Feedback on talks and reviews: UCL plagiarism policy

“Any quotation from the published or unpublished works of other persons must, therefore, be clearly identified as such by being placed inside quotation marks, and students should identify their sources as accurately and fully as possible...

Under these Regulations students found to have committed an offence may be excluded from all further examinations of UCL or the University or of both.”

http://www.ucl.ac.uk/current-students/guidelines/plagiarism
Feedback on talks and reviews: UCL plagiarism policy

• Plagiarism includes:
  • “turning in someone else's work as your own
  • copying words or ideas from someone else without giving credit
  • failing to put a quotation in quotation marks
  • giving incorrect information about the source of a quotation
  • changing words but copying the sentence structure of a source without giving credit
  • copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not”

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• Don’t copy and paste text from papers except for quoting:
  • Inside quotation marks
  • With a reference to a bibliography at end
• Quotes should be there to support your own assertions, not as a substitution
• Generally quotes are not needed for presentations or paper reviews. Quotes may be needed for literature review
• Rules for figures are the same: include citation in caption
Feedback on talks and reviews: dissertation marking criteria

0–49% = Fail, 50–69% = Pass, 70–100% = Distinction

Positive marking criteria, not negative

• 90–100% (Perfect) Significant contribution to field, potential for publication at top venue; Evidence of considerable extra-curricular reading and original interpretation; close to faultless in execution and write-up

• 80–90% (Outstanding) Contribution to field, potential for publication at respectable venue; Evidence of extra-curricular academic reading and original interpretation; Only very minor faults in execution and write-up
Feedback on talks and reviews: dissertation marking criteria

- 70–80% (Excellent) Demonstration of extra-curricular reading and good understanding of the area; Very well written report with logical structure, correct and precise use of terminology
- 60–70% (Good) Evidence of understanding, and at least some evidence of extra-curricular reading; Clear project-write up with logical structure, may contain some ambiguities or faults
- 50–60% (Satisfactory) Mostly demonstrates understanding with minor flaws, limited extra-curricular reading; Adequate project write-up, lacking clarity or detail in places, or containing irrelevant material
Feedback on talks and reviews: ethics

• Good to see discussion of research ethics but some confusion
• More details later but here are some criteria from Menlo Report, based on Belmont Report
  • “Respect for Persons: Participation as a research subject is voluntary, and follows from informed consent…
  • Beneficence: Do not harm; Maximize probable benefits and minimize probable harms…
  • Justice: Each person deserves equal consideration in how to be treated, and the benefits of research should be fairly distributed…
  • Respect for Law and Public Interest: Engage in legal due diligence; Be transparent in methods and results…”
Selection Bias

• Selection bias leads to sampling bias
  • Terms often used interchangeably (incorrectly)
  • Sampling bias is a sub-type of selection bias

• Other types of selection bias:
  • Terminate trial when result achieved
  • Discounting drop outs
Selection and Sampling Bias

- Selection Bias
  Asking your friends to take part in your study

- Sampling Bias
  Sample not representative of total UK/world population

- In Method section of paper
  - Provide description of selection process and any limitations
  - Provided description of sample collected and any limitations
Structured Sampling

- May want to deliberately manage sampling
- Deliberately select participants based on criteria
- Example:
  - Focus groups to discuss television viewing habits
  - Objective of selection process is to get a good coverage of ages and regions in the UK
Quantitative Research

• Historical roots in *positivism*
  • Goal is to find laws that explain the real world
  • Identify causal links between things
  • Knowledge is only obtained through experience and observation
• Facts are separated from values
• Science is based on **quantitative data** obtained through rigorous processes
Quantitative Research

• Types of variables
  • Categorical variables
    • Binary (e.g. yes/no)
    • Nominal (e.g. males, females)
    • Ordinal (e.g. strongly/somewhat agree/disagree)
  • Continuous variables
    • Interval (e.g. temperature in degrees Fahrenheit)
    • Ratio (e.g. natural zero point e.g. degrees Kelvin)
Quantitative Research

- Measurement error
  - Discrepancy between real value of a variable and measurement obtained
  - Instruments can be calibrated to reduce measurement error
  - Self-reported measures can also have measurement error because participants may have a reason to lie
Quantitative Research

• Validity
  • Whether an instrument measures what it is supposed to measure
    • e.g. Can we use password length to measure password complexity?
• Content validity
  • Whether the questions in a questionnaire cover the full range of a construct
• Reliability
  • Whether a measure produces the same results under the same conditions
Quantitative Research

• Correlational Research
  • Observe what happens in the world without interfering
  • Measure two or more variables at one point in time
    • e.g. Measure complexity of passwords used by employees in one organisation and which ones write them down
  • Minimises researcher bias
  • Contributes to external validity (ecological validity)
  • Note: Correlation does not imply causality!
Questionnaires

- “Feel the pulse” of a specific population about a topic
- Collect small amount of data from large sample
- Aim to get sample representative of population

**Advantages**
- Efficient
- Statistical significance
- Simplicity
- Transparency
- Credible results

**Disadvantages**
- Require high technical proficiency to design
- Only measure attitudes, not behaviour
  - e.g. self-selection bias of more private individuals!
Experimental Research

- Manipulate one variable to see effect on another variable (remember independent/dependent variables)
  - e.g. create passwords with different complexities and assign them to different participants. Take note of which ones resort to writing them down
- Cause and effect (David Hume)
  - Events must occur close together in time
  - Cause must precede the effect
  - Effect never occurs without the cause
- Confounding variables may cause both events:
  - Cause never occurs without the effect
Experiments

• Between-groups design
  • Manipulate the independent variable with different participants
  • Each group of participants is tested under different experimental conditions
  • Differences between people (e.g. IQ) can lead to unsystematic variation in results
Experiments

- Within-subjects design
  - Manipulate the independent variable with same participants
  - Every participant goes through all the experimental conditions
  - Can introduce learning and boredom/fatigue effects
Laboratory experiments

• Advantages:
  • Control over environment
  • Replicable
  • Allows the determination of cause and effect
  • Statistical significance
  • Capture behaviour, not just attitudes

• Disadvantages
  • Artificiality
  • Researcher bias
  • Demand bias (participants guess what the experiment is about)