Data Dictionary Codebook

Alternate Understandings of Genetic Causation -CTSI6617 (PID: 12610)

03/13/2025 10:27am

Instruments	
Instrument	**Form Name**
Example Survey	survey

	#	Variable / Field Name	Field Label *Field Note*	Field Attributes (Field Type, Validation, Choices, Calculations, etc.)
		Instrument: Example Survey (survey)	👤 **Enabled as survey**	
	1	[participant_id]	Participant ID	text
	2	[gender]	Section Header: *Demographics* Gender	radio, Required <table><tr><td>1</td><td>Man</td></tr><tr><td>2</td><td>Woman</td></tr><tr><td>3</td><td>Other</td></tr><tr><td>4</td><td>Prefer not to answer</td></tr></table>
	3	[other_gender] Show the field ONLY if: [gender] = '3'	Please specify other gender	text
	4	[race_ethnicity]	Race/Ethnicity (check all that apply):	checkbox, Required <table><tr><td>1</td><td>race_ethnicity___1</td><td>White</td></tr><tr><td>2</td><td>race_ethnicity___2</td><td>Black or African American</td></tr><tr><td>3</td><td>race_ethnicity___3</td><td>Hispanic or Latino</td></tr><tr><td>4</td><td>race_ethnicity___4</td><td>American Indian or Alaskan Native</td></tr><tr><td>5</td><td>race_ethnicity___5</td><td>Asian</td></tr><tr><td>6</td><td>race_ethnicity___6</td><td>Pacific Islander</td></tr><tr><td>7</td><td>race_ethnicity___7</td><td>Other</td></tr><tr><td>8</td><td>race_ethnicity___8</td><td>Prefer not to answer</td></tr></table>
	5	[other_race] Show the field ONLY if:	Please specify other race or ethnicity	text

		[race_ethnicity(7)] = '1'		
6	[age]	Age	radio, Required	

radio, Required

1	Under 18
2	18-24
3	25-34
4	35-44
5	45-54
6	55-64
7	65 and over

7	[professional_role]	Current Professional Role	radio, Required

1	Undergraduate
2	Graduate Student
3	Post-doctoral Researcher
4	Tenure-track Professor
5	Tenured Professor
6	Research Faculty (non tenure-track)
7	Non-academic researcher
8	Other
9	Prefer not to answer

8	[other_profession] Show the field ONLY if: [professional_role] = '8'	Please specify other professional role	text, Required

9	[field]	What best describes your primary field of study within genetics?	radio, Required

1	Population, Evolutionary or Quantitative Genetics
2	Genomics
3	Molecular Genetics
4	Behavioral Genetics
5	Psychiatric Genetics
6	Medical Genetics
7	Other

10	[other_field] Show the field ONLY if: [field] = '7'	Please specify other field of study	text, Required
11	[research_clinician]	Do you consider yourself to be primarily a researcher or a clinician?	radio, Required 1 Researcher 2 Clinician 3 Both 4 Neither
12	[partition]	Section Header: It is possible to partition and quantify how much human physical and behavioral traits are caused by genetics versus environment	radio (Matrix) 1 Strongly disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Strongly agree
13	[environment]	Genes are more important than the environment in determining human physical traits such as height and risk of somatic illness.	radio (Matrix) 1 Strongly disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Strongly agree
14	[intelligence]	Genes are more important than the environment in determining complex human behavioral traits, such as intelligence and personality.	radio (Matrix) 1 Strongly disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Strongly agree
15	[gwas]	Genome Wide Association Studies (GWAS), which show statistical correlations between Single Nucleotide Polymorphisms (SNPs) and behavioral traits, demonstrate that the relevant traits are genetically caused.	radio (Matrix) 1 Strongly disagree 2 Somewhat disagree 3 Neutral 4 Somewhat agree 5 Strongly agree
16	[cell_process]	Studies establishing a gene's contribution to cellular processes provide stronger support for genetic causation of a trait than studies producing population measures, such as heritability scores.	radio (Matrix) 1 Strongly disagree 2 Somewhat disagree

				3	Neutral
				4	Somewhat agree
				5	Strongly agree

17	[all_traits]	All human traits are genetically caused	radio (Matrix)		
				1	Strongly disagree
				2	Somewhat disagree
				3	Neutral
				4	Somewhat agree
				5	Strongly agree

18	[human_behavior]	Research into the genetics of human behavioral traits, such as intelligence and personality, can promote positive social change and uplift socially disadvantaged groups.	radio (Matrix)		
				1	Strongly disagree
				2	Somewhat disagree
				3	Neutral
				4	Somewhat agree
				5	Strongly agree

19	[sickle_cell]	Section Header: *Sickle Cell Disease is a disorder of red blood cells in which individuals express an abnormal form of hemoglobin. A single mutation in the β-globin gene results in the replacement of a single amino acid in the hemoglobin protein, which alters the protein's function. In people with two copies of this mutation, this abnormal form of hemoglobin can cause red blood cells to have a distorted shape, which can inhibit blood flow and the transportation of oxygen. Sickle Cell Disease can be treated with medications, blood transfusions, bone marrow transplant, and (experimentally) gene therapy. People with the disease can also make lifestyle changes which can help manage symptoms and decrease the likelihood of attacks.* Sickle Cell Disease is genetically caused	radio (Matrix), Required		
				1	Strongly disagree
				2	Somewhat Disagree
				3	Neutral
				4	Somewhat Agree
				5	Strongly Agree

20	[cause]	Scientists have a good understanding of the causal role that genes play in Sickle Cell Disease	radio (Matrix), Required		
				1	Strongly disagree
				2	Somewhat Disagree
				3	Neutral
				4	Somewhat Agree
				5	Strongly Agree

21	[genes]	Genetics are more important than environment in causing Sickle Cell Disease	radio (Matrix), Required		
				1	Strongly disagree
				2	Somewhat Disagree
				3	Neutral
				4	Somewhat Agree

| | | | 5 | Strongly Agree |

22	[no_env]	Environmental factors do not play a causal role in Sickle Cell Disease	radio (Matrix), Required
			1 Strongly disagree
			2 Somewhat Disagree
			3 Neutral
			4 Somewhat Agree
			5 Strongly Agree

23	[pku_cause]	Section Header: *Phenylketonuria (PKU) is a metabolic disorder in which individuals cannot convert phenylalanine into tyrosine. This results in a buildup of phenylalanine which can cause developmental disabilities, seizures, and possible cardiovascular abnormalities. People with PKU have an abnormal form of phenylalanine hydroxylase (PAH), which results from a mutation in the PAH gene. However, when individuals with these mutations are put on a low-phenylalanine diet, they can avoid experiencing any symptoms.* PKU is genetically caused	radio (Matrix), Required
			1 Strongly Disagree
			2 Somewhat Disagree
			3 Neutral
			4 Somewhat Agree
			5 Strongly Agree

24	[pku_understanding]	Scientists have a good understanding of the causal role that genes play in PKU	radio (Matrix), Required
			1 Strongly Disagree
			2 Somewhat Disagree
			3 Neutral
			4 Somewhat Agree
			5 Strongly Agree

25	[pku_genes]	Genetics are more important than environment in causing PKU	radio (Matrix), Required
			1 Strongly Disagree
			2 Somewhat Disagree
			3 Neutral
			4 Somewhat Agree
			5 Strongly Agree

26	[pku_environment]	Environmental factors do not play a causal role in PKU	radio (Matrix), Required
			1 Strongly Disagree
			2 Somewhat Disagree
			3 Neutral
			4 Somewhat Agree
			5 Strongly Agree

27	[schiz_bio]	Section Header: *Schizophrenia is a psychiatric diagnosis characterized by a wide range of symptoms including hallucinations, delusions, and disordered thinking. Twin studies have been used to estimate the heritability of schizophrenia at around .8. More recently, Genome Wide Association Studies*	radio (Matrix), Required
			1 Strongly Disagree
			2 Somewhat Disagree

		(GWAS) have identified Single-Nucleotide Polymorphisms (SNPs) which are statistically associated with schizophrenia. A recent GWAS identified SNPs at 287 different loci, which together yielded a SNP-based heritability estimated at .24 (Trubetskoy et al. 2022).	3	Neutral
			4	Somewhat Agree
			5	Strongly Agree
		Estimates of heritability from twin studies show that schizophrenia is a biological disease		

28	[schiz_gene]	Estimates of heritability from twin studies show that schizophrenia is genetically caused	radio (Matrix), Required	
			1	Strongly Disagree
			2	Somewhat Disagree
			3	Neutral
			4	Somewhat Agree
			5	Strongly Agree

29	[schiz_bio_gwas]	GWAS results show that schizophrenia is a biological disease	radio (Matrix), Required	
			1	Strongly Disagree
			2	Somewhat Disagree
			3	Neutral
			4	Somewhat Agree
			5	Strongly Agree

30	[schiz_genetic_gwa s]	GWAS results show that schizophrenia is genetically caused	radio (Matrix), Required	
			1	Strongly Disagree
			2	Somewhat Disagree
			3	Neutral
			4	Somewhat Agree
			5	Strongly Agree

31	[schiz_snps]	SNPs identified by GWAS results play a causal role in schizophrenia	radio (Matrix), Required	
			1	Strongly Disagree
			2	Somewhat Disagree
			3	Neutral
			4	Somewhat Agree
			5	Strongly Agree

32	[schiz_environment]	Genetics are more important than environment in causing schizophrenia	radio (Matrix), Required	
			1	Strongly Disagree
			2	Somewhat Disagree
			3	Neutral
			4	Somewhat Agree
			5	Strongly Agree

33	[ea_gene]	Section Header: *Educational attainment (EA) refers to the highest level of education completed by an individual. A recent twin study (Silventoinen et al. 2020) estimated the heritability of educational attainment at .43. A more recent genome-wide association study (GWAS) meta-analysis identified 3,952 single-nucleotide polymorphisms (SNPs) associated with educational attainment, which combined explained 12-16% of the variance in educational attainment.* Estimates of heritability from twin studies show that educational attainment is genetically caused	radio (Matrix), Required 1 Strongly Disagree 2 Somewhat Disagree 3 Neutral 4 Somewhat Agree 5 Strongly Agree
34	[ea_gwas]	GWAS results show that educational attainment is genetically caused	radio (Matrix), Required 1 Strongly Disagree 2 Somewhat Disagree 3 Neutral 4 Somewhat Agree 5 Strongly Agree
35	[ea_snps]	SNPs identified by GWAS results play a causal role in educational attainment	radio (Matrix), Required 1 Strongly Disagree 2 Somewhat Disagree 3 Neutral 4 Somewhat Agree 5 Strongly Agree
36	[ea_environment]	Genetics are more important than environment in causing an individual's educational attainment	radio (Matrix), Required 1 Strongly Disagree 2 Somewhat Disagree 3 Neutral 4 Somewhat Agree 5 Strongly Agree
37	[hear]	Section Header: How did you hear about this survey?	radio, Required 1 UCEER Email List 2 Center for Genomic Medicine 3 Public Health Sciences 4 Huntsman Cancer Institute 5 Other 6 Prefer not to answer
38	[other_hear] Show the field ONLY if:	Please specify if other	text, Required

		[hear] = '5'		
39	[clear_vignettes]	The vignettes in the survey were clear and easy to understand	radio (Matrix)	

1	Strongly Disagree
2	Somewhat Disagree
3	Neutral
4	Somewhat Agree
5	Strongly Agree

40	[clear_questions]	The questions in the survey were clear and easy to understand	radio (Matrix)

1	Strongly Disagree
2	Somewhat Disagree
3	Neutral
4	Somewhat Agree
5	Strongly Agree

41	[order]	I feel that the order in which the vignettes and questions were presented exerted a strong influence on my answers	radio (Matrix)

1	Strongly Disagree
2	Somewhat Disagree
3	Neutral
4	Somewhat Agree
5	Strongly Agree

42	[feedback]	Please provide any feedback on how the survey could be improved for future versions	notes
43	[contact]	If you would be open to being contacted by the research team to provide further feedback on the survey, please leave contact information here:	text
44	[survey_complete]	Section Header: *Form Status* Complete?	dropdown

0	Incomplete
1	Unverified
2	Complete