

Office use only

Reference number:

Quiz results received for all applicants? Y/N

DEAKIN UNIVERSITY HUMAN ETHICS ADVISORY GROUP
LOW-RISK APPLICATION FORM



The [National Statement on Ethical Conduct in Human Research](#) (2007) - updated 2018 defines low risk research as:
 'Research in which the only foreseeable risk is one of discomfort. Research in which the risk for participants is more serious than discomfort is not low risk'.

Project Title: Examining Generality and Processes in Heterodox Beliefs

Proposed Start Date: 20/05/2021

Proposed end date: 03/11/2021

Principal Investigator/s: Dr Mathew Ling

Student Investigator/s (if applicable): Nicholas Hall

Student id: [REDACTED]

Nicholas Riggs

Student id: [REDACTED]

Kate Ritson

Student id: [REDACTED]

Alexandra Wake

Student id: [REDACTED]

Degree/s for which student/s enrolled: [REDACTED]

School: Psychology

Faculty: Health

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Contact details of all researchers involved in the project:

Name	Role	Email	Phone
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Kate Ritson	SI	[REDACTED]	[REDACTED]
Alexandra Wake	SI	[REDACTED]	[REDACTED]

If separate ethics approval or exemption is being sought for different elements or phases of this project, please indicate whether:

1) Approval or exemption has already been provided for a different element or phase of the project. Please include the HEAG or DUHREC reference number: OR

2) Provide a brief explanation of the nature of the element or phase of the study for which you have sought/intend to seek separate approval or exemption:

Please note: There has been an update by Microsoft which blocks links to single sign-on web pages.

To access the Deakin Human Ethics Guidelines referred to in this form, cut and paste the following address to your browser:

<http://www.deakin.edu.au/students/research/research-support-and-scholarships/integrity-secure/human-ethics/dheg>

Links to external sites in this form will still work.

COVID-19

Please indicate whether:

- ☐ Your project is not designed to align with current COVID-19 restrictions and
- a. will be delayed until all restrictions are lifted and
 - b. will be modified with approval prior to commencement if unforeseen flow-on effects from the virus raise new ethical issues OR
- ☒ Your project will be conducted once approval is granted and you have described in this application how the project's design aligns with:
- a. The current COVID-19 restrictions,
 - b. Deakin's [COVIDSafe Management Plan](#) and
 - c. Any applicable [COVIDSafe Activity Plan](#) in place for high COVID risk activities.
- ☐ Where your project may include COVID-19 related risks, please acknowledge that you have taken into consideration the information provided on the [FAQs - Human Research Ethics](#) site.

Please indicate whether your research will include questions related to the participants' lived experience of COVID-19? Yes ☐ No ☒

1. If Yes, tick to confirm you have:

- ☐ Included an appropriately tailored version of the following statement in your Plain Language Statement:

Low risk projects only

"While it is not expected that participating in the research will cause you to feel distress, we recognise the challenging circumstances the COVID-19 pandemic has caused for many community members. As such, we would like to highlight that if you, or those close to you are experiencing distress, or are in need of additional support, you are encouraged to contact [insert appropriate contact details for your participants e.g. Beyond Blue, Lifeline, Suicide Call Back Service, Headspace, Kids Helpline etc.]."

Higher than low risk projects

"In addition to the risks outlined in this document, we recognise the challenging circumstances the COVID-19 pandemic has caused for many community members. As such, we would like to highlight that if you, or those close to you are experiencing distress, or are in need of additional support, you are encouraged to contact [insert appropriate contact details for your participants e.g. Beyond Blue, Lifeline, Suicide Call Back Service, Headspace, Kids Helpline etc.]."

- ☐ As applicable, included the same statement at the conclusion of your survey/ questionnaire/ research instruments.

2. And that you will:

- ☒ Immediately review all research data for any disclosures of heightened distress, suicidal ideation or attempts or self-harm. Researchers who are unable to review their data immediately or who need clarification on what kind of time frame constitutes an acceptably prompt review, should contact research-ethics@deakin.edu.au to discuss their options.
- ☒ Report disclosures as described above on the FAQ website.

PART A: Excluded Categories (see National Statement [Chapter 5.1.6](#))

1 Does your project involve any of the following?

- Yes ☐ No ☒ Aboriginal or Torres Strait Islander Peoples or issues
- Yes ☐ No ☒ Research involving pregnant women or the human fetus
- Yes ☐ No ☒ People highly dependent on medical care who may be unable to give consent
- Yes ☐ No ☒ People with a cognitive impairment, an intellectual disability, or mental illness
- Yes ☐ No ☒ People who may be involved in illegal activities where the research is intended to study or expose illegal activity or that is likely to discover it
- Yes ☐ No ☒ Clinical trials - defined as "...any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes" (World Health Organisation)
- Yes ☐ No ☒ Human genomic research
- Yes ☐ No ☒ Human biospecimens including human cells (Please note: where researchers want to re-use human biospecimens that were originally collected as per a Deakin approved ethics application, their future use *may* be eligible for low risk review if the researchers intend to seek specific consent from participants for the new project and if all other aspects of the project are low risk)
- Yes ☐ No ☒ Projects involving ionising radiation
- Yes ☐ No ☒ Travel to regions classified as Level 2, 3 or 4 (see [DFAT](#) and Section 35 of the Deakin Guidelines)
- Yes ☐ No ☒ Projects involving active concealment or planned deception of participants
- Yes ☐ No ☒ Risk of harm to participants (more serious than discomfort, *National Statement* [Chapter 2.1.6](#))
- Yes ☐ No ☒ Opt-out consent in relation to the collection of ***health or sensitive data** from participants (*National Statement*, [Chapter 2.3](#)). Please complete a [Human Research Ethics Application](#) (HREA) that includes a request to waive the requirement for consent (required under Privacy Legislation) and submit to DUHREC, attaching the [Privacy Supplement](#).
- Yes ☐ No ☒ A waiver of the requirement for consent when accessing collections of potentially **identifiable *health or sensitive data***. Please complete a [Human Research Ethics Application](#) (HREA) and submit to DUHREC attaching the [Privacy Supplement](#). Please note if you are accessing **pre-existing collections of non-identifiable data** you may be eligible for an exemption (see Q.3, page 3 for more information).

If you selected yes to ANY of these elements, your project is not eligible for low-risk review. You should complete a higher than low risk application form (the [Human Research Ethics Application](#) (HREA) for review by DUHREC (see [Section 6.5](#) of the Deakin Guidelines).

* **Please note:** if you are seeking access to existing collections of **potentially identifiable data**, that are **neither health nor sensitive data**, your project may still be eligible for low risk review even if you are seeking to waive the requirement for consent (i.e. you are not planning to obtain consent from participants to access their data) so long as every other aspect of your project is low risk. If this is the case, please complete Q.1 in Section 2 of the Checklist, and Questions 3 and 11 in Part C of this form. Please also note: this only applies to existing collections of data. If you are prospectively collecting data directly from participants, you will need to apply for ethics approval and seek participant consent prior to collecting the data. If you are using **opt-out consent in relation to the collection of non-health or non-sensitive data**, and every other aspect of your study is low risk, please address the National Statement 2.3.6 a-i (see Part C: Q.10: Consent).

* Please see Part F: Glossary, page 15 of this form for definitions of health and sensitive data.

2 Does your project involve ethical review by another Australian organisation?

Yes ☐ No ☒ If yes, your project should not be submitted for review by a HEAG. You should consult [Section 6](#) of the Deakin Guidelines regarding the processes which apply to applications previously approved by another organisation.

3 Does your project involve ONLY use of existing collections of non-identifiable data?

Data are non-identifiable when they do not identify the people to whom the information relates – identifiers should never have been collected, or should have been permanently removed from the data set before you received it.

Yes ☐ No ☒ If yes, you should complete the application form for Exemption from Ethical Review (see Section 6 of the Deakin Guidelines). Please note: **research using human biospecimens is not eligible for an exemption.**

PART B: Checklist

This checklist will help you decide whether your research may be submitted for review by your Faculty HEAG. Research is eligible for low-risk review if the foreseeable risk level is no more than discomfort. If you answer 'YES' to any items on the checklist **your project is not eligible for low risk review unless** you can explain how this potential risk will be managed or minimised to ensure that the project remains low risk. This should be explained in the special case assessment section (Section 6) below.

It is your responsibility to assess the level of risk associated with your project. If your project is not considered low risk by the HEAG, you will be required to complete a high-risk application for submission to DUHREC.

Please ensure you include all signatures before submitting the application as approval cannot be granted until they are received.

1 Are any of the following topics to be covered in part or in whole?

Parenting	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Sensitive personal issues	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Sensitive cultural issues	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Grief, death or serious/traumatic loss	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Gambling	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Eating disorders	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Illicit drug taking	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Substance abuse	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Self-report of criminal behaviour	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Any psychological disorder, depression, mood states and/or anxiety	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Suicide	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Sexuality, sexual behaviour or gender identity	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Race or ethnic identity	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Any disease or health problem	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Fertility	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Termination of pregnancy	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

2 Are any of the following procedures to be employed?

Waiver of consent for access to collections of identifiable data that are neither health nor sensitive data (please see Part F: Glossary for definitions of health and sensitive data).	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Use of personal data obtained from Commonwealth or State Government Department/Agency	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Concealing the purposes of the research	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Covert observation	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Audio or visual recording without consent	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Recruitment via a third party or agency	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Withholding from one group specific treatments or methods of learning, from which they may 'benefit' (e.g. in medicine or teaching)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Psychological interventions or treatments	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Administration of physical stimulation	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

Invasive physical procedures	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Infliction of pain	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Administration of drugs or placebos	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Administration of other substances	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Use of medical records where participants can be identified or linked	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

3 PARTICIPANT VULNERABILITY ASSESSMENT

Does the research specifically target participants from any of the following groups?

Children or young people under 18 years	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People with a physical disability or vulnerability	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People whose ability to give consent is impaired	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Residents of a custodial institution	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People unable to give free informed consent because of difficulties in understanding the Plain Language Statement or Information Sheet (e.g. language difficulties)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Members of a socially identifiable group with special cultural or religious needs or political vulnerabilities	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People in dependent or unequal relationship with the researchers (e.g. lecturer/student, doctor/patient, teacher/pupil, professional/client)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People with existing relationships with the researcher (e.g. relative, friend, co-worker)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
People in a workplace setting with the potential for coercion or problems of confidentiality (e.g. employer/employee)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Participants able to be identified in any final report when specific consent for this has not been given	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Persons not usually considered vulnerable but would be thought so in the context of the project	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

4. RESEARCH IN OVERSEAS SETTINGS ASSESSMENT

Does the research involve any of the following?

Research being undertaken in a politically unstable area	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
Research involving sensitive cultural issues	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
Research in countries where criticism of government and institutions might put participants and/or researchers at risk	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
*Please indicate which DFAT level of advice applies to the region you intend visiting (see DFAT and Section 35 of the Deakin Guidelines)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
*Note: Travel to regions classified as Level 2 (or above) is considered higher than low risk and not eligible for review by a HEAG.				

5. OTHER RISKS

Are there any risks to the researcher, (e.g. research undertaken in unsafe environments or trouble spots)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Are there any other risks not covered in this assessment that you consider may be relevant?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

6. SPECIAL CASE ASSESSMENT

If you have answered 'YES' to an item in the checklist but you still believe that because of the particular nature of the project and the participants your project may still be eligible for low risk review. Please provide details below, or attach an additional sheet.

SPECIAL CASE DETAILS:

Recruitment will be undertaken using the service "Prolific" (formerly Prolific Academic). Prolific will distribute an advertisement to their pool of participants who will then be forwarded to the PLS and survey. Participants will therefore consent under the same voluntary and informed conditions as any convenience sample, at no point will Prolific hold any of the participant data.

PART C: Project

1. Aims of the project/the research question(s)/hypothesis

The present study aims to investigate two sets of research questions:

1. What patterns emerge amongst heterodox beliefs (e.g. beliefs in Complementary and alternative medicines, endorsement of conspiracy theories, belief in cryptids)?
 - a. Does a domain general positive manifold emerge, or is there specificity in domains of beliefs?
 - b. What predicts the particular profiles of beliefs observed?
2. Is belief homophily (the preference for people who believe the same thing as you) motivated by a belief in the correctness of one's beliefs and the error of deviants?
 - a. Can the tendency towards belief homophily be predicted by other individual difference variables?

2. Research design and methods

Give a concise and simple description of the proposed research design and the methods to be used. Please include all data collection procedures and all groups of participants.

This study will utilise a cross-sectional survey to collect a variety of self report measures (see attachments). In addition to measuring demographics and an array of heterodox beliefs, a number of measures will be administered to investigate the motivational roots of profiles among these beliefs. These will include:

- The Muenster Epistemic Trustworthiness Inventory (Trust in Science)
- The Margins of Society (MOS) Scale
- Belief in a Dangerous World scale
- Narcissistic Personality Inventory (NPI-16)
- Comprehensive Thinking Styles questionnaire

In order to address the second research question, participants will be shown mock social media posts disagreeing with their position on climate change, vaccination, or herbal remedies, before being asked items assessing their belief confidence and avoidance of the message source as per Molnar & Lowenstein (2020).

Describe how the design and methods of the project will enable adequate exploration of the research questions and achieve the aims of the research.

Research question 1 requires only cross-sectional measurement of the relevant beliefs and correlated to identify and characterise any latent clustering within heterodox beliefs.

Research question 2 depends on elicitation of conflict between the respondent's beliefs and the beliefs of another. Inclination toward avoidance of people who they disagree with is the key outcome variable. By leveraging the heterodox beliefs measure, we can obtain estimates of beliefs where polarisation is likely (e.g. climate change), and then conditionally display content that is contrary to their position. All consequent measures (e.g. perception of own correctness/other's erroneousness, inclination to interact with other) can then be assessed in the context of this divergence between the respondent's belief and our contrary stimuli. By spreading respondents across three domains, we improve our confidence that the effect is not conditional on topic.

Describe how the design of the project will maintain respect for participants.

The Plain Language Statement for this study will provide as much detail as is possible about the design without compromising the integrity of the study to ensure voluntary participation is informed. Participants will have the right to decline to answer questions and withdraw at any point. In order to ensure the privacy of participants, the minimum demographic data will be collected. Effort will be taken to ensure any identifying or pseudo identifying information participants volunteer in open text responses is removed.

Has the project been reviewed by a formally constituted academic, scientific or professional review process and if so, what was the outcome of that review?

This project has been subject to internal review within the School of Psychology.

3. Use of existing stored data

Please list any existing stored data that you plan to use as part of the project e.g. health or employment records used for recruitment, or comparison. Please include in your answer:

- The type and number of records being accessed;
- Whether the records identify individual people; and
- How you will obtain permission to use them (consent from individuals or permission from custodians of non-identifiable data). Or, if not seeking consent, please indicate here that you are seeking a waiver of the requirement for consent and answer Q.11 below (please note waivers of consent can only be sought via low risk review **where the data are neither health nor sensitive data**).

(See the *National Statement* [Chapter 3.1](#) and [Chapter 3.2](#); and [Section 25](#) of the Deakin Guidelines for more information.)

No existing data will be used.

Please describe any stored biospecimens that you intend to use as part of the project. **Please note:** projects involving biospecimens may only be considered low risk if they were collected as part of a project that was approved by a Deakin ethics review body, you intend to seek the consent of the participants for the re-use of their biospecimens as described in this application and the project is low risk in all other respects.

(see the *National Statement* [paragraphs 3.2.11-3.2.14](#) for more information)

No biospecimens will be used.

4. Risks and benefits

Give a summary of the expected benefits of this project

This may include benefits to the broader community, the participants, people with whom the participants identify or the researcher (see the *National Statement* on [benefits](#) for more information). Among other things, benefits may include a contribution to knowledge or understanding, improved social or individual wellbeing, or the skill and expertise of researchers.

Understanding the clusters of heterodox beliefs will help unpack the mechanisms by which people come to adopt potentially dangerous worldviews and duly to identify targets for intervention design.

Equally an understanding of the mechanisms underpinning belief homophily will help identify how to prevent and interrupt echo chambers which may contribute to intergroup conflict and polarisation.

There are not expected to be any benefits to individual participants within this study.

Provide a justification for the potential benefits

Potential benefits should be based on either relevant literature or a review of prior research unless, due to the novelty of the question, there is scarce literature or prior research.

Previous studies conducted in our group over 2018-2019 have found a positive manifold in heterodox beliefs across the healthcare domain, irrespective of conflicting mechanisms within the underlying practices. While there are comparable findings in the conspiracy theory literature (see Brotherton et al., 2013), there is no clear indication that there is a consistent rejection of scientific orthodoxy within these groups. Uncovering such a phenomenon would provide underpinning for interventions across these domains consistent with Hornsey & Fielding (2017).

Give a summary of the expected risks of this project and how they will be managed

This should include any risks to participants, researchers, to the environment or to Deakin or other organisations (see the *National Statement* on [assessment of risk](#) for more information).

There are no expected risks associated with the study. Participants will not be exposed to anything more confronting than a contrary belief. There are no ancillary risks as this is implemented through an online survey.

5. Monitoring

As the researcher, how will you monitor the progress of the research?

You should include details of planned communication between members of the research team (e.g. face to face meetings, email, telephone or Skype) (see the *National Statement* [Chapter 5.5.3](#) for more information).

The project will be monitored through weekly project team meetings (in-persona and via videoconference as needed) and ongoing discussion using online collaborative working tools (e.g. teams/slack)

6. Resources

Please explain the amount and source of funding (sponsorship, tender, grant etc.). If there are specific resources required for the project how will they be provided?

Any resourcing for the project will be provided by the school of psychology.

7. Conflict of interest

Do any of the researchers or others involved in this project have any conflict of interest in relation to it? If so, please explain how this will be managed (see the *National Statement* on [Conflict of Interest](#) for more information).

There are no relevant conflicts of interest.

PARTICIPANTS

8. Describe your participant group/s

Please include the following information for each participant group how many participants you plan to recruit:

- a justification for the number of participants chosen for each participant group
- the inclusion and exclusion criteria.

(See the *National Statement* [Section 4](#) for more information.)

We are looking to recruit a convenience sample as there are no a priori relevant groups to target. Participants recruited through Prolific will be required to be over 18 years of age and residing in Australia. No other exclusion criteria will apply.

We will recruit the maximum sample our budget will permit (n=300) to maximise our capacity to evaluate the existence of clusters and provide sufficient power to detect homophily effects.

9. Explain your recruitment process

Please include the following information for each participant group:

- How will you locate the participants that you plan to recruit? If through existing records or contact lists, please explain how this will be done in a way that does not infringe privacy requirements.
- How will initial contact be made?
- If you plan to use a document or spoken statement e.g. flyer, letter, advertisement, phone call, please attach a copy of the document or script to this application.
- All advertisements (both written and spoken) must include the following statement: "This study has received Deakin University ethics approval (reference number: insert reference number here)."
- Will the participants be screened?
- If there is a screening tool, please attach a copy.

(See [Section 8](#) of the Deakin Guidelines for more information.)

Participants of the research project will be recruited via the online crowdsourcing platform Prolific. Potential participants will be voluntary subscribers to Prolific, and as such Prolific will mediate all interactions between the research team and potential respondents.

The research team will provide Prolific the web link for the study. Prolific will then display this web link to participants who fit the inclusion criteria required for the study. These inclusion criteria include being over the age of 18, and being in Australia. This web link will include the Plain Language Statement, followed by the study materials. The description of the study that will be sent to potential participants by Prolific is provided as an attachment.

CONSENT

10. Describe the consent process

There are a variety of ways in which consent can be established, most commonly by giving participants a Plain Language Statement and Consent Form (PLSCF) or by return of a survey. You may wish to consult [Section 9](#) of the Deakin Guidelines for more information. Please include details such as:

- how and when you will provide consent materials to your potential participants
- how, when and to whom participants will indicate their consent
- If you are seeking **opt-out consent in relation to non-health or non-sensitive data**, please address the National Statement [Chapter 2.3](#), 2.3.6 a-i.

(See the *National Statement* [Chapter 2.2](#), [Chapter 2.3](#) and Element 3 of [Chapter 3.1](#) for more information.)

Participants recruited via Prolific Academic will then proceed to the study site on Qualtrics where they will read the Plain Language Statement and will be given an opportunity to download a PDF of this PLS which will be hosted on the Open Science Framework. Participants will be informed that that submission of the survey will indicate consent, prior to their moving to the demographic section.

11. Waiver of Consent

Are you seeking a waiver of consent (in relation to accessing **collections of potentially identifiable data** that are **neither health nor sensitive*** data)? (See the *National Statement*, [Chapter 2.3](#) for more information.) ☐ YES ☒ NO

If yes, please describe how this complies with the [NS 2.3.10 a-i](#) requirements below:

- a) involvement in the research carries no more than low risk to participants:
- b) the benefits from the research justify any risks of harm associated with not seeking consent:
- c) it is impracticable to obtain consent (for example due to the quantity, age or accessibility of records):
- d) there is no known or likely reason for thinking participants would not have consented if they had been asked:
- e) there is sufficient protection of their privacy:
- f) there is an adequate plan to protect the confidentiality of data:
- g) in case the results have significance for the participants' welfare there is, where practicable, a plan for making information arising from the research available to them:
- h) the possibility of commercial exploitation of derivatives of the data or tissue*(please note waivers of consent in regards to accessing *human tissue or biospecimens are not eligible for low risk review) will not deprive the participants of any financial benefits to which they would be entitled:
- i) the waiver is not prohibited by State, federal or international law:

*** Please see Part F: Glossary, page 15 of this form for definitions of health and sensitive data.**

12. Will there be reimbursement of expenses or incentives to participate?

Where expenses will be reimbursed please state:

- the nature of the expenses incurred by participants
- the maximum value of any intended reimbursement.

Where incentives to participate are offered, please explain:

- why you consider that the proposed incentive will not encourage participants to take risks they would not otherwise take. In doing so, please consider both the risks associated with participation and the value of the incentive, relative to your participant group.

(See the *National Statement* [Chapter 2.2.10-2.2.11](#); and [Section 8](#) of the Deakin Guidelines for more information.)

As required on the Prolific Platform, participants will receive a small reimbursement of £2.25 for their time. This amount is above the minimum required by Prolific to ensure all participants are reimbursed at the minimum rate per hour, however this incentive is not thought to be coercive and participants will not be exposed to any risk above that of typical engagement with social media.

13. Pre-existing or unequal relationships

Do any of the proposed participants have existing relationships with the researchers, each other or with any other organisation involved in the research? Please explain the relationships, and how you will make sure that participants do not feel pressured to take part.

(See the *National Statement* [Chapter 4.3](#); and the [Section 22](#) of the Deakin Guidelines for more information.)

There are no pre-existing relationships.

14. Does your project include children or young people under 18 years?

If your project involves people under the age of 18, please answer the following questions.

- What age group is involved?
- Will parental/guardian consent be obtained? If the young people will consent on their own behalf, how their capacity to do this will be judged?
- Is it necessary to involve people under 18? Could your projects be undertaken with adult participants?
- Is the methodology appropriate for children/young people?
- Is there any reason to consider that participation in the research is not in the best interests of the children/young people?

(For further information, consult the *National Statement* [Chapter 4.2](#); and [Section 19](#) of the Deakin Guidelines.)

No.

15. Language and communication issues

Will your project involve people who cannot communicate easily in English? (e.g. people who are not confident English speakers, or who have a disability, such as a hearing impairment that requires special arrangements for participation). If so, please explain how translation/interpretation issues will be managed.

(For further information consult [Section 24](#) of the Deakin Guidelines.)

No.

16. People in other countries

If you are planning to undertake research in other countries, please answer the following questions. What are the legal and ethical requirements for conducting research in the designated country?

- What arrangements will be in place for a local, readily accessible contact to receive responses, questions and complaints about the research? (*National Statement* [Chapter 4.8.16](#))
- How will the research be monitored on site?
- Are there cultural sensitivities relating to the research? How will these be managed?

If the research is to be conducted in a language other than English, please ensure that you have covered all relevant language issues under question 14.

(For further information consult the *National Statement*, [Chapter 4.8](#); and Section 35 of the Deakin Guidelines.)

We are not recruiting participants from other countries.

17. Return of research results or findings to participants

If the results/findings of the research will be returned to participants, please explain:

- If the individual research results for each participant will be returned to that participant
- If the overall research findings will be returned to participants
- How these results/findings will be provided to participants/how the process will be managed and
- Any risks associated with returning the results/findings

The Principal researcher will publish results to a pre-specified open repository on the OSF, the details of which will be made available to participants on the end page of the survey and the Plain Language Statement. Only group results will be published, no individual will be identified in any publication.

Where the results/findings could have significant health, social, economic, legal, psychological or other implications for participants or their relatives, please provide an ethically defensible plan to disclose or withhold results or findings of the research. The plan should include:

- What results will be returned (if any)
- Whether the participants will be advised in advance of the option to receive the findings or results
- Whether the findings or results may be given to anyone else and if so, whether participants will be informed of this in advance
- If applicable, the process for determining whether participants' relatives wish to receive the findings or results
- How the findings or results will be returned in a manner that is appropriate and accessible
- The relevant expertise of the person who may be communicating the results and
- Any measures to protect the level of privacy desired by participants.

No individual contact information or identifiers will be captured, therefore individual feedback cannot be provided to participants. Information including a plain language summary and the raw, anonymised data will be made available to participants via an OSF repository made available via a link in the Plain language statement. There are no anticipated risks arising from this distribution method.

For further information, consult the National Statement paragraphs [3.1.63 - 3.1.65](#).

Where the research involves the use of biospecimens (see exception to excluded categories of research in Section A), please also include the additional details for the ethically defensible plan described in the National Statement [3.2.15](#) points a-i:

CONFIDENTIALITY / PRIVACY

18. Will you be collecting data/information in identified form?

Data are generally divided into:

- **identifiable** (also called personal): the person to whom the data relates can be established from the data – either because they are named, or information that identifies them is included (e.g. position in an organisation at the time)
- **re-identifiable** (also called coded): the identifiers have been removed from the information and replaced with a code.
- **non-identifiable**: the data were collected anonymously, or all identifiers have been permanently removed.

Please explain the form in which the data will be collected. If you plan to collect it in identified form and later remove the identifiers, please explain how and when.

(See Section 10 of the Deakin Guidelines for more information.)

Prolific will provide the researchers with 'Prolific IDs' of all participants who have completed the study for the purposes of approving compensation.

While these IDs are not themselves identifiable, they are static across research studies and so could potentially be used to link participant responses between multiple studies. This could compromise anonymity of participants if a set of studies provide sufficient information about participants to identify them. For this reason

- Prolific IDs will not be shared with anyone outside of the research team.
- Prolific IDs will only be collected for the purposes of distributing study compensation.
- All Prolific IDs will be removed from the dataset at the conclusion of data collection. These IDs will be replaced with a randomly generated participant ID for each participant. It will not be possible to identify participants from this ID.

19. How will the research comply with relevant regulations or guidelines authorised by law?

For example, the mandatory reporting requirements for disclosure of child abuse. For more information see National Statement [3.1.66 - 3.1.68](#).

There are no anticipated legal, contractual or professional obligations to disclose findings or results to third parties.

20. Storage of data/information

Data storage should meet the requirements of the Research Conduct Policy and the Research Data and Primary Materials Management Procedure which can be found in the [Deakin Legislation and Policy Library](#). In most cases data should be stored securely at Deakin, for a period of at least five years after the final publication of the research outcomes. If the data will be stored in another location, please explain this, and how data security will be maintained. You should include:

- whether the data will be identified/re-identifiable/non-identifiable
- how security will be maintained (locked storage, secure server, etc.)
- how long the data will be stored and
- if and when the data will be disposed of and how security will be maintained.

(See Section 10.8 of the Deakin Guidelines for more information.)

During data collection data will be stored on the Deakin University Qualtrics instance. Only members of the research team will have access to this data.

Once data collection is complete data will be moved to a Deakin research data store and checked to ensure de-identified status, ensuring no private or sensitive information has been inadvertently disclosed and that participants have not identified themselves through combination of pseudo-identifiers. Data from this study will then be published in an open access data repository; this will allow for verification of published results and secondary analysis by other researchers to maximise the outputs from the participants' contribution.

All de-identified data will be stored indefinitely, consistent with sections 15 and 16 of the Research Data and Primary Materials Management Procedure.

21. Collaborative research

If the research involves multiple researchers collaborating on collection, storage and/or analysis of data, please outline your arrangements for:

- Custodianship of the data
- Storage, retention and destruction of the data or materials
- Rights of access to the data or information
- Rights to analyse or use and re-use the data or information and
- Rights to produce research outputs based upon the data

All investigators are Deakin affiliates. PI Ling will act as custodian of the data holding it on a secure RDS on the Deakin server. After removal of any identifiers, the raw dataset will be published to the Open Science Framework under a CC BY 4.0 licence for re-use by third parties consistent with the National Statement. As a result, researchers other than those named within this project will have the right to re-use and analyse the de-identified data relating to this project.

22. Intellectual property, copyright and ownership

Please detail any intellectual property (individual, community, organisational, commercial), ownership or copyright arrangements related to the data or outputs of the research:

It is intended for all products of this research to be made available under a CC-BY licence.

23. Publication of results

(See Section 4 of the [Australian Code for the Responsible Conduct of Research](#) for more information.)

Whose responsibility will it be to notify participants of the outcome of the research?

Participants will not be directly notified of the outcome of this research project. However, the Principal Investigator Dr Mathew Ling will publish plain language summaries of results to a pre-specified open repository on the OSF, the details of which will be made available to participants on the end page of the survey and the Plain Language Statement.

How will you notify participants of the outcome of the research?

Participants will not be directly notified of the outcome of this research project. However, the Principal Investigator Dr Mathew Ling will publish plain language summaries of results to a pre-specified open repository on the OSF, the details of which will be made available to participants on the end page of the survey and the Plain Language Statement.

How will your research be reported/published?

Results will be reported at relevant academic conferences and published in peer-reviewed journals. Raw (non-identifiable) data from the study will also be published and available for verification of published results and secondary analysis by other researchers.

How will you manage participant confidentiality?

All Prolific IDs will be removed from the dataset at the conclusion of data collection (and after all participants have been compensated). These IDs will be replaced with a randomly generated participant ID for each participant. It will not be possible to identify participants from this ID. Only this non-identifiable data will be available to other researchers. Individual participants will not be identifiable through any output of this research.

PART D: Declarations

- 1 I/We, the undersigned declare that the information supplied in this application is true and accurate to the best of my/our knowledge.

I / We the undersigned have read the *National Statement on Ethical Conduct in Human Research* and accept responsibility for the conduct of the project detailed in this application in accordance with the principles contained in the Statement and any other conditions laid down by Deakin University or the Human Ethics Advisory Group.

I/We the undersigned, declare that where the research project may involve contact with a child or young person under the age of 18, I/we have a current Working with Children Check.

Where the project involves a student researcher, as the supervisor I accept responsibility for ensuring that ethics approval is obtained prior to commencing the research and for overseeing the ethical conduct of the project as detailed in the ethics application.

Signatures:

Principal Investigator/s




Dr Mathew Ling

Date: 30/5/2021

Student Investigator/s



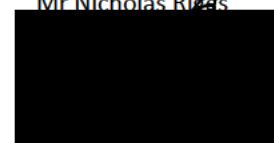
Mr Nicholas Hall

Date: 08/06/2021



Mr Nicholas Riggs

Date: 08/06/2021



Date: 08/06/2021



Ms Alexandra Wake

Date: 20/05/2021

2 ACKNOWLEDGEMENT OF HEAD OF SCHOOL*/DIRECTOR OF RESEARCH OR THEIR NOMINEE

I the undersigned acknowledge that the Faculty has considered and approved the academic worth of the project described in this application.

Name:

Title:

Signature:

Date:

*If the Head of School (or similar) is also a member of the research or supervisory team, a more senior member of University staff e.g. Dean or Associate Dean (Research) must sign the project as authorising officer.

Part E: Attachments

Have you attached the following?

Yes ☒ No ☐ N/A ☐

A copy of the email or certificate confirming successful completion of the online human ethics quiz (first time applicants) or project id of an ethics application/s on which you are listed. For more information on the quiz, copy and paste the following link into your browser: <http://www.deakin.edu.au/students/research/research-support-and-scholarships/integrity-secure/human-ethics/human-research-ethics-training>

Yes ☒ No ☐ N/A ☐

A copy of any advertisements/flyers or other recruitment materials. All advertisements (both written and spoken) must include the following statement: "This study has received Deakin University ethics approval (reference number: insert reference number here)."

Yes ☒ No ☐ N/A ☐

A copy of the Plain Language Statement and Consent Form (PLSCF) or other consent materials to be used in the project

Yes ☒ No ☐ N/A ☐

A copy of any survey, list of questions/topics for interviews, or other materials to be used in this project. Please note Deakin University's preferred online survey platform is Qualtrics. More information on Qualtrics can be found [here](#) or for technical assistance contact eresearch@deakin.edu.au

Yes ☒ No ☐ N/A ☐

Any other documents to be supplied to the participants or used in the conduct of the project

Yes ☐ No ☐ N/A ☒

A letter of support from the organisation/s involved or an organisational PLSC if you are proposing to recruit participants through an external organisation/s

Yes ☐ No ☐ N/A ☒

A completed Organisational Consent Form Coversheet (available on the [Application Forms page](#)) if you are recruiting Deakin staff and students

Please submit all documents via email to your faculty's HEAG:

Faculty of Arts and Education	artsed-ethics@deakin.edu.au
Faculty of Business and Law	blethics@deakin.edu.au
Faculty of Health	health-ethics@deakin.edu.au
Faculty of Science, Engineering and Built Environment	sciethic@deakin.edu.au

Please note: if the hyperlinks in this form result in an error message, return to the form and:

1. *right click on the hyperlink*
2. *click on Edit Hyperlink*
3. *copy the URL to your browser.*

Deakin University is collecting your personal information on this form for the primary purpose of processing your human research ethics application. It will also use this information for monitoring your compliance with the approved protocol. For these purposes Deakin may also provide this information to potential research participants, past or current research participants, or other interested parties in your research. You are not required to provide the information requested, however if the information is not provided, Deakin may not be able to process your ethics application. Deakin manages personal information it holds, including requests by individuals for access to their personal information, in accordance with the Privacy and Data Protection Act 2014 (Vic). Deakin's Privacy Policy may be viewed on Deakin's [Policy Library](#). Information on privacy at Deakin is available at <http://www.deakin.edu.au/footer/privacy>. Questions about privacy may be directed to the Privacy Officer on (03) 5227 8524 or by email to privacy@deakin.edu.au.

Part F: Glossary

Health Data:

(a) information or an opinion about:

- i. the physical, mental or psychological health or a disability (at any time) of an individual; or
- ii. an individual's expressed wishes about the future provision of health, disability or aged care services to him or her; or
- iii. a health, disability or aged care service provided, or to be provided, to an individual; that is also personal information; or

(b) other personal information collected to provide, or in providing, a health, disability or aged care service; or

(c) other personal information about an individual collected in connection with the donation, or intended donation, by the individual of his or her body parts, organs or body substances; or

(d) personal information that is genetic information about an individual in a form which is or could be predictive of the health (at any time) of the individual or any of his or her descendants.

Sensitive Data:

means information or an opinion about an individual's:

- racial or ethnic origin; or
- political opinions; or
- membership of a political association; or
- religious beliefs or affiliations; or
- philosophical beliefs; or
- membership of a professional or trade association; or
- membership of a trade union; or
- sexual preferences or practices; or
- criminal record; or
- health information about an individual, or
- genetic information about an individual that is not otherwise health information; or
- biometric information that is to be used for the purpose of automated biometric verification or biometric identification; or biometric templates.

2021 - General or Localised Consensus Beliefs

Start of Block: PLS

Commented [ML1]: Deakin Logo appears in online version

Q1

PLAIN LANGUAGE STATEMENT AND CONSENT FORM

Plain Language Statement

Date: 30th March, 2021

Full Project Title: Examining Generality and Processes in Heterodox Beliefs

Principal Researchers: Dr Mathew Ling

Student Researchers: Nicholas Hall, Nicholas Riggs, Kate Ritson, Alexandra Wake

1. Background and Purpose

You have been contacted via Prolific to invite you to participate in our study investigating how beliefs regarding health issues and practices are associated with one another.

Participation will involve answering some questions about your beliefs regarding some health issues and the effectiveness of varied therapies and then some other measures that will allow us to understand your patterns of beliefs including measures of your trust of scientific authorities, experiences in the healthcare sector and about the operation of society. This should on average take 18 minutes to complete.

No identifying information will be collected as part of our research data, and while participation will involve the recording of your prolific ID, this will be removed from the data immediately after download. So we will not be able to identify your particular responses in our data.

We do not anticipate any risks to you from participation, and benefits are likely to be limited to the £2.25 paid via Prolific upon completion of the study. However, we anticipate the results of this study will help us understand what people believe about their health and healthcare, with implications for education, policy, and public health.

2. Consent to Participate

Participation is voluntary and you have the right to withdraw from further participation at any stage up to the submission of your data. Submission of the final results will be taken as an indication of your consent. If you should wish to withdraw immediately after submitting your results, please contact the Principal Researcher Dr Mathew Ling (m.ling@deakin.edu.au) with your ProlificID. As your data will be de-identified, it will be impossible to withdraw consent after results are extracted from the server.

If you have questions relating to this research project, you can contact the lead researcher, Dr Mathew Ling via email (m.ling@deakin.edu.au) or telephone +61 3 9244 6475 (Australian phone number).

3. Declarations and Conflicts of Interests

All funding for this research is provided by Deakin's School of Psychology.

4. Communication of Results and Data

Results of this study will be used as part of the thesis components of the student researchers' Honours degree in Psychology. They will also be published in academic journals and via social media to maximise accessibility and benefit of your participation to the public; Results may also be presented at conferences. If you wish to view the results from this study, research outputs will be released at this following address (<https://osf.io/s78u4/>).

After ensuring you cannot be identified by your responses, and removing your ProlificID or any other identifying features from the dataset, this de-identified data will be published in a public, online data-store at the Open Science Foundation (<https://osf.io/h6mnu/>). Your identity will never be exposed by this, but this can also allow for unanticipated research findings through secondary analysis.

5. Distress

While it is not expected that participating in the research will cause you to feel distress, we recognise the challenging circumstances the COVID-19 pandemic has caused for many community members. As such, we would like to highlight that if you, or those close to you are experiencing distress, or are in need of additional support, you are encouraged to contact Lifeline at 13 11 14.

6. Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Ethics and Biosafety,

Deakin University
221 Burwood Highway
Burwood Victoria 3125
Telephone: +61 3 9251 7129
research-ethics@deakin.edu.au

Please quote project number **HEAG-H**

Commented [ML2]: To be completed on approval

To download a copy of this Participant Information Statement, click [here](#).

End of Block: PLS

Start of Block: Demographics

Q2 We'd like you to tell us a bit about yourself, so we can describe the total group of people who participated in our study. We won't be able to identify you from your responses here.



age How old are you (in years)?

gender What Gender do you identify as?

education What is the highest level of education you have completed?

- ☐ Less than high school (1)
- ☐ High school graduate (2)
- ☐ Technical school diploma (3)
- ☐ Associate Degree (4)
- ☐ Bachelors degree (5)
- ☐ Masters degree (6)
- ☐ Doctorate (7)

End of Block: Demographics

Start of Block: Heterodox beliefs



beliefs The following statements are contested by people in the community, please indicate your level of belief regarding each.

	Definitely false (1) (1)	(2) (2)	(3) (3)	(4) (4)	(5) (5)	(6) (6)	Definitely true (7) (7)
Chiropractory is an effective healthcare method (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbal remedies are beneficial for health (72)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reflexology is an effective healthcare method (73)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daily multivitamins are beneficial for health (74)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Homeopathy is an effective healthcare method (75)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aromatherapy is an effective healthcare method (76)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some crystals have healing properties (77)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traditional Chinese Medicine is an effective healthcare method (78)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cannabis is beneficial for health (79)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acupuncture is an effective healthcare method (80)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Hypnosis is beneficial for health (81)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mediation is beneficial for health (82)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prayer is effective for protecting and restoring health (83)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoga is beneficial for health (84)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taichi is beneficial for health (85)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Therapeutic Massage (e.g Myotherapy, Shiatsu, Bowen Therapy) is an effective healthcare method (86)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Magnet Therapies (e.g. magnetic bracelets, joint braces, creams, plasters) are an effective healthcare method (87)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specific Diets (e.g. Paleo, Alkaline, Atkins, non-coeliac Gluten-free) are beneficial for health (88)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vaccinations are beneficial for health (89)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Antibiotics are beneficial for health (90)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventional Medicine is an effective healthcare method (91)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Naturopathy is an effective healthcare method (92)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Humans are contributing to significant changes in the climate (93)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5G communications technologies are a health hazard (94)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water fluoridation is harmful to humans (95)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wind turbines are harmful to health (96)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foods made from Genetically Modified Ingredients are harmful (97)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recycled water should be added to the drinking supply (98)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural and unprocessed foods (e.g. Raw Milk) are better for health (99)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Governments have suppressed energy technologies (100)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Corporations have suppressed technology development that would affect their profits. (101)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Viruses like COVID-19 are a product of genetic engineering (102)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other intelligent species have visited earth (103)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Governments have exaggerated the risks of COVID-19 to justify restrictions on rights (104)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aircraft leave chemical spray trails for nefarious purposes. (105)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
South African anti-Apartheid leader Nelson Mandela died in prison in the 1980s (106)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

There are powerful actors in the bureaucracy, finance sector, that control government more than elected representatives (107)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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There are large creatures (e.g. yeti, phantom cats, Loch Ness Monster) that science does not explain (108)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Spirits of the dead remain in the world and can be felt or interacted with (109)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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The original moon landing in 1969 was faked (110)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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End of Block: Heterodox beliefs

Start of Block: METI



Q11 Thinking about scientists, how would you describe them on the following pairs of terms?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	incompetent
intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unintelligent
well educated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	poorly educated
professional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unprofessional
experienced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	inexperienced
qualified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unqualified
sincere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	insincere
honest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	dishonest
just	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unjust
fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unfair
moral	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	immoral
ethical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unethical
responsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	irresponsible
considerate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	inconsiderate

Q41 On the next page, we'll show you a tweet and ask you some questions about it before proceeding.

End of Block: METI

Start of Block: Exposure

Display This Question:

If CONDITION = Alternative Medicines (e.g. Herbal Remedies)
And CAM > 4

Commented [ML3]: In this section, images are shown conditional on participants' condition and their prior responses. Each participant will see only 1 image



The medical establishment is keeping people safe by showing "alternative medicines" to be ineffective.

1:23 PM · Apr 20, 2021 · TweetDeck



Display This Question:

If CONDITION = Alternative Medicines (e.g. Herbal Remedies)
And CAM <= 4



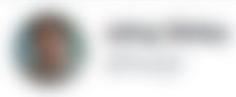
The medical establishment is harming people by suppressing evidence for "alternative medicines" effectiveness.

1:23 PM · Apr 20, 2021 · TweetDeck



Display This Question:

If *CONDITION* = Anthropogenic (Human Caused) Climate Change
And *Climate* ≥ 4



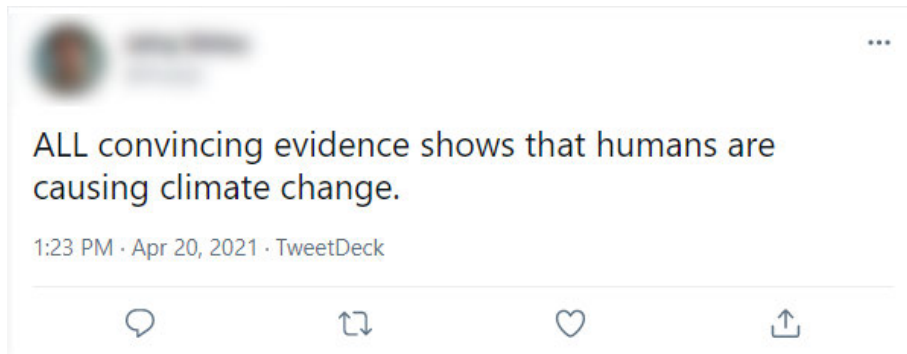
There is NO convincing evidence that humans are causing climate change.

1:23 PM · Apr 20, 2021 · TweetDeck



Display This Question:

If *CONDITION* = Anthropogenic (Human Caused) Climate Change
And *Climate* < 4



Display This Question:

If *CONDITION* = *Vaccinations*

And *Vax* ≥ 4



Display This Question:

If *CONDITION* = *Vaccinations*

And *Vax* < 4



Vaccines are a safe and effective way to protect a child's health.

1:23 PM · Apr 20, 2021 · TweetDeck



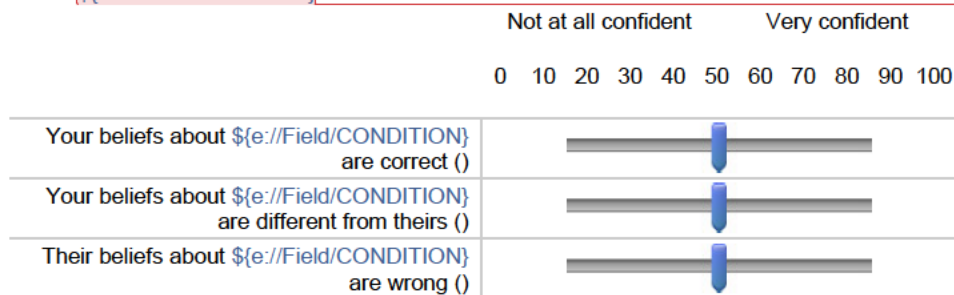
Exposure_qual Please write your thoughts (minimum 100 characters) about this tweet and the type of person you think authored it.

Q127 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: Exposure

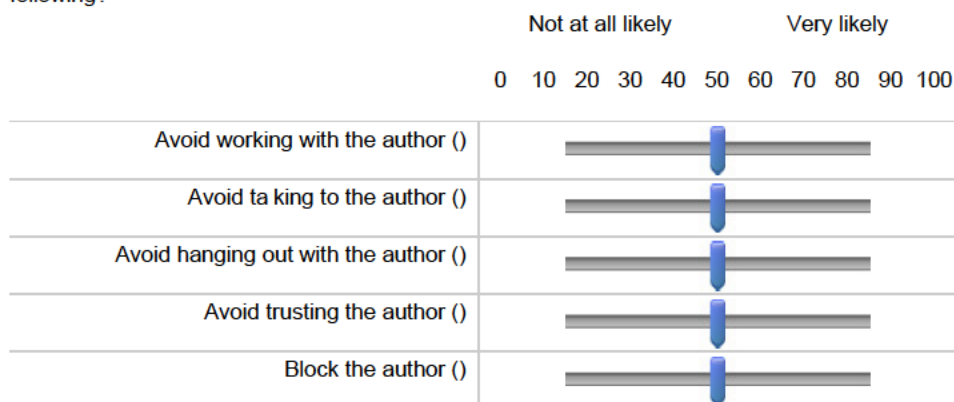
Start of Block: homophily

Q43 Thinking about that tweet on the previous page, how confident are you about \${e://Field/CONDITION}

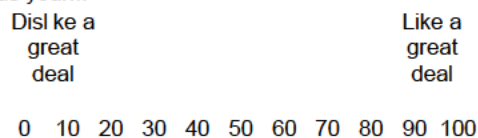


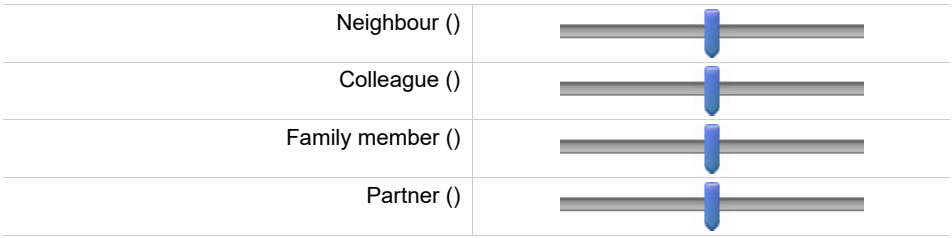
Commented [ML4]: This will be filled with the condition the participant is in either Anthropogenic climate change, Vaccination, or Complementary and Alternative Medicines

Q45 Assuming you found this on your feed. How likely would you be to do each of the following?



Q46 How much would you like it if the author was your...





End of Block: homophily

Start of Block: Narcissism (NPI-16)



NPI For each pair of statements, select the option that most accurately describes you

	1 (1)	2 (0)	
I know that I am good because everybody keeps telling me so	<input type="radio"/>	<input type="radio"/>	When people compliment me I sometimes get embarrassed
I like to be the center of attention	<input type="radio"/>	<input type="radio"/>	I prefer to blend in with the crowd
I think I am a special person	<input type="radio"/>	<input type="radio"/>	I am no better or no worse than most people
I like having authority over people	<input type="radio"/>	<input type="radio"/>	I don't mind following orders
I find it easy to manipulate people	<input type="radio"/>	<input type="radio"/>	I don't like it when I find myself manipulating people
I insist upon getting the respect that is due me	<input type="radio"/>	<input type="radio"/>	I usually get the respect that I deserve
I am apt to show off if I get the chance	<input type="radio"/>	<input type="radio"/>	I try not to be a show off
I always know what I am doing	<input type="radio"/>	<input type="radio"/>	Sometimes I am not sure of what I am doing
Everybody likes to hear my stories	<input type="radio"/>	<input type="radio"/>	Sometimes I tell good stories
I expect a great deal from other people	<input type="radio"/>	<input type="radio"/>	I like to do things for other people
I really like to be the center of attention	<input type="radio"/>	<input type="radio"/>	It makes me uncomfortable to be the center of attention
People always seem to recognize my authority	<input type="radio"/>	<input type="radio"/>	Being an authority doesn't mean that much to me
I am going to be a great person	<input type="radio"/>	<input type="radio"/>	I hope I am going to be successful
I can make anybody believe anything I want them to	<input type="radio"/>	<input type="radio"/>	People sometimes believe what I tell them

I am more capable
than other people

☐☐

There is a lot that I
can learn from other
people

I am an extraordinary
person

☐☐

I am much like
everybody else

End of Block: Narcissism (NPI-16)

Start of Block: Comprehensive Thinking Styles Questionnaire

Q1 Please indicate the extent to which you agree or disagree with the following statements.



Q2 It is important to be loyal to your beliefs even when evidence is brought to bear against them.

- ☐ Strongly disagree (1)
- ☐ Disagree (2)
- ☐ Somewhat disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Strongly agree (6)



Q3 Whether something feels true is more important than evidence.

- ☐ Strongly disagree (1)
- ☐ Disagree (2)
- ☐ Somewhat disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Strongly agree (6)



Q4 Just because evidence conflicts with my current beliefs does not mean my beliefs are wrong.

- ☐ Strongly disagree (1)
- ☐ Disagree (2)
- ☐ Somewhat disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Strongly agree (6)



Q5 There may be evidence that goes against what you believe but that does not mean you have to change your beliefs.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q6 Even if there is concrete evidence against what you believe to be true, it is OK to maintain cherished belief.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q7 Regardless of the topic, what you believe to be true is more important than evidence against your beliefs.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q8 I think there are many wrong ways, but only one right way, to almost anything.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q9 In my experience, the truth is often black and white.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q10 Truth is never relative.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q11 The truth does not change.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q12 Either something is true or it is false; there is nothing in-between.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q13 There is no middle ground between what is true and what is false.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q14 I like to rely on my intuitive impressions.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q15 I believe in trusting my hunches.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q16 When I make decisions, I tend to rely on my intuition.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q17 Using my "gut-feelings" usually works well for me in figuring out problems in my life.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q18 Intuition is the best guide in making decisions.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-

X+

Q19 I often go by my instincts when deciding on a course of action.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q20 I'm not that good at figuring out complicated problems.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q21 Thinking is not my idea of an enjoyable activity.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q22 I try to avoid situations that require thinking in depth about something.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q23 I am not a very analytical thinker.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q24 Reasoning things out carefully is not one of my strong points.

- ☐ Strongly disagree (1)
 - ☐ Disagree (2)
 - ☐ Somewhat disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Agree (5)
 - ☐ Strongly agree (6)
-



Q25 Thinking hard and for a long time about something gives me little satisfaction.

- ☐ Strongly disagree (1)
- ☐ Disagree (2)
- ☐ Somewhat disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Strongly agree (6)



Q26 I have been to every country in the world.

- ☐ Strongly disagree (1)
- ☐ Disagree (2)
- ☐ Somewhat disagree (3)
- ☐ Somewhat agree (4)
- ☐ Agree (5)
- ☐ Strongly agree (6)

End of Block: Comprehensive Thinking Styles Questionnaire

Start of Block: Dangerous world



BDW The next block of questions are about your model of society. Please answer honestly.

	Strongly agree (8)	Somewhat agree (9)	Neither agree nor disagree (10)	Somewhat disagree (11)	Strongly disagree (12)
Although it may appear that things are constantly getting more dangerous and chaotic, it really isn't so. Every era has its problems, and a person's chances of living a safe, untroubled life are better today than ever before (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Any day now chaos and anarchy could erupt around us. All the signs are pointing to it (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Despite what
one hears
about "crime
in the street,"
there
probably isn't
any more
now than
there ever
has been (7)



If a person
takes a few
sensible
precautions,
nothing bad is
likely to
happen to
him or her;
we do not live
in a
dangerous
world (8)



Every day as
society
become more
lawless and
bestial, a
person's
chances of
being robbed,
assaulted,
and even
murdered go
up and up (9)



My knowledge and experience tells me that the social world we live in is basically a safe, stable and secure place in which most people are fundamentally good (10)



It seems that every year there are fewer and fewer truly respectable people, and more and more persons with no morals at all who threaten everyone else (11)



The "end" is not near. People who think that earthquakes, wars, and famines mean God might be about to destroy the world are being foolish (12)



My
knowledge
and
experience
tells me that
the social
world we live
in is basically
a dangerous
and
unpredictable
place, in
which good,
decent and
moral
people's
values and
way of life are
threatened
and disrupted
by bad
people (13)



Q89 The next set of questions is about your personal relationship with society.

	Strongly agree (9)	Agree (10)	Somewhat agree (11)	Neither agree nor disagree (12)	Somewhat disagree (13)	Disagree (14)	Strongly disagree (15)
I feel all alone these days. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My whole world feels like it's falling apart. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish I were somebody important. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's hard for me to tell just what is right and wrong these days. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to live by society's rules. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'll never find the right person to care enough about me. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Dangerous world

Start of Block: Closing remarks

Q27 Thank you for completing the survey. We greatly value your participation within this study. If you wish to provide us some comments or feedback on the study, please use the textbox below.

End of Block: Closing remarks

Advertisement as displayed on Prolific

Heterodox beliefs

In this study, we'll ask you about your beliefs regarding a wide variety of issues. In many of them there is an "orthodox" view and an "unorthodox" or "heterodox" position held by members of society. We'd like to understand how these relate to each other, how we respond to different views, and what drives these beliefs.

Eligibility: Aged 18+, living in Australia

Estimated Time: 18 mins

Questions: 125 MCQs, 3 brief text boxes, 12 sliders (1 optional feedback box)

This study has received Deakin University ethics approval (reference number: HEAG-H)
