring

Item mlq_09 is reverse coded

9.4. Scoring

Part II.

Survey 2

10. Anthropomorphism

10.1. Measure

Modifications

The original measure used by Neave, Jackson, Saxton, & Hönekopp (2015) questions pertaining to childhood and adulthood experiences. For the sake of brevity only questions pertaining to adulthood were included.

For consistency with the other agreement based measures used in the project the anchors and response items were altered to be a 7-point Likert scale.

10.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and rate how strongly you agree or disagree. There are no right or wrong answers and your responses remain anonymous.

Items

10. Anthropomorphism

Qlabel	question
anth_01	I sometimes wonder if my computer deliberately runs more slowly after I have shouted at it
anth_02	On occasions I feel that my computer/printer is being deliberately awkward
anth_03	I sometimes wonder if my personal possessions appreciate it when I have given them a good clean
anth_04	On occasion I feel that the weather conditions are being deliberately bad in order to ruin a social event
anth_05	I do think that certain cars have a specific personality
anth_06	If I accidentally break one of my favourite possessions I make sure that I apologise to it for my clumsiness
anth_07	I think that some trees are friendly while others have an air of menace
anth_08	I sometimes think that if my computer/printer is made to feel happy and/or wanted, then they will be less likely to malfunction
anth_09	I sometimes feel that the sea can be angry
anth_10	Part of the reason why I picked a new car/electrical item was because when I first saw it I felt that it had a friendly personality

Coding

This questionnaire follows our standard coding for agreement based measures, with strongly disagree = 1, and strongly agree = 7.

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

10.2. Implementation

No items are reverse coded

10.2.1. Scoring

The following variables were derived from this measure

11. Mentalizing

Cluster: Cognitive Biases

11.1. Measure

The Mentalizing measure used was the EQ-Short (Wakabayashi et al., 2006), which is an abbreviated version of the original Empathy Quotient measure (Baron-Cohen & Wheelwright, 2004).

11.1.1. Modifications

In contrast with other agreement based measures we used, the selected mentalizing measure used a unique scoring system, and as such was not altered to be consistent with our other Likert measures.

The wording of the question was altered to reflect the manner of administration (“select” your answer instead of the original “circle”)

11.2. Implementation

Question wording

Participants read the following text:

11. Mentalizing

Please read each of the following statements carefully and rate how strongly you agree or disagree. There are no right or wrong answers and your responses remain anonymous.

Items

Qlabel question

- mnt_01 I can easily tell if someone else wants to enter a conversation.
- mnt_02 I really enjoy caring for other people
- mnt_03 I find it hard to know what to do in a social situation
- mnt_04 I often find it difficult to judge if something is rude or polite
- mnt_05 In a conversation, I tend to focus on my own thoughts rather than on what my listener might be thinking
- mnt_06 I can pick up quickly if someone says one thing but means another.
- mnt_07 It is hard for me to see why some things upset people so much
- mnt_08 I find it easy to put myself in somebody else's shoes
- mnt_09 I am good at predicting how someone will feel.
- mnt_10 I am quick to spot when someone in a group is feeling awkward or uncomfortable
- mnt_11 I can't always see why someone should have felt offended by a remark
- mnt_12 I don't tend to find social situations confusing.
- mnt_13 Other people tell me I am good at understanding how they are feeling and what they are thinking
- mnt_14 I can easily tell if someone else is interested or bored with what I am saying
- mnt_15 Friends usually talk to me about their problems as they say that I am very understanding.
- mnt_16 I can sense if I am intruding, even if the other person doesn't tell me

11.2. Implementation

Qlabel question

mnt_17 Other people often say that I am insensitive, though I don't
always see why
mnt_18 I can tune into how someone else feels rapidly and intuitively.
mnt_19 I can easily work out what another person might want to talk
about
mnt_20 I can tell if someone is masking their true emotion
mnt_21 I am good at predicting what someone will do
mnt_22 I tend to get emotionally involved with a friend's problems

Coding

The mentalizing measure follows a bespoke 4 point agreement scale and uses a the following coding scheme:

definitely disagree	slightly disagree	slightly agree	definitely agree
0	0	1	2

Items 03, 04, 05, 07, 11, and 17 are reverse coded.

11.2.1. Scoring

The following variables are derived from this measure:

12. Vividness of Mental Imagery

Cluster: Cognitive Biases

12.1. Measure

The measure of vividness of mental imagery we use is the Vividness of Mental Imagery scale Marks (1973).

Modifications

12.2. Implementation

For this questionnaire each subscale appeared on its own page with the subscale specific text above

Question wording

Participants read the following text:

ItemsText

12. Vividness of Mental Imagery

ItemsText

vvi_01 For each scenario try to form a mental picture of the people,
 - objects, or setting. Consider carefully the vividness of your visual
 vvi_11 imagery experience. Does some type of image come to mind? Rate
 how vivid the image is using the 5-point scale. If you do not have a
 visual image, rate vividness as '1'. Only use '5' for images that are
 as lively and vivid as real seeing.
 Please try to form the mental image of the following items with
 your eyes *closed*.

additional text was also presented prior to each subscale:

Subscale (items)	Text
Relative or friend (vvi_01 - vvi_04)	For items 1 to 4, think of some relative or friend whom you frequently see (but who is not with you at present) and consider carefully the picture that comes before your mind's eye.
Natural scene: Rising sun (vvi_05 - vvi_08)	Visualize a rising sun. Consider carefully the picture that comes before your mind's eye.
Shop (vvi_09 - vvi_12)	Think of the front of a shop which you often go to. Consider the picture that comes before your mind's eye.
Natural scene: Lake (vvi_13 - vvi_16)	Finally, think of a country scene which involves trees, mountains, and a lake. Consider the picture that comes before your mind's eye.

Items

12.2. Implementation

QlabelSubscale	question
vvi_01Relative or friend	The exact contour of face, head, shoulders, and body.
vvi_02Relative or friend	Characteristic poses of head, attitudes of body, etc.
vvi_03Relative or friend	The precise carriage, length of step, etc. in walking.
vvi_04Relative or friend	The different colors worn in some familiar clothes.
vvi_05Natural scene: Rising sun	The sun is rising above the horizon into a hazy sky.
vvi_06Natural scene: Rising sun	The sky clears and surrounds the sun with blueness.
vvi_07Natural scene: Rising sun	Clouds. A storm blows up, with flashes of lightening.
vvi_08Natural scene: Rising sun	A rainbow appears.
vvi_09Shop	The overall appearance of the shop from the opposite side of the road.
vvi_10Shop	A window display including colors, shape, and details of individual items for sale.
vvi_11Shop	You are near the entrance. The color, shape, and details of the door.
vvi_12Shop	You enter the shop and go to the counter. The counter assistant serves you. Money changes hands.
vvi_13Natural scene: Lake	The contours of the landscape.

12. Vividness of Mental Imagery

QlabelSubscale	question
vvi_14Natural scene: Lake	The color and shape of the trees.
vvi_15Natural scene: Lake	The color and shape of the lake.
vvi_16Natural scene: Lake	A strong wind blows on the tree and on the lake causing waves.

Coding

This questionnaire follows a unique scoring scheme for vividness

1	2	3	4	5
Perfectly clear and as vivid as normal vision	Clear and rea- sonably vivid	Moderately clear and vivid	Vague and dim	No image at all, you only “know” that you are thinking of an object

No items are reverse coded

12.2.1. Scoring

The following variables are derived from this measure:

12.3.

13. Dualism

Cluster: Cognitive Biases

13.1. Measure

The Dualism measure used is an abbreviation of The Dualism Scale by Stanovich (1989). As with previous research the scale has been shortened for brevity (Willard & Cingl, 2017; Willard, Cingl, & Norenzayan, 2020).

13.1.1. Modifications.

For consistency with the other agreement based measures used in the project the anchors and response items were altered to be a 7-point Likert scale

13.2. Implementation

13.2.1. Question wording

Participants read the following text, adapted and shortened from Stanovich (1989):

13. Dualism

Please read each of the following statements carefully and rate how strongly you agree or disagree. There are no right or wrong answers and your responses remain anonymous

Items

Qlabelquestion

- dua_0The mind is not part of the brain but it affects the brain.
- dua_0When I imagine a scene in my mind, I am in a state that will forever be beyond explanation by science.
- dua_0The mind is a special form of energy (currently unknown to man) that is in contact with the brain and affects it.
- dua_0When people talk about their minds they are really just talking about what their brains seem to be doing.
- dua_0The fact that I can know my own thought processes (that I can introspect) means that my thought processes cannot be just brain processes
- dua_0The mind is a nonmaterial substance that interact with the brain to determine behavior
- dua_0Minds are inside brains but are not the same as brains.
- dua_0Some mental processes have no connection to brain processes
- dua_0Mental processes are the result of activity in the nervous system
- dua_1The mind and the brain are two totally separate things
-

Coding

This questionnaire follows our standard scoring for agreement based measures, with strongly disagree = 1, and strongly agree = 7.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

13.3. Scoring

strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree
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dua_04 and dua_09 are reverse coded

13.3. Scoring

13.4. Script

14. Promiscuous Teleology

14.1. Measure

The promiscuous teleology measure we use is the short form of the Teleological Ideas about Nature Scale (TINS), which is an as yet unpublished scale by Kelemen, Brown, Burnham & Rottman (2023, in prep).

PAGE WILL BE UPDATED WHEN THE SCALE IS PUBLISHED

Modifications

14.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and state to what extent you agree. There are no right or wrong answers and your responses remain anonymous.

14. Promiscuous Teleology

Items

Coding

This questionnaire used the standard response scale for agreement

No items are reverse coded

14.2.1. Scoring

The following variables are derived from this measure:

14.3. Script

15. Thinking Style

Cluster: Cognitive Style

15.1. Measure

We use the original Cognitive Reflection Task by Frederick (2005), and an updated version, the Cognitive Reflection Task 2, from Thomson & Oppenheimer (2016).

Modifications

15.2. Implementation

Question wording

Participants read the following text:

In the following section you will be asked a series of questions. Please do your best to answer as accurately as possible.

Items

15. Thinking Style

Qlabel	question
crt_01	You're running a race and you pass the person in second place, what place are you in?
crt_02	A farmer had 15 sheep and all but 8 died. How many are left?
crt_03	Emily's father has three daughters. The first two are named April and May. What is the third daughter's name?
crt_04	How many cubic feet of dirt are there in a hole that is 3' deep x 3' wide x 3' long?
crt_05	A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost?
crt_06	If it takes 5 machines 5 min to make 5 widgets, how long would it take 100 machines to make 100 widgets?
crt_07	In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?

Coding

This questionnaire uses open responses for `crt` items.

For scoring responses are labelled as either "Correct", "Intuitive" or "Incorrect". Correct and intuitive answers are as follows:

'we also code any typos/variations accordingly for all items, see rows 1:3 as illustration)

15.2. Implementation

Item	Correct (including variations/typos)	Intuitive (!!CHECK THESE!!)
crt_01	second (or 2nd, 2 or any variation therein)	first (or 1st, 1 or any variation of)
crt_02	8 (or eight or other variations of/typos)	7 (or seven or variations of)
crt_03	Emily (or typos of)	June (or typos)
crt_04	0	3
crt_04	5 cents	10 cents
crt_05	5 minutes	1 minute
crt_06	47 days	24 days

15.2.1. Scoring

The following variables are derived from this measure:

16. Existential Insecurity

Cluster: Motivational

16.1. Measure

The initial existential insecurity measures were derived from those used by Baimel et al. (2022) and by Willard & Cingl (2017).

Modifications

The food security measure from Baimel et al. (2022) was combined with financial and physical security from Willard & Cingl (2017), these were asked for ‘recently’ and ‘for the forthcoming months’.

In this wave we only included questions pertaining to childhood.

16.2. Implementation

Question wording

The question wording was as follows:

16. Existential Insecurity

Questions	Question Text
es_15 - es_21	<i>When growing up did you:</i>

Items

The question items were as follows:

Existential Security

Qlabel	question
es_15	worry that your household may not able to buy or produce enough food to eat?
es_16	feel that your household may not be able to afford to buy items you need
es_17	worry that your household may not have enough money
es_18	worry about members of your household losing their job
es_19	feel you will be safe walking alone in your local area after dark
es_20	worry about being burgled
es_21	worry about being a victim of violent crime

Coding

Items on the existential security subscale use the following frequency based Likert scale:

1	2	3	4	5	6	7
never	very infre- quently	infrequently	sometimes	frequently	very fre- quently	always

16.2. Implementation

es_19 is reverse coded

16.2.1. Scoring

The following variables are derived form this measure:

17. Tolerance of Ambiguity

Cluster: Cognitive Styles

17.1. Measure

The measure used for tolerance of ambiguity is the Multiple Stimulus Types Ambiguity Tolerance Scale- II (MSTAT-II) by McLain (2009) .

Modifications

17.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and state to what extent you agree with each. There are no right or wrong answers and your responses remain anonymous.

Items

17. Tolerance of Ambiguity

Qlabel	question
at_01	I don't tolerate ambiguous situations well
at_02	I would rather avoid solving a problem that must be viewed from several different perspectives
at_03	I try to avoid situations that are ambiguous
at_04	I prefer familiar situations to new ones
at_05	Problems that cannot be considered from just one point of view are a little threatening
at_06	I avoid situations that are too complicated for me to easily understand
at_07	I am tolerant of ambiguous situations
at_08	I enjoy tackling problems that are complex enough to be ambiguous
at_09	I try to avoid problems that don't seem to have only one "best" solution
at_10	I generally prefer novelty over familiarity
at_11	I dislike ambiguous situations
at_12	I find it hard to make a choice when the outcome is uncertain
at_13	I prefer a situation in which there is some ambiguity

Coding

This questionnaire uses our standard response scale for agreement,

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

17.2. Implementation

at_01, at_02, at_03, at_04, at_05, at_06, at_09, at_11, and at_12 are reverse coded

17.2.1. Scoring

The following variables are derived from this measure:

18. Importance of Rationality

Cluster: Cognitive Style

18.1. Measure

Here we include the Importance of Rationality Scale from Ståhl, Zaal, & Skitka (2016)

Modifications

18.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and state to what extent you agree. There are no right or wrong answers and your responses remain anonymous.

INSERT

Items

18. Importance of Rationality

imp_01	It is important to me personally to be skeptical about claims that are not backed up by evidence.
imp_02	It is important to me personally to remain rational and levelheaded even in heated arguments.
imp_03	It is important to me personally to examine traditionally held beliefs using logic and evidence.
imp_04	It is important to me personally that I can justify my beliefs using rational arguments and evidence.
imp_05	It is important to me personally to critically examine my long-held beliefs.
imp_06	It is important to me personally to be a rational person.

Coding

This questionnaire uses our standard agreement scale.

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

No items are reverse coded

18.2. Implementation

Scoring

The following variables are derived form this measure:

Part III.

Belief Measures

19. ISSP

Cluster: Measuring Belief

19.1. Measure

Modifications

Note ISSP_03 was not originally an ISSP question. This is a question created by us and added to this section for practical purposes.

19.2. Implementation

`issp_02` only appears if `issp_01 = 1` or `2`

19. ISSP

Qlabel	Question	Response options
issp_	Which statement comes closes to expressing what you believe about God?	<ol style="list-style-type: none"> 1. I don't believe in God 2. I don't know whether there is a God, and I don't believe there is any way to find out 3. I don't believe in a personal God, but I do believe in a Higher Power of some kind 4. I find myself believing in God some of the time, but not at others 5. While I have doubts, I feel that I do believe in God. 6. I know God really exists and I have no doubt about it. 7. Don't know

19.2. Implementation

Qlabel	Question	Response options
issp_02	Here are some examples of how different people who do not believe in God or gods identify themselves. If you had to pick a label, which of these comes closest to how you identify yourself?	<ol style="list-style-type: none"> 1. Spiritual but not religious 2. Seeker 3. Non-religious 4. Atheist 5. Agnostic 6. Humanist 7. Sceptic 8. Free thinker 9. Rationalist 10. Secular 11. Christian 12. Muslim 13. Jewish 14. Buddhist 15. Hindu 16. Daoist 17. Shinto 18. Confucian 19. Other (please specify)

19. ISSP

Qlabel	Question	Response options
issp_03	Which of the following best describes your belief in god?	<ol style="list-style-type: none">1. Generally speaking, I have always believed in God.2. Generally speaking, I have never believed in God.3. I believed in God in the past, but now I do not.4. I did not believe in God in the past, but now I do.

19.3. Scoring

See the Belief Measures landing page for all belief measures variables and their definitions.

20. Religious Identity

20.1. Measure

20.2. Implementation

rid_02 only appears if rid_01 = Yes

Qlabel	Question	Response options
rid_01	Do you regard yourself as belonging to a particular religion?	Yes/No

20. Religious Identity

Qlabel	Question	Response options
rid_02	If yes, which?	<ol style="list-style-type: none"> 1. Protestant 2. Catholic 3. Orthodox (e.g. Greek Orthodox, Russian Orthodox) 4. Sunni 5. Shiite 6. Buddhist 7. Confucian 8. Daoist 9. Hindu 10. Jewish 11. Shinto 12. Other (please specify)
rid_03	Whilst growing up did your primary caregiver belong to a particular religion?	Yes/No

20.2. Implementation

Qlabel	Question	Response options
rid_04	If yes, which?	<ol style="list-style-type: none"> 1. Protestant 2. Catholic 3. Orthodox (e.g. Greek Orthodox, Russian Orthodox) 4. Sunni 5. Shiite 6. Buddhist 7. Confucian 8. Daoist 9. Hindu 10. Jewish 11. Shinto 12. Other (please specify)
rid_05	Whilst growing up did an additional important caregiver belong to a particular religion?	Yes/No

20. Religious Identity

Qlabel	Question	Response options
rid_06	If yes, which?	<ol style="list-style-type: none">1. Protestant2. Catholic3. Orthodox (e.g. Greek Orthodox, Russian Orthodox)4. Sunni5. Shiite6. Buddhist7. Confucian8. Daoist9. Hindu10. Jewish11. Shinto12. Other (please specify)

20.2.1. Scoring/ Coding

See the Belief Measures landing page for all belief measures variables and their definitions.

20.3.

20.3.

21. Religious Practice

Cluster: Measuring Belief

21.1. Measure

Modifications

21.2. Implementation

21. Religious Practice

Qlabel	Question	Response options
rp_01	Apart from weddings and funerals, about how often do you attend religious services these days?	<ol style="list-style-type: none">1. More than once a week2. Once a week3. Once a month4. Only on special holy days5. Once a year6. Less often7. Never, practically never

21.2. Implementation

Qlabel	Question	Response options
rp_02	Apart from weddings and funerals, about how often do you pray?	<ol style="list-style-type: none"> 1. Several times a day 2. Once a day 3. Several times each week 4. Only when attending religious services 5. Only on special holy days 6. Once a year 7. Less often 8. Never, practically never
rp_03	Do you have in your home a shrine, altar, or a religious object on display such as a (BIBLE OR CROSS/ COUNTRY SPECIFIC ITEM)?	<ol style="list-style-type: none"> 1. Yes, for religious reasons 2. Yes, for non-religious reasons 3. No

21. Religious Practice

Country Specific Examples

Brazil

rp_03: crucifix or an image of Iemanja

China

rp_03: an ancestor tablet, censer, Buddha statue, or statue of a deity?

Denmark

rp_03: a Bible or cross?

Japan

rp_03: butsudan, ihai, or kamidana?

UK

rp_03: cross, icon, mezuzah, or Bible?

USA

rp_03: a cross, icon, mezuzah, Bible, or retablo?

21.2.1. Scoring/ Coding

See the General Belief landing page for all belief measures variables and their definitions.

22. Supernatural Belief

Cluster: Belief Measures

22.1. Measure

Modifications

22.2. Implementation

Question wording

Participants read the following text:

Please read each of the following statements carefully and state to what extent you agree. There are no right or wrong answers and your responses remain anonymous.

22.2.1. Items

Qlabel	question
snb_01	There is some sort of life after death
snb_02	Sometime after I die, I expect that I'll be born again in another body.

22. Supernatural Belief

Qlabel	question
snb_03	The positions of the stars and planets affect people's lives
snb_04	Some people have mystical powers (e.g. to heal, harm, or bring good luck)
snb_05	Some objects have mystical powers (e.g. to heal, harm, or bring good luck)
snb_06	There are underlying forces of good and evil in this world.
snb_07	There exists a universal spirit or life force.
snb_08	There is a power in the universe that causes good things to happen to people who behave morally and bad things to happen to people who behave immorally.
snb_09	Most significant life events are meant to be and happen for a reason.
snb_10	Supernatural beings of some kind exist
snb_11	There exist supernatural beings that are good/kind (e.g. COUNTRY SPECIFIC)
snb_12	There exist supernatural beings that are harmful. (e.g COUNTRY SPECIFIC)
snb_13	Some people will be punished after they die
snb_14	Some people will be rewarded after they die
snb_15	Making other people envious of you can cause illness or misfortune.
snb_16	Have you ever felt as though you were connected to a powerful spiritual force?
snb_17	Do you carry any objects for luck or protection?

Country Specific Examples

Brazil

22.2. Implementation

snb_11: e.g. angels, nature spirits

snb_12: e.g. demons, ghosts

China

snb_11: e.g. ancestor spirits

snb_12: e.g. ghosts

Denmark

snb_11: e.g. angels, nature spirits

snb_12: e.g. demons, ghosts

Japan

snb_11: e.g. angels, spirits

snb_12: e.g. ghosts, monsters

UK

snb_11: e.g. angels, nature spirits

snb_12: e.g. demons, ghosts

USA

snb_11: e.g. angels, nature spirits

snb_12: e.g. demons, ghosts

22.3. Coding

Items snb_01 - snb_15 use our standard response scale for agreement

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

Item snb_16 uses the following bespoke scale

1	2	3
Yes, I've had an experience like this.	I've had an experience like this, but I didn't associate it with a spiritual force.	No, I've never had an experience like this.

Item snb_17 is a Yes/No response

22.3.1. Scoring

See the General Belief landing page for all belief measures variables and their definitions.

23. General Belief

Cluster: Belief Measures

23.1. Measure

Modifications

23.2. Implementation

Question wording

Participants read the following text:

“The following section will list a number of statements regarding your attitudes towards God, religion, and belief. Please read each and state to what extent you agree. There are no right or wrong answers and your responses remain anonymous.”

23.2.1. Items

Qlabel	question
belief_01	I believe that God exists
belief_02	It is not possible to know if God exists

23. General Belief

Qlabel	question
conf_01	I am confident that my beliefs about God's existence are the right ones.
ar_01	We would all be better off if people left religion behind.
apth_01	Whether or not God exists is a question that doesn't interest me much
apth_02	Whether or not there is an ultimate purpose to life is a question that doesn't interest me much.
agn_01	I don't know whether there is a God, and I don't believe there is any way to find out.
mean_01	For most things in the world, we will never be able to discover the real objective truth.

23.3. Coding

This scale uses our standard response scale for agreement

1	2	3	4	5	6	7
strongly disagree	moderately disagree	slightly disagree	neither agree nor disagree	slightly agree	moderately agree	strongly agree

23.4. Scoring

See the Belief Measures landing page for all belief measures variables and their definitions.

24. Atheist Membership

Cluster: Measuring Belief

24.1. Measure

Modifications

24.2. Implementation

Qlabel	Question	Response options
am__01	Are you currently a member of any atheist, secularist, humanist, or similar organization at a national or local level?	Y/N

24.3. Scoring

See the Belief Measures landing page for all belief measures variables and their definitions.

Part IV.

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