

Ethics in Research

Frank Tamborello
Research Methods
January 26, 2006

Administrative

- [Please return completed lecture evaluation forms to me.
- [These slides will be downloadable from my website,
<http://chil.rice.edu/tambo/>

Ethics in Psychological Research

- [Ethics deals with resolving moral conflict
- [Conflicts:
 - knowledge benefit vs cost to obtain knowledge
 - honesty vs professional gain
- [Conflicts usually addressed by utilitarian approach
- [How to seek IRB approval

What is ethics?

[The philosophical study of morality

- Reflective thought on the reasons why certain actions are moral or not
- Deals with resolving moral conflict between two (or more) moral principles

[What ethics is not:

- Conventional morality
- Law
- Religion
- Economics
- Opinion

4

4

morality is societal convention, ethics is the study of that

Conventional morality

- morality learned by instruction or habit
- not open to reflection or questioning
- example: premarital sex

Ethical concerns in research

- [**Conflicting sets of obligations**

- Advancement of knowledge, career
- Rights & welfare of human & non-human research participants

- [**Scientific conduct**

- plagiarism
- falsification of data

First participant safety
will return to conduct

Approaches to ethical decisions

Approaches to conflict resolution

- deontology
- ethical skepticism
- utilitarianism
- <http://www.apa.org/ethics/>

6

6

deontology – ethics judged by universal moral code

ethical skepticism – ethical rules are arbitrary and relative to culture and time

utilitarianism – judgments of ethicality depend upon the consequences

Guiding ethical principles

- [**Beneficence and nonmaleficence**
- [**Fidelity and Responsibility**
- [**Integrity**
- [**Justice**
- [**Respect for people's rights and dignity**

7

7

Keep these in mind when faced with moral dilemma

Beneficence & nonmaleficence – maintain welfare of participants, do no harm

Fidelity & responsibility – responsible to society, uphold professional standards of conduct

Integrity – accuracy & honesty in science, teaching & practice

Justice – benefit of science for all, precautions against doing anything that would lead to condoning unjust practices

Respect for rights & dignity – psychologists respect the dignity and worth of all people

Scientific misconduct

- [Dishonesty

- Plagiarism

- Falsification of data

- Difference between analysis and “massaging”

8

8

Report details of analysis

If you feel squeamish about reporting something, it's probably questionable
...unless you don't know what you're doing, in which case ask us.

Data problems

— [Task: “Find the one digit in the array of five digits that is less than five. Press the appropriate key as quickly and accurately as possible.”

- Normal response time (RT) \approx 700 ms
- Your subject sneezes, RT > 4,000 ms
- What does a response like this mean for your experimental paradigm?

9

9

Pause & solicit responses

Trick question: The sneeze doesn't mean anything.

Outliers

- [**Bizarre responses**

- Like pausing mid-trial to sneeze

- [**How bizarre must a response be to be “invalid”?**

- [**Devise your own rule**

- Be explicit in your write-up!
- Rule of thumb: subject mean \pm 3 standard deviations

- [**You’ve found them!**

- Now what?
- Again, be explicit!

10

10

Example: outliers – remove them to increase validity
How bizarre? Pause to solicit responses.
Now what? Pause.

Other issues

- [Privacy & confidentiality
- [Deception
 - Milgram's obedience studies
- [Debriefing
- [Common courtesy

11

11

Milgram could not have obtained his results w/o deception

- Milgram's findings were important
- Price was extreme mental stress in subjects, even though most said afterward that learning power of obedience first-hand was worth the stress
- Was Milgram justified?
- Could such a study be performed today?

Debriefing:

- Inform about subterfuge
- Inform about what subject's time contributed toward
- Show them sample debriefing form

Common courtesy: participants are doing you a favor

Participant Debriefing
Experiment #217, Locating A Target Number ←

Principal Investigator: Dr. Michael Byrne
Experimenters: Frank Tamborello

Thank you for participating in this study. Your patience and concentration are greatly appreciated.

This line of research is aimed at determining how visual factors of a document contribute to a person's ability to find the information they are looking for. Previous research has found that making some subset of items within a larger body more visually salient, say by highlighting those items, can reduce the amount of time required to find a target within that highlighted subset. But it also found that varying the reliability of the highlighting can impact the highlighting's helpfulness. We expect to find a function which essentially relates the reliability of highlighting to its helpfulness in a visual search task.

Thank you again for your participation in this experiment. If you have any questions, your experimenter will be happy to answer them. Or, if you should think of any questions or comments later, please contact the experimenter, Frank Tamborello (tambo@rice.edu, 713-348-2141), or the principal investigator, Dr. Michael Byrne (byrne@rice.edu, 713-348-3770).

12

Form type, experiment number, experiment title

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13

PI: Eden, Juan and me?
all experimenters

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Common courtesy: thank the participant.

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15

Tell the participant what you're going to do with the time and data they donated.

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More common courtesy: contact information

Informed consent

- [Obtain informed consent

- informed

- consent

- [Potential problems

- Compromising validity

- Participants unable to give informed consent

- Ludicrous cases of informed consent

- [OSR's consent form template

17

17

No coercion to participate

Validity: people often behave differently when they know they're being observed

Show them OSR's consent form template

Debriefing template?

Institutional review board (IRB)

- Ensures research executed ethically

- Composed of variety of competent people

- At least one non-scientist

- At least one institutional non-affiliate

- Review and approve all studies involving human and non-human participants

- <http://osr.rice.edu/compliance.cfm#human>

- <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>

Links for further reading.

IRB exemption

— [IRB exemption rules: <http://obssr.od.nih.gov/IRB/isyour.htm>

— [Exemptions apply:

- Established educational settings, involving normal educational practices
- Educational tests
- Existing data

19

19

Educational tests: as long as data not identifiable and does not place participant's at risk of civil or criminal liability

Existing data: retrospective studies of your own or publicly available data. Privacy safe guards still warranted.

IRB training

— [You must train with OSR before collecting data.

— <http://osr.rice.edu/consent/>

— “Social and Behavioral Sciences”

— Do this now.

20

20

Website explains a bit about the training and links to study material and tests
Don't wait until you're busy making materials.

Test time!

- [1. Get out a sheet of paper.
- [2. Write your name, date, and “PSYC 340-3” on it.
- [3. Hand it in at the end of class.
- [Informed Consent Quiz

21

21

We didn't tell you, but this quiz will determine your entire grade.

And you still have to do all the other work.

Is that ethical?

Just kidding!

Now which story do you believe?

This counts as class participation.

- 1. Get out paper.
- 2. Write your name on it.
- 3. Hand it in afterward.

References

- [Leary, M. R. (2004). Introduction to Behavioral Research Methods (4th edition). Pearson Education.
- [Jason Crowther (personal communication)
- [Rice University Office of Sponsored Research <http://osr.rice.edu/>
- [American Psychological Association. <http://www.apa.org/ethics/code2002.pdf>

References

- [National Institutes of Health, Office of Behavioral and Social Sciences Research. <http://obssr.od.nih.gov/>
- [Federal Department of Health and Human Services, Office for Human Research Protections. <http://www.hhs.gov/ohrp/>