

Project Title	Validation of the Illusion Game
Status	Approved
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Phone No.	
Applicant Status	PG (Taught)
Department	Psychology
Supervisor	Makowski, Dominique
Project Start Date	07-Jan-2024
Project End Date	30-Sep-2024
External Funding in place	No
External Collaborators	No
Funder/Project Title	
Name of Funder	

Ethical Review Application ER/ASF25/3 (continued)

Project Description

This online study includes a perceptual decision-making task (the "Illusion Game"), accompanied by personality questionnaires. The goal is to 1) validate the Illusion Game as a reliable measure of illusion sensitivity and 2) investigate the correlates with other dispositional measures.

The study's duration is approximately 30min, and it contains the following elements:

- Consent form

At the beginning, participants will be shown information about the study's goal (no deception is involved).

The page also emphasizes that their response and participation will be kept confidential and entirely anonymous (no IP address, or any identifiers are collected).

Participant's data is saved only at the end of the study (giving them a chance to retract their participation till the end).

- Demographic information

Participants will then undergo a brief demographic survey, to collect voluntary information concerning their age, gender, highest attained education level, and ethnicity to better describe the characteristics and representativeness of the sample.

- Questionnaires

1) The IPIP-6 (Sibley et al., 2011) measures 6 "normal" personality traits (Extraversion, Openness, Conscientiousness, Agreeableness, Neuroticism and Honesty-Humility) with 24-items on analog scales.

2) The PID-5 (Krueger et al., 2011) measures 5 "pathological" (i.e., maladaptive) personality traits (Disinhibition, Antagonism, Detachment, Negative Affect and Psychoticism) with 25-items on Likert scales.

3) The SSS-21 (Kotov et al., 2004) is a condensed version of the multidimensional Iowa suggestibility scale and measures participants' sensibility and adaptability with 21-items on Likert scales.

4) The MIST-20 (Maertens et al 2020) measures participants ability to discriminate between real and fake news with 20 dichotomous items.

- Illusion Game

The Illusion Task (Makowski et al., 2023) is a reaction time task in which participants must make perceptual judgments (e.g., "which red line is the longer") as quickly and accurately as possible, without making any errors. There are of 3 illusion types (Ebbinghaus, Müller-Lyer and Vertical-Horizontal), and the illusion strength and task difficulty is manipulated orthogonally.

- Debriefing

Participants will be given some further information at the end of the study.

- Randomization

The tasks order is as follows: 2 questionnaires, followed by the first block of the Illusion Game (starting with a practice). Then, a third questionnaire, followed by the second Illusion Game block. The order of the questionnaires is randomized.

- Participants

Participants will be recruited via convenience sampling, or via other recruitment systems if available (e.g., SONA, Prolific).

The incentive type and amount (of lack thereof) will be recorded to test and mitigate for its potential effect.

As we aim at recruiting a diverse sample, there are no exclusion criteria beside having to do the experiment on a computer/laptop (as it is not mobile friendly).

- Risks

~~There~~ are no risks involved in this study.

Ethical Review Form Section A (ER/ASF25/3)

Question	Response
>> Checklist	
A1. Will your study involve participants who are currently or potentially vulnerable or unable to give informed consent or in a dependent position (e.g. people under 18, people with learning difficulties, over-researched groups or people in care facilities)?	No
A2. Will participants be required to take part in the study without their consent or knowledge at the time (e.g. covert observation of people in non-public places), and / or will deception of any sort be used? Please refer to the British Psychological Society Code of Ethics and Conduct (or similar guidelines) for further information.	No
A3. Unless specifically and clearly consented (e.g. a media release form), will it be possible, through a research output, to identify participants in any way? (This does not include taking email details for participant prize draws or identifying participants from signed consent forms or holding identity encryption spreadsheets that are stored securely separate from the research data).	No
A4. Might the study induce psychological stress or anxiety, or produce humiliation or cause harm or negative consequences beyond the risks likely to be encountered in the everyday life of the participants?	No
A5. Is there a risk that the research topic might lead to disclosures from the participant concerning their beliefs, involvement in illegal actions or any other activities that may represent a threat to themselves or others?	No
A6. Will the study involve collecting any personal special category information* in a form that could allow the participant/ participants to be identified? [* identifiers relating to race, ethnic origin, politics, religion, trade union membership, philosophical beliefs, genetics, biometrics, health, sex life or sexual orientation]	No
A7. Will any drugs, placebos or other substances (such as food substances or vitamins) be administered as part of this study and will any invasive or potentially harmful procedures of any kind will be used?	No
A8. Will your project involve working with any substances and / or equipment which may be considered hazardous?	No
A9. Will your study involve the taking and/or storage of human tissue that falls under the Human Tissue Act (HTA)? http://www.sussex.ac.uk/staff/research/governance/erp_overview/humantissue	No
>> Risk Assessment	
A10. If you have answered Yes to ANY of the above questions, your application may be considered as HIGH risk. If, however you wish to make a case that your application should be considered as LOW risk please enter the reasons here. Researchers should note that SREOs or C-RECs may decide NOT to agree with the case that you have made.	

Ethical Review Form Section B (ER/ASF25/3)	
Question	Response
>> Data Collection and Analysis (Please provide full details)	
B1. PARTICIPANTS: How many people do you envisage will participate, who are they, and how will they be selected?	The goal is to recruit at least 30 participants but given the correlational nature of the study and of the recruitment procedure, a higher number is desired.
B2. RECRUITMENT: How will participants be approached and recruited?	The research will involve primary data collection, using convenience sampling (in which case the researcher's entourage will be invited to participate) or other platforms if available (e.g., SONA).
B3. METHOD: What research method(s) do you plan to use; e.g. interview, questionnaire/self-completion questionnaire, field observation, audio/audio-visual recording?	The study is composed of one perceptual decision making task (the Illusion Game) and questionnaires.
B4. LOCATION: Where will the project be carried out e.g. public place, in researcher's office, in private office at organisation?	Participants will be able to partake in the study online from their computers.
B5. PARTICIPANT WELLBEING: Will the study involve engaging participants in the discussion of potentially distressing or sensitive topics? (e.g. sexual activity, drug use, ethnicity, political behaviour, potentially illegal activities). If so, please set out how you will manage the well-being of participants.	No.
>> Confidentiality and Anonymity	
B6. Will questionnaires be completed anonymously and returned indirectly?	Yes
B7. Will research data only be identifiable by a unique identifier (e.g. code/pseudonym)? If Yes, please explain how this will be attributed in B11a below.	N/A
B8. Will lists of identity numbers or pseudonyms linked to names and/or addresses be stored securely and separately from the research data? If Yes, explain how this will occur in B11a below.	N/A
B9. Will all place names and institutions which could lead to the identification of individuals or organisations be changed unless this is consented to explicitly in the consent form?	N/A
B10. Will all personal information gathered be treated in strict confidence and never disclosed to any third parties?	Yes
B11. Can you confirm that your research records will be held in accordance with data protection regulations? (http://www.sussex.ac.uk/ogs/policies/information/dpa)	Yes
B11a. Please explain how ANY identifiable personal and/or research data will be managed and securely stored ensuring that participants have given appropriate informed consent for this.	There will be no identifiable information.
B12. Do you intend to use the research data for any purpose other than that for which consent is explicitly given? If so, please explain below	No
B12a. If you answered NO to any of the above in this section (or think more information could be useful to the reviewer) please explain here:	

>> Informed Consent and Recruitment of Participants	
B13. Will all respondents be given an Information Sheet and be given adequate time to read it before being asked to agree to participate?	Yes
B14. Will all participants taking part in an interview, focus group, observation (or other activity which is not questionnaire based) be asked to sign a consent form? If you are obtaining consent another way (such as verbally), please explain under B17 below.	N/A
B15. Will all participants self-completing a questionnaire be asked to show consent to participate by a specific and identifiable action? (Give details in B17 below)	Yes
B16. Will all participants be told that they can withdraw their participation at any time during the research and can ask for their data to be destroyed and/or removed from the project until it is no longer practical to do so?	Yes
B17. If you answered NO to any of the above in this section (or think more information will be useful to the reviewer) please explain here:	
>> Context	
B18. Is DBS (Disclosure and Barring Service) clearance necessary for this project? If yes, please ensure you complete the next question.	No
B19. Are any other ethical clearances or permissions (internal or external) required? Please see the help text (i) for further details.	No
B19a. If yes, please give further details including the name and address of the organisation. If other ethical approval has already been received please attach evidence of approval, otherwise you will need to supply it when ready. (You do not need to provide evidence of a current DBS check at this point).	
B20. Does the research involve any fieldwork - Overseas or in the UK?	No
B20a. If yes, where will the fieldwork take place? If undertaken overseas you must attach an OTSSRA form. In the event that the Foreign and Commonwealth Office has specific travel warnings in place for the country (ies) to be visited you will also need to provide a detailed risk assessment. https://www.gov.uk/foreign-travel-advice	
B21. Will any researchers be in a lone working situation?	No
B21a. If yes, briefly describe the location, time of day and duration of the lone working. What precautionary measures will be taken to ensure safety of the researcher(s)?	
>> Any further concerns	
B22. Are there any other ethical considerations relating to your project which have not been covered above?	No
B22a. If yes, please explain:	

Informed Consent

Invitation to Take Part

You are being invited to take part in a research study to further our understanding of Human psychology. Thank you for carefully reading this information sheet. This study is being conducted by Dr Dominique Makowski from the School of Psychology, University of Sussex, who is happy to be contacted (D.Makowski@sussex.ac.uk) if you have any questions.

Why have I been invited and what will I do?

The goal is to study how Humans are impacted by visual illusions. In this study, you will be asked to complete a few questionnaires and perform some tasks where we will measure how fast and accurately you can perceive small visual differences. The whole experiment will take you **about 35 min** to complete. Please make you sure that you are in a quiet environment, **on a computer** (the experiment is not mobile-friendly), and that you have time to complete it in one go.

What will happen to the results and my personal information?

The results of this research may be written into a scientific publication. Your anonymity will be ensured in the way described in the consent information below. Please read this information carefully and then, if you wish to take part, please acknowledge that you have fully understood this sheet, and that you consent to take part in the study as it is described here.

Consent

- I understand that by signing below I am agreeing to take part in the University of Sussex research described here, and that I have read and understood this information sheet
- I understand that my participation is entirely voluntary, that I can choose not to participate in part or all of the study, and that I can withdraw at any stage without having to give a reason and without being penalised in any way (e.g., if I am a student, my decision whether or not to take part will not affect my grades).
- I understand that since the study is anonymous, it will be impossible to withdraw my data once I have completed it.
- I understand that my personal data will be used for the purposes of this research study and will be handled in accordance with Data Protection legislation. I understand that the University's Privacy Notice provides further information on how the University uses personal data in its research.
- I understand that my collected data will be stored in a de-identified way. De-identified data may be made publically available through secured scientific online data repositories.
- Please note that various checks will be performed to ensure the validity of the data. We reserve the right to withhold credit awards or reimbursement should we detect non-valid responses (e.g., random patterns of answers, instructions not read, ...).
- By participating, you agree to follow the instructions and provide honest answers. If you do not wish to participate, simply close your browser.

For further information about this research, or if you have any concerns, please contact Dr Dominique Makowski (D.Makowski@sussex.ac.uk). This research has been approved (ER/HER27/1) by the ethics board of the School of Psychology. The University of Sussex has insurance in place to cover its legal liabilities in respect of this study.

I read, understood, and I consent

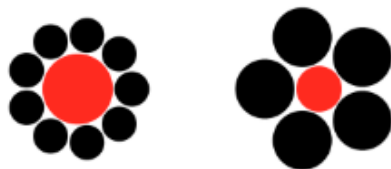
Practice

In this part, two red circles will appear side by side on the screen.

Your task is to select which **red circle is bigger** in size as fast as you can, without making errors.

Don't get distracted by the surrounding black circles around the red circles!

Press **the LEFT or the RIGHT arrow** to indicate which is the bigger **red circle**.



In this example, the correct answer is the **LEFT arrow**.

Are you ready? **Press ENTER to start**

Please categorize the following news headlines as either 'Fake News' or'Real News'.

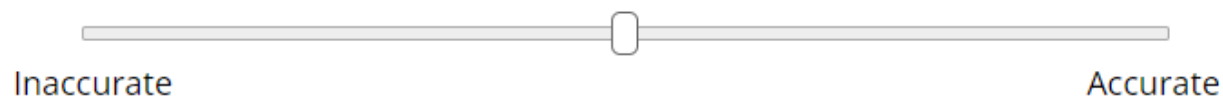
Some items may look credible or obviously false at first sight, but may actually fall in the opposite category. However, for each news headline, only one category is correct.

	Real	Fake
Government Officials Have Manipulated Stock Prices to Hide Scandals	<input checked="" type="radio"/>	<input type="radio"/>
The Government Is Knowingly Spreading Disease Through the Airwaves and Food Supply	<input type="radio"/>	<input type="radio"/>
US Hispanic Population Reached New High in 2018, But Growth Has Slowed	<input type="radio"/>	<input type="radio"/>
Majority in US Still Want Abortion Legal, with Limits	<input type="radio"/>	<input type="radio"/>
United Nations Gets Mostly Positive Marks from People Around the World	<input type="radio"/>	<input type="radio"/>
Taiwan Seeks to Join Fight Against Global Warming	<input type="radio"/>	<input type="radio"/>
Hyatt Will Remove Small Bottles from Hotel Bathrooms	<input type="radio"/>	<input type="radio"/>
Left-Wingers Are More Likely to Lie to Get a Good Grade	<input type="radio"/>	<input type="radio"/>
The Government Is Actively Destroying Evidence Related to the JFK Assassination	<input type="radio"/>	<input type="radio"/>
A Small Group of People Control the World Economy by Manipulating the Price of Gold and Oil	<input type="radio"/>	<input type="radio"/>
The Government Is Conducting a Massive Cover-Up of Their Involvement in 9/11	<input type="radio"/>	<input type="radio"/>
Climate Scientists' Work Is 'Unreliable', a 'Deceptive Method of Communication'	<input type="radio"/>	<input type="radio"/>
Morocco's King Appoints Committee Chief to Fight Poverty and Inequality	<input type="radio"/>	<input type="radio"/>
About a Quarter of Large US Newspapers Laid off Staff in 2018	<input type="radio"/>	<input type="radio"/>
New Study: Left-Wingers Are More Likely to Lie to Get a Higher Salary	<input type="radio"/>	<input type="radio"/>
Most Americans Say It's OK for Professional Athletes to Speak out Publicly about Politics	<input type="radio"/>	<input type="radio"/>

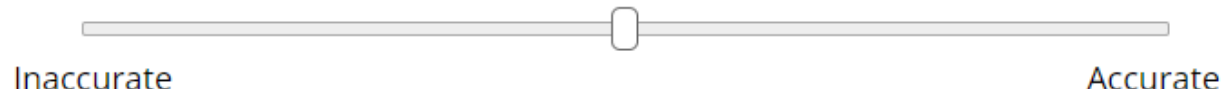
About your personality...

Please answer the following questions based on how accurately each statement describes you in general.

I am the life of the party



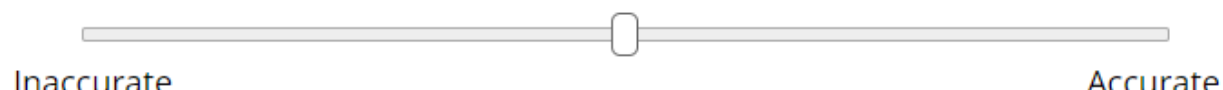
I sympathise with others' feelings



I get chores done right away



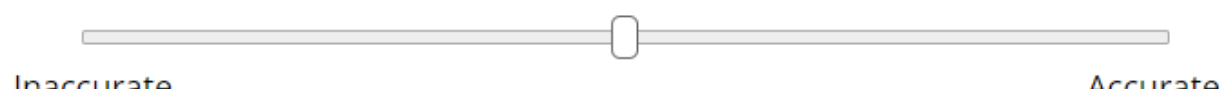
I have frequent mood swings



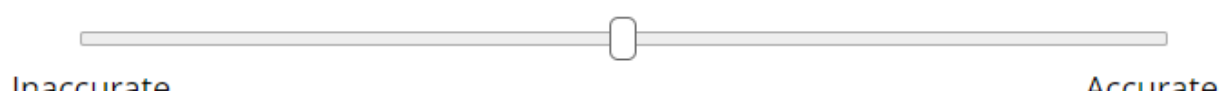
I have a vivid imagination



I feel entitled to more of everything



I don't talk a lot



I am not interested in other people's problems



I have difficulty understanding abstract ideas



I like order



I make a mess of things



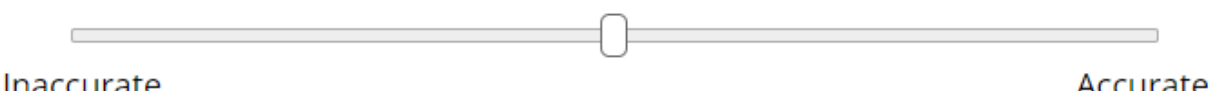
I deserve more things in life



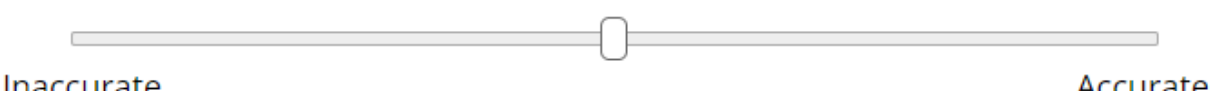
I do not have a good imagination



I feel others' emotions



I am relaxed most of the time



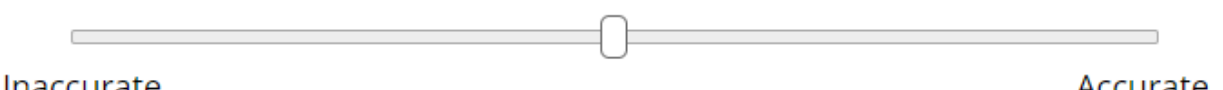
I get upset easily



I seldom feel blue



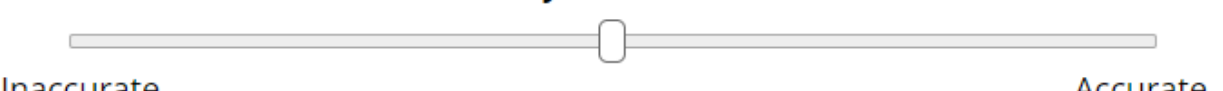
I would like to be seen driving around in a really expensive car



I keep in the background



I am not really interested in others



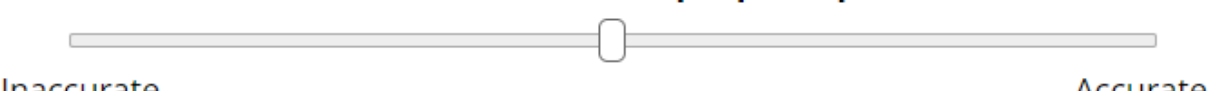
I am not interested in abstract ideas



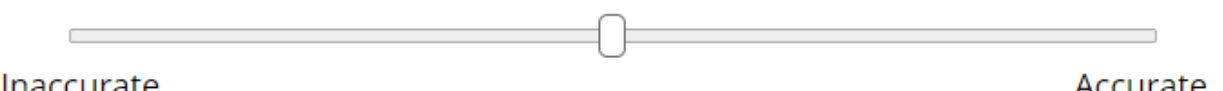
I often forget to put things back in their proper place



I talk to a lot of different people at parties



I would get a lot of pleasure from owning expensive luxury goods



Continue

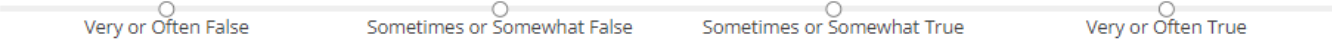
About yourself...

Below is a list of things different people might say about themselves. Please select the response that best describes you.

I often have to deal with people who are less important than me



I feel like I act totally on impulse



I often feel like nothing I do really matters



It is easy for me to take advantage of others



I'm not good at planning ahead



I get irritated easily by all sorts of things



I have seen things that weren't really there



I'm not interested in making friends



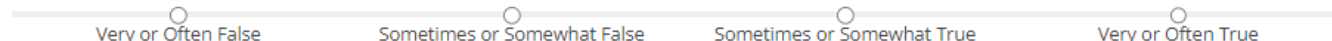
I don't like to get too close to people



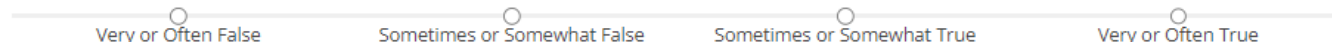
I often 'zone out' and then suddenly come to and realise that a lot of time has passed



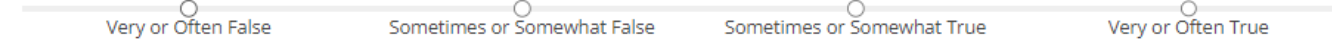
I worry about almost everything



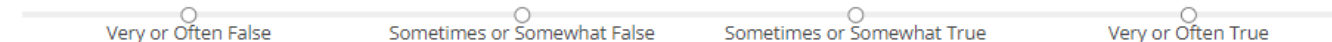
I get emotional easily, often for very little reason



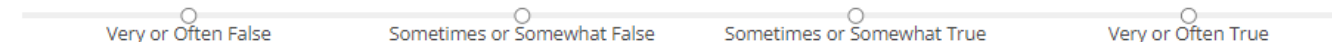
Things around me often feel unreal, or more real than usual



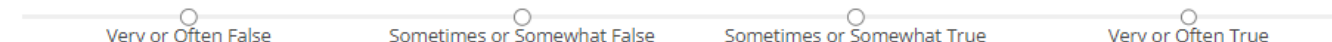
Even though I know better, I can't stop making rash decisions



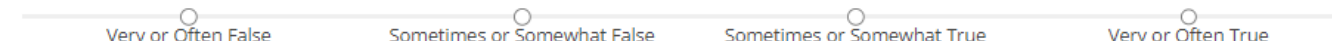
I use people to get what I want



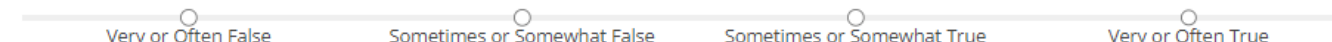
I get stuck on one way of doing things, even when it's clear it won't work



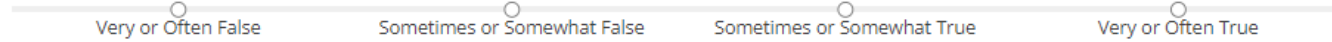
I fear being alone in life more than anything else



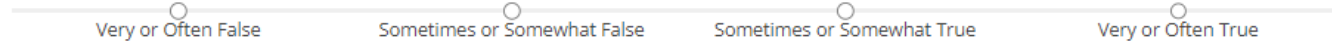
Others see me as irresponsible



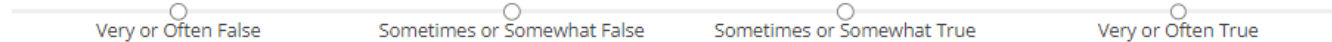
I often have thoughts that make sense to me but that other people say are strange



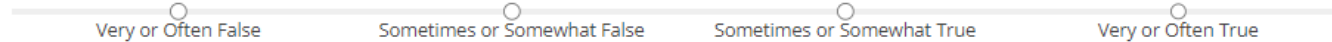
I rarely get enthusiastic about anything



I crave attention



My thoughts often don't make sense to others



People would describe me as reckless



I steer clear of romantic relationships



It's no big deal if I hurt other people's feelings

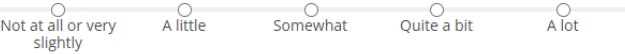


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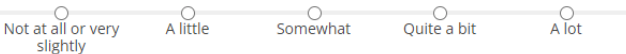
About your sensitivity and adaptability...

Please indicate to what extent the following statements apply to you.

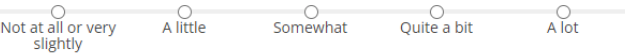
When I see someone shiver, I often feel a chill myself



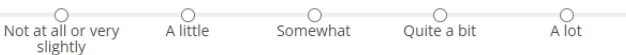
I get a lot of good practical advice from magazines or TV



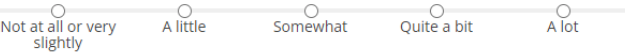
I follow current fashion trends



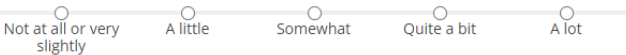
Imagining a refreshing drink can make me thirsty



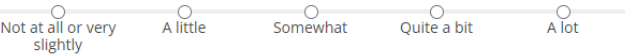
I am easily influenced by other people's opinions



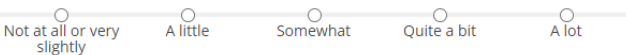
I frequently change my opinion after talking with others



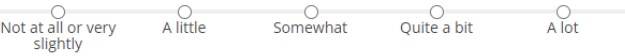
I get many good ideas from others



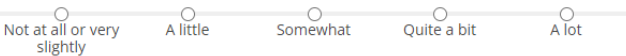
I have picked-up many habits from my friends



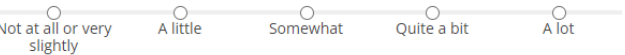
After I see a commercial for lotion, sometimes my skin feels dry



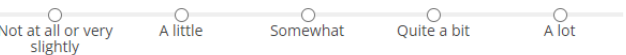
When people tell me how they feel, I often notice that I feel the same way



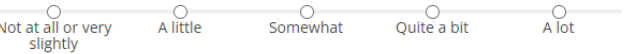
When making a decision, I often follow other people's advice



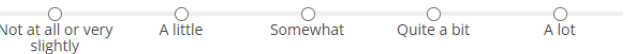
If a product is nicely displayed, I usually want to buy it



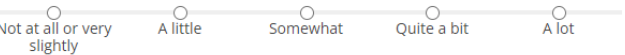
Reading descriptions of tasty dishes can make my mouth water



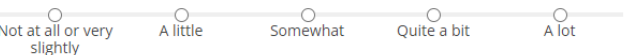
It is important for me to fit in



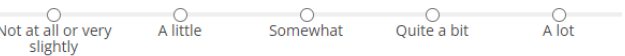
If I am told I don't look well, I start feeling ill



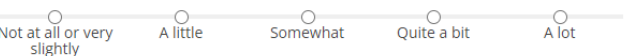
A good salesperson can really make me want their product



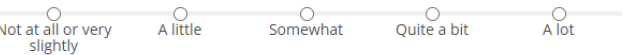
I can be influenced by a good commercial



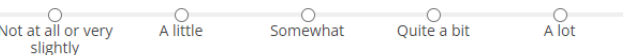
Thinking about something scary can make my heart pound



I discovered many of my favorite things through my friends



I get my style from certain celebrities



Thank you for participating

It means a lot to us. Don't hesitate to share the study by sending this link:

<https://realitybending.github.io/IllusionGameSuggestibility/experiment>

Information

The purpose of this study was for us to understand how Humans perceive visual illusions, and whether this relates to personality traits. Hence, this study included the Illusion Game, with measures how people's vision is biased by illusions, as well as various questionnaires that might be related.

If you have any questions about the project, please contact D.Makowski@sussex.ac.uk.

You can safely close the tab now.

End