



# Academic Ethics



Academic Misconduct  
Research Ethics  
Human Subjects Research  
Ethics training

# Academic Misconduct

- Cheating
- Plagiarism
- Claiming the ideas of others as your own
- Falsifying data
- Interfering with the work of others

# Cheating

- Getting help on a test, exam or assignment without *explicit* authorization from the instructor
- *Giving* help without explicit authorization
- Submitting the same work for two different classes without prior authorization from the instructor



# Cheating

- Submitting the same work for more than one class may be permitted with prior authorization by both professors
- Typically, a more substantial piece of work will be required in such cases





# Cheating

- If you have any question whether helping each other is allowed.....
- Ask the instructor





# Plagiarism

- Using the words *or ideas* of others without explicit citation
- If you use the words of others, use quotation marks and reference the source
- If you use the ideas of others, make clear you are doing so and reference the source



# Plagiarism

- It doesn't matter if the work cited is published or unpublished, if it is the work of a friend, colleague, fellow student, professor, or anyone else
- It doesn't matter if your assignment is written or oral, you must still cite your sources

# Plagiarism

- Correct:
  - In a previous study, Jones found “the consequences of iron deficiency in infancy are devastating” (Jones, 1994)
- **Plagiarism:**
  - There have been many studies of iron deficiency. They found the consequences of iron deficiency in infancy are devastating (Smith 1992; Jones 1994; Kumar, 1985).

# Plagiarism

- Correct:
  - Previous studies suggest **cognitive losses due to iron deficiency are caused by interference with the dopamine receptor system** (Smith, 1992; Jones, 1994; Kumar, 1986).
- **Plagiarism**
  - **Cognitive losses due to iron deficiency are caused by interference with the dopamine receptor system.** (No references provided.)
- (Note: *this is plagiarism even if the references are listed in the bibliography.*)

# Plagiarism

- Correct:
  - Our study tests Jones' (1994) hypothesis that iron deficiency affects cognition through the dopamine receptor system in the brain.
- **Plagiarism:**
  - The proposed study tests the hypothesis that iron deficiency affects cognition through the dopamine receptor system.



# Plagiarism

- Self-plagiarism: publishing the same material in more than one place
- This is considered misconduct: ‘redundant publication’
- Is there a fuzzy line here?





# Plagiarism

- Internet has made plagiarism extremely easy and tempting
- BUT
- Internet has made it amazingly easy to identify plagiarized work!





# Sanctions

- Sanctions for academic misconduct may include
  - Grade reduction
  - Requirement for additional work
  - Assignment of a failing grade in the course



# Sanctions

- Serious or repeated instances of academic misconduct may result in
  - Temporary suspension
  - Withholding of honors and awards
  - Withdrawal of financial aid
  - Dismissal
  - Note of reason for dismissal on permanent record



# Ethical Issues in Research

- Academic conduct
- Choice of question
- Treatment of subjects
- Use of funds
- Analysis and interpretation
- Reporting



# Claiming the Ideas of Others

- It is academic misconduct to claim to have originated ideas for research, interpretation, or other significant original thought
- It doesn't matter if the other person is a friend, fellow-student, colleague, professor, or anyone else
- Use of others' ideas in developing your own is allowable, as long as explicit credit is given for their contribution

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## Falsifying Data

- Falsifying or manipulating data to reach a desired conclusion is grave misconduct
- Falsifying data includes
  - Selectively dropping cases or variables
  - Making up data
  - Selectively reporting or suppressing results

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# Interfering With Others' Work

- Altering, sabotaging, or otherwise interfering with the work of others, or
- Attempting to do so

# Control and Ownership

- Ownership of data
- Rights to publish
- Authorship credit requires
  - Contribute to the research
  - Write or revise the article
  - Approve the final version
  - Just providing the funds is not sufficient
- It is wise to discuss these issues in advance!

# Choice of Question

- Risks balanced with possible benefits of the research
- Possible uses and misuses of the results
- Influence of funding sources
- So what? Is the research useful?



# Treatment of Subjects

- Voluntary participation/coercion
  - Implied coercion
  - Coercive (excessive) compensation
  - False promises



# Treatment of Subjects

- Ethical treatment of human subjects
  - Harm
  - Risk
  - Deception
  - Anonymity
  - Confidentiality

# Treatment of Subjects

- Milestones

- Nuremberg Code

- Ten principles – voluntary, useful, no undue harm, scientific qualification of researchers..

- Belmont Report

- Autonomy (respect for persons)
    - Beneficence
    - Justice



# Analysis and Interpretation

- Can you change your question after the fact? (Or add a new question)



# Reporting

- Obligation to report results
  - Negative results
  - Unexpected results
  - Lack of results
- Accepting research support if the right to report results is compromised (not permitted at Tufts)
  - But risk of influence (still) exists



# Use of Funds

- Responsible use of funds for intended purposes only
- Accounting properly
- Getting advance permission for deviations



# Research in Other Countries

- Responsibilities
  - Who chooses the question?
  - Who benefits?
  - Capacity building?
- Adaptation of IRB process
- Adaptation of informed consent process (?)

# Human Subjects Research

- ALL research using data collected from human subjects is subject to review by the Institutional Review Board (IRB)
- This includes original data collection and use of existing human subjects data for a purpose other than that for which it was originally collected
- This includes human subject data used, or collected for use, in a class

# Human Subjects Research

- Many types of studies, including some qualitative and quantitative surveys, are exempt from IRB review, but...
- *You must submit your study to the IRB*
- The IRB determines whether your data collection effort is exempt, eligible for expedited review, or requires full review

# Human Subjects Research

- Many data collection or data analysis projects are not intended to produce generalizable or publishable result, and thus may be exempt from IRB review, but....
- *You must submit your study to the IRB*
- The IRB will determine if it is exempt

# Human Subjects Research

- Certain protections are mandatory when collecting data from human subjects
- You can find guidelines for informed consent and other protections on the web
- Forms and guidelines for requesting review are also found on the web.
- <http://www.tufts.edu/central/research/IRB/main.htm>

# Human Subjects Research: Elements of Informed Consent

- It is **research**
- Participation is **voluntary** (no sanctions for refusal or for stopping participation)
- **Procedures** to be followed
- Possible **risks**; possible **benefits**; alternative treatments (if applicable)
- **Anonymity or confidentiality** protection
  - Anonymity is not the same as confidentiality
- Compensation, options in case of harm
- **Contact information** in case of problems

# Human Subjects Research

- IRB review is an absolute requirement of the University for all research and data collection involving human subjects
- Many journals will not accept articles for review without evidence that the research was cleared in advance by the Institutional Review Board

# Human Subjects Research

- If your research is in the social sciences, contact
  - Medford IRB Office, 617 627 3417
  - Yvonne.Wakeford@tufts.edu
- If your research is in the biomedical sciences, contact
  - Boston IRB Office, 617 636-7512
  - André Briola abriola@tufts.edu
- Forms may be found at  
<http://www.tufts.edu/central/research/IRB.htm>

# Human Subjects Ethics Training

- All researchers including students are required to complete ethics training regarding treatment of human subjects if they are involved in human subjects research
- Evidence of human subjects ethics training is required for some research grant applications
- Ethics training requirements change from time to time (and will change Jan 1); check the web site...
- **Collaborative IRB Training Initiative (CITI) Program**

**Table 1 | Percentage of scientists who say that they engaged in the behaviour listed within the previous three years (n = 3,247)**

| Top ten behaviours   | All  | Mid-career | Early-career |
|--|------|------------|--------------|
| 1. Falsifying or 'cooking' research data   | 0.3  | 0.2        | 0.5          |
| 2. Ignoring major aspects of human-subject requirements  | 0.3  | 0.3        | 0.4          |
| 3. Not properly disclosing involvement in firms whose products are based on one's own research           | 0.3  | 0.4        | 0.3          |
| 4. Relationships with students, research subjects or clients that may be interpreted as questionable     | 1.4  | 1.3        | 1.4          |
| 5. Using another's ideas without obtaining permission or giving due credit                               | 1.4  | 1.7        | 1.0          |
| 6. Unauthorized use of confidential information in connection with one's own research                    | 1.7  | 2.4        | 0.8 ***      |
| 7. Failing to present data that contradict one's own previous research                                   | 6.0  | 6.5        | 5.3          |
| 8. Circumventing certain minor aspects of human-subject requirements                                     | 7.6  | 9.0        | 6.0 **       |
| 9. Overlooking others' use of flawed data or questionable interpretation of data                         | 12.5 | 12.2       | 12.8         |
| 10. Changing the design, methodology or results of a study in response to pressure from a funding source | 15.5 | 20.6       | 9.5 ***      |

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## Other behaviours

|   |      |      |         |
|---|------|------|---------|
| 11. Publishing the same data or results in two or more publications                                     | 4.7  | 5.9  | 3.4 **  |
| 12. Inappropriately assigning authorship credit   | 10.0 | 12.3 | 7.4 *** |
| 13. Withholding details of methodology or results in papers or proposals                                | 10.8 | 12.4 | 8.9 **  |
| 14. Using inadequate or inappropriate research designs  | 13.5 | 14.6 | 12.2    |
| 15. Dropping observations or data points from analyses based on a gut feeling that they were inaccurate | 15.3 | 14.3 | 16.5    |
| 16. Inadequate record keeping related to research projects  | 27.5 | 27.7 | 27.3    |

Note: significance of  $\chi^2$  tests of differences between mid- and early-career scientists are noted by \*\* ( $P < 0.01$ ) and \*\*\* ( $P < 0.001$ ).

# Resources

- Tufts University. 2003. “Academic Integrity @ Tufts.” <http://studentservices.tufts.edu/dos>
- Dartmouth College. “Sources: Their Use and Acknowledgement.”  
<http://www.dartmouth.edu/~sources/>
- Long Island University. “Citation Style for Research Papers.”  
<http://www.liunet.edu/cwis/cwp/library/workshop/citation.htm>

## More Resources

- Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*. 6<sup>th</sup> edition. University of Chicago Press, 1996.
- University of Chicago Press Staff, editor **The Chicago Manual of Style, 15th Edition**. 15th Edition. 984 p., 2003