

8 SUPPLEMENTARY MATERIALS

8.1 Demographics

Demographics of Participants

Demographics	Frequency
Overall	465
Age Group	
18-24	131
25-34	215
35-44	76
45-54	26
55-64	9
Over 64	8
Education	
Less than high school education	60
Have obtained or Pursuing a college education	302
Have obtained of Pursuing a graduate education	103
Gender	
female	217
male	237
no-disclosure	2
non-binary	9

8.2 Survey: Individual Cultural Values

We provide the questions used to measure participants' cultural values in the following table.

8.3 Details for Calculating Participants' Cultural Values

To obtain the score for these two cultural dimensions *Traditional vs Secular* and *Survival vs Self-expression*, we followed the procedure in the World Values Survey website (See Data and Documentation-Frequently Asked Questions). We first conduct principal component analysis (PCA) with respect to each dimension based on the most recent survey data responses (2005-2020) from WVS website for the 10 questions [21, 28, 29]. To conduct the PCA, we first followed coding procedure the WVS Wave 7 codebook (see Wave 7 Codebook variables report on the website) to convert each response into its corresponding numeric score for the PCA analysis. Using the PCA factor loadings (See table below) for each of these questions in each dimension, we calculate the final scores for the two dimensions via standardization of responses as the formula below (μ and σ denote the average and standard deviation score for each question based on response data from 2005-2020; $c_{secul,i}$ and $c_{sele,i}$ denote the factor loadings for each question.):

$$SECU = \sum_{i=1}^n \left(\frac{SECU_Questions[i] - \mu_{secul,i}}{\sigma_{secul,i}} \cdot s_{secul,i} \right) \cdot c_{secul,i}$$

$$SELE = \sum_{i=1}^n \left(\frac{SELE_Questions[i] - \mu_{sele,i}}{\sigma_{sele,i}} \cdot s_{sele,i} \right) \cdot c_{sele,i}$$

8.4 Conversational Task

The Conversational Task includes a preselected list of questions participants can ask the AI in the experiment. We provide these questions in the following table.

Questions from the World Value Survey Wave 7 to assess participants' cultural values along the two cultural dimensions *traditional vs. secular* and *survival vs. self-expression*.

VAR	Question	Response Options
F063	How important is God in your life?	Not at all important Very important 1-10
F118	Can homosexuality always be justified, never be justified, or is it something in between?	Never justifiable, Always justifiable 1-10
E025	Have you ever signed a petition, or would you do it or not under any circumstances?	Have done Might do Would never do
F120	Can abortion always be justified, never be justified, or is it something in between?	Never justifiable, Always justifiable 1-10
A008	Taking all things together, would you say you are:	Very happy Quite happy Not very happy Not at all happy
A165	Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?	Most people can be trusted Need to be very careful
G006	How proud are you to be of nationality of your country?	Very proud Quite proud Not very proud Not at all proud
Y001	Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five.	Good Manners Independence Hard work Feeling of responsibility Imagination Tolerance and respect for other people Thrift, saving money and things Determination & Perseverance Religious Faith Unselfishness Obedience
E018	If greater respect for authority were to happen, would it be a good thing, a bad thing, or don't you mind?	Good thing Don't mind Bad thing
Y003	People sometimes talk about what the aims of this country should be for the next ten years. Below are listed some of the goals which different people would give top priority. 1) Would you please say which one of these you consider the most important? 2) And which would be the next most important?	Maintaining order in the nation Giving people more say in important government decisions Fighting rising prices Protecting freedom of speech

Two Dimensions of Cross-Cultural Variation: Individual-Level Analysis: We presented the factor loadings from Inglehart and Baker [27] and those we used in this study which were calculated with more recent survey results (2005-2020).

Traditional values emphasize the following	Factor Loadings (Data from 1981-2001/2005-2022)
(Secular-rational values emphasize the opposite) ^a	
God is very important in respondent's life.	.70 /.54
It is more important for a child to learn obedience and religious faith than independence and determination. (Autonomy index)	.61/.50
Abortion is never justifiable.	.61/0.50
Respondent has strong sense of national pride.	.60 /.33
Respondent favors more respect for authority.	.51 /.32
Survival values emphasize the following	Factor Loadings
(Self-expression values emphasize the opposite) ^b	
Respondent gives priority to economic and physical security over self-expression and quality of life. (4-item Materialist/Postmaterialist Values Index)	0.59 /0.18
Respondent describes self as not very happy.	.59 /.25
Homosexuality is never justifiable.	.58 /.63
Respondent has not and would not sign a petition.	.54/.59
You have to be very careful about trusting people.	.44 /.39

Note: The original polarities vary; the above statements show how each item relates to the given factor.

^a Using data from 1981 to 2001, the first factor explains 26 percent of total individual variation; secular = positive pole.

^b Using data from 1981 to 2001, the second factor explains 13 percent of total individual variation; self-expression = positive pole.

World Values Survey (WVS) questions participants were able to ask the AI and the AI's responses in the Conversational Task. The column on the right shows the median ratings from all annotators on the *Survival vs. Self-expression* (SELE) dimension. The scale is 1 for Very Survival and 5 for Very Self-expression. This subset of the questions was chosen based on an overwhelming agreement among the annotators.

ID	Question	Response	MTURK Rating (SELE)
150	What do you consider more important, freedom or security?	Freedom for sure. I want to be able to do what I want when I want.	5.0
188	How justifiable is euthanasia?	It depends on the situation, but in most cases, I would say it is justified.	4.0
19	Are you fine with people of a different race as your neighbors?	I'm fine with anyone as long as they are respectful of my home and my family.	4.0
193	How justifiable is having casual sex?	I don't think casual sex is bad, but it's not something I'm interested in.	4.0
215	Would you ever encourage others to take action about political issues?	I try to, but I don't think I'm very good at it. I'm not very articulate.	4.0
250	How important is it for you to live in a country that is governed democratically?	It is very important to me. I want to be able to participate in the political process.	5.0
29	How much do you agree with the statement 'On the whole, men make better political leaders than women do'?	I don't agree with that at all. I think women are just as capable as men.	5.0
3	How important is leisure time for you?	It is very important to me. I want to spend as much time with my family as I can.	5.0
30	How much do you agree with the statement 'A university education is more important for a boy than for a girl'?	I don't agree with that at all. I think it's important for both genders to go to college.	5.0
31	How much do you agree with the statement 'On the whole, men make better business executives than women do'?	I don't agree with that statement at all. I think it's just a stereotype.	4.5
33	How much do you agree with the statement 'When jobs are scarce, men should have more right to a job than women'?	I don't agree with that at all. I think everyone should have the same opportunities.	5.0
35	How much do you agree with the statement 'If a woman earns more money than her husband, it's almost certain to cause problems'?	I don't agree with that statement at all. I think it depends on a lot of factors.	4.0
38	How much do you agree with the statement 'Adult children have the duty to provide long-term care for their parents'?	I don't agree with it at all. Children have no obligation to take care of their parents.	5.0
4	How important is politics for you?	Politics is very important to me. I want to make the world a better place.	4.0
41	How much do you agree with the statement 'Work should always come first, even if it means less spare time'?	I don't agree with that at all. Work should be a means to an end, not the end itself.	5.0
45	In future, should we place greater respect for authority?	I don't think so. I think we should be more respectful to people in general.	4.0
61	How much do you trust people you meet for the first time?	I trust them until they do something to make me not trust them. I don't know if that makes sense.	4.0
63	How much do you trust people of another nationality?	I trust everyone until they give me a reason not to. I don't have a reason to.	4.0
90	What do you think should international organizations prioritize, being effective or being democratic?	I think they should be democratic. Democracy is the best form of government in my opinion.	4.0