

Research ethics

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Overview

- Objective
 - By the end of this session, you should be able to describe and know how to tackle the ethical issues faced by researchers
- To do that, we will
 - Take a look at general ethical principles
 - Discuss the ethics of studying humans
 - Discuss the ethics of gathering data online
 - Discuss the ethics of authorship

Before we start

- Anything exciting to report on from the last few weeks?



Ethics in research

- Belmont report (1979)
 - Respect for persons
 - Beneficence (“do no harm”)
 - Justice
- “It may be accepted as a maxim that **poorly or improperly designed study involving human subjects... is by definition unethical**. Moreover, when a study is in itself scientifically invalid, all other ethical considerations become irrelevant... The scientific validity of a study on human beings is in itself an ethical principle”

Rustein (1969, p. 524)

Ethical research

- Hence the importance of understanding and applying research methods
 - Validity?
 - Reliability?
 - Feasibility?
 - Scientific worth?
 - Impact? Funding? Societal benefit? ...

Ethical research

- The first question:
 - Is my research project well designed?
 - Sample?
 - Methods?
 - Analysis?
 - Building on previous research?

Ethical research

- When it goes horribly wrong
 - Apply the principles of Behaviourism (Pavlov and his dogs)
 - Try to understand fear
 - Carry out a carefully thought-through experiment
 - Use well-established methods
- Little Albert



Ethics in studying people

- British Psychological Society
 - Code of conduct (August 2009)
 - http://www.bps.org.uk/sites/default/files/documents/code_of_ethics_and_conduct.pdf
- Respect
- Competence
- Integrity
- Responsibility

Ethics in studying people

- General respect
 - Sensitivity to individual differences
 - Fairness
- Confidentiality
 - In research: give participants a code
 - In transcripts, change any identifying information
 - In data records, assign a code
 - TE29SH
 - Postcode, date of birth, mother's maiden name.

Ethics in studying people

- Informed consent
 - Detailed sheet about the experiment (but don't give away your hypothesis!)
 - List of participants' rights
 - Opportunity to ask questions
 - Keep record of consent
 - dated and signed
 - Participant's consent, or, if not possible, carer
 - If need to withhold information (e.g. the other participant is actually a co-experimenter), explain this after the study
 - Right to withdraw

Sample consent form

Thank you very much for your interest in our research. The purpose of this form is to make sure that you have been given a full and clear explanation of what is involved in the study, that you meet certain criteria, and that you are happy to take part.

Are you over 18 years of age?	YES/NO
Do you have a skin condition of any kind or wounds on your scalp?	YES/NO
Have you had a full and clear explanation of what is involved in taking EEG recordings?	YES/NO
Has the experimental task been explained to you in detail?	YES/NO
Have you had the opportunity to ask questions and discuss the study?	YES/NO
If you have asked questions have you had satisfactory answers to your questions?	YES/NO/NA
Do you understand that you are free to withdraw from the study at any time without having to give any reason?	YES/NO
Do you understand that your confidentiality will be maintained and your data will only be identifiable through a unique code?	YES/NO
Do you agree that your data can be used for academic presentations and publications provided that your anonymity is maintained?	YES/NO
Do you agree to take part in this study?	YES/NO

Extract from participant info sheet

This experiment involves you listening to music and sentences while we record your brain activity using electroencephalography (EEG). You will also be asked to answer several ratings about the stimuli, such as how interesting you found them, how odd they sounded and how aesthetically pleasing they were.

I will now explain in more detail what each of the components involved.

The Experimental task

The instructions for your task will come up on the screen at the beginning of the experiment. All you are asked to do is listen to the music and the sentences which are played. Try not to move during the listening phase (less than 30s for each extract), as this disrupts the recording of brain activity. Once the music or sentence has stopped playing, you will be asked to complete some ratings. The experimental task is divided into three main blocks which each contain 4 parts. You will have an opportunity for a break between each of these. The testing part of the experiment lasts approximately 2 ½ hours.

Electroencephalogram (EEG)

EEG relies on recording electrical activity produced by your brain that can be measured on the surface of the scalp with a series of small sensors (please see pictures on separate sheet). It is a non-invasive, painless technique used throughout the world for both medical and scientific purposes. The EEG technique will use the Neuroscan system. Neuroscan

Extract from participant info sheet

equipment and procedures are considered safe and reliable and are widely used in hospitals and psychology departments. The electrode caps that will be used are of the latest generation, designed to prevent feelings of discomfort. The application of the electrode nets and operation of the machine will be done by a trained person. It will take 30-40 minutes at the beginning of the experiment to set up the electroencephalograph (EEG) scanner.

You will be asked to wear the Neuroscan electrode cap for the duration of the experimental task. The experimenter will come into the lab during the breaks between the blocks in the experimental task and will make sure the electrodes are still recording enough information. The electrodes may need to be moved slightly or to receive more solution. This will be done in the space of a few minutes and you will then be able to move to the next phase of the experimental task.

Other Assessment Procedures

Before you take part in the study, you are required to complete a screening questionnaire. The data from this questionnaire is anonymous and will be stored in a locked filing cabinet. It will not be used for research purposes.

Confidentiality

The identity of all participants will be kept anonymous. Participants will only be identifiable through a unique code, and any links between your identity and code will be stored in secure servers and/or hard disks secured by the University of Leeds network security procedures. Participants will be given the option to have their names kept on record if they wish to be contacted with regards to participation in future studies. Any data provided will only be accessible to the researcher and supervisors, although it is possible that your data may be used in future conference presentations or journal article publications; your identity will be disguised during this process. All information provided by you will be kept confidential.

If you have any further questions please let me know.

Ethics in studying people

- Informed consent (observational studies)
 - “restrict research based upon observations of public behaviour to those situations in which persons being studied would reasonably expect to be observed by strangers, with reference to local cultural values and to the privacy of persons who, even while in a public space, may believe they are unobserved” (p. 13).
- Populations considered vulnerable
 - Under 18
 - Over 65
 - Those of ill health

Ethics when studying people

- Competence
 - Act in accordance with ethics guidelines
 - Do not go beyond your competence (e.g. Temptation to act as therapist rather than researcher)
 - Value the advice of colleagues
- Integrity
 - Honesty
 - Professional boundaries



Ethics when studying people

- Responsibility
 - Do no harm, professional behaviour
 - Be mindful of risks to yourself
 - e.g. where you conduct a one-to-one interview
 - Be mindful of risks to participants
 - e.g. study encouraging more exercise, make sure not contraindicated
 - If potential harm is involved, seek authorisation from ethical body
- Debrief

Ethics in studying people

- What issues to do with studying people might you encounter in your research projects?
 - Respect
 - Competence
 - Integrity
 - Responsibility



Ethics in gathering data online

- “restrict research based upon observations of public behaviour to those situations in which persons being studied would reasonably expect to be observed by strangers, with reference to local cultural values and to the privacy of persons who, even while in a public space, may believe they are unobserved”
 - Blogs?
 - Discussions?
 - Forums?
 - Researcher’s integrity?
 - Informed consent? Right to withdraw? Debrief?...

Ethics in gathering data online

- Online resources:
 - <http://www.restore.ac.uk/orm/ethics/ethcontents.htm>
 - <http://aoir.org/reports/ethics.pdf>
- Set of questions researchers should ask themselves when gathering data online
 - AoIR report (2002)

Ethics in gathering data online

- Where?
 - Homepages, blogs, google searchers, personal emails, archives, newsgroups, instant messaging, forums, chatrooms, gaming, images...
- What are the ethical expectations established by the venue?
 - Site policy?
 - Users set up own privacy variables (e.g. private chat on forum)?
- “The greater the acknowledged publicity of the venue, the less obligation the researcher has to protect privacy, confidentiality, rights to informed consent etc”

Ethics in gathering data online

- Who?
 - Who is posting / being studied
 - Responsibility to protect the vulnerable
- “The greater the vulnerability of the author / subject, the greater the obligation of the researcher to protect the author / subject”

Ethics in gathering data online

- Informed consent
 - When?
 - Ideally at the start of the study
 - How?
 - Email? Post (so can have real signature?)
 - Who?
 - From the moderator?
 - What for?
 - Direct quotes or paraphrases? Identity hidden?

Ethics in gathering data online

- The law in the EU (from 1995, quoted in 2002)
 - Data subjects must:
 - Unambiguously give consent for personal information to be gathered online
 - Be given notice as to why data is being collected about them
 - Be able to correct erroneous data
 - Be able to opt out of data collection
 - Be protected from having their data transferred to countries with less stringent privacy protections

Ethics in gathering data online

- What are the initial ethical expectations of the authors being studied?
 - Believe communication is private?
 - Studied as “participants” (e.g. forums – more private) or as authors of published materials (e.g. blogs – less private)?
- What ethically significant risks does the research entail for the subjects?
 - Priority: do no harm
 - Disclosing someone else’s private conversations?

Ethics in gathering data online

- What benefits might be gained from the research?
 - Benefits outweigh real and potential costs?
- What are the ethical traditions of researchers and subjects' culture and country?
 - Risks may vary between cultures
 - What it may be OK to disclose about someone in one culture may put them at risk in another culture

Ethics in gathering data online

- How could online data help your research project?
- What specific ethical issues would you need to think about?



Ethics in authorship

- Plagiarism
 - Plagiarism is defined as presenting someone else's work as your own. Work means any intellectual output, and typically includes text, data, images, sound or performance. (Office of Academic Appeals & Regulation, 2005)
 - Plagiarism committed by accident is still considered an offense. i.e. lack of awareness is not a sufficient excuse.
 - Plagiarism can occur in any type of work submitted for marks. So this is not just written assignments, but also presentations, computer code, art work, performances etc.
 - Plagiarism is not about the stealing of ideas, words etc without the permission of the original author. It does not matter whether the original author has consented or not.

Ethics in authorship

- Authorship in publications

THE AUTHOR LIST: GIVING CREDIT WHERE CREDIT IS DUE

The first author
Senior grad student on the project. Made the figures.

The third author
First year student who actually did the experiments, performed the analysis and wrote the whole paper. Thinks being third author is "fair".

The second-to-last author
Ambitious assistant professor or post-doc who instigated the paper.

Michaels, C., Lee, E. F., Sap, P. S., Nichols, S. T., Oliveira, L., Smith, B. S.

The second author
Grad student in the lab that has nothing to do with this project, but was included because he/she hung around the group meetings (usually for the food).

The middle authors
Author names nobody really reads. Reserved for undergrads and technical staff.

The last author
The head honcho. Hasn't even read the paper but, hey, he got the funding, and his famous name will get the paper accepted.

- Your idea and you did most of the work? You go first.

Resources

- ECA ethics procedures and forms
 - <http://www.ed.ac.uk/schools-departments/edinburgh-college-art/research/research-support/ethics-policy>
- Guidelines for this module:
 - Testing on a friend / non-vulnerable participant you know: OK without an ethics form
 - Testing on a vulnerable participant or members of the public you do not know: submit an ethics form

Research ethics

- General principles
- Ethics in studying people
- Ethics in gathering data online
- Ethics in authorship
- Any questions?
- Next time: writing up research

