



# What would you do? Bridging the GAP from theory to case study

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**Are we on the same page?**

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## ■ Research Misconduct or Violations of Research Integrity

- Traditionally defined as fabrication, falsification, or plagiarism.
- Recent years: violations of good research practice
  - Hiding the use of AI or automated tools in the creation of content or drafting of publications (also: risk of plagiarism or IP infractions)
  - Chopping up research results with the specific aim of increasing the number of research publications
  - Self-plagiarism
  - ...
- Grey area or slippery slopes:
  - Omitting data (risk of confirmation bias and cherry picking)
  - Grant proposal promising groundbreaking results (fine line between ambition and deception)



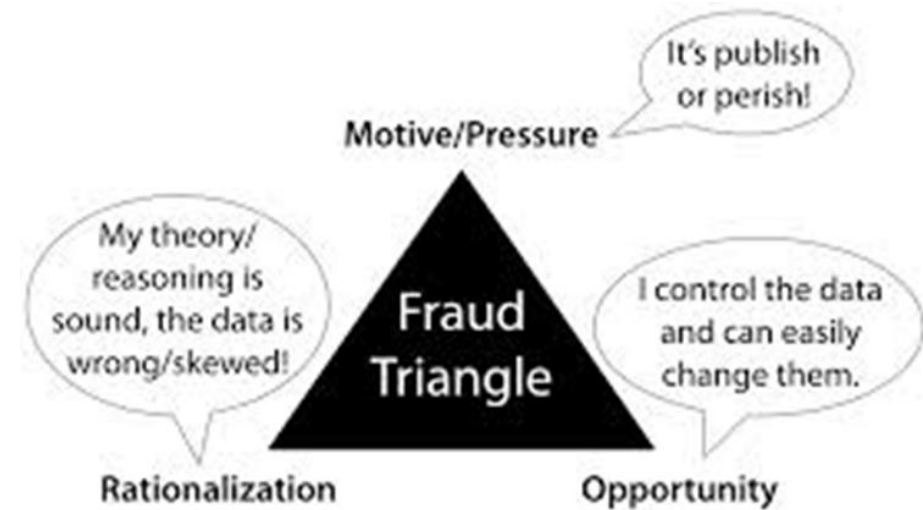
# Are we on the same page?

## ▪ Research Integrity

- researchers conduct their research according to **appropriate ethical, legal and professional frameworks, obligations and standards.**
- ALLEA Code: Honesty, Reliability, Respect & Accountability
- *What do these principles mean for you in practice?*
  - Honesty?
    - Unbiased peer review, even if the research contradicts your own findings
    - Openly declare any limitations to your study
  - Reliability?
    - Document all steps of your experiment in a lab notebook
    - Double-check statistical analyses and ensure appropriate sample sizes
  - Respect?
    - Obtain informed consent from participants and respect their privacy
    - Minimize environmental impact when performing a field study
  - Accountability?
    - Senior researchers properly mentor PhD researchers to avoid research misconduct
    - Carefully manage research grants

# Are we on the same page?

- **Drivers for research misconduct (Davis, Riske-Morris & Diaz, 2007)**
  - Personal and professional stressors
  - Organizational climate
  - Job insecurities
  - Rationalizations
  - Personal inhibitions
  - Personality factors



Fraud Triangle (by Donald R. Cressey) adapted to Scientific Misconduct

**What would you do?**

# What would you do?

- You are co-authoring a paper with a colleague. During a discussion, you notice that they have slightly adjusted some data points to make the results ‘look better.’ The changes are minor and don’t alter the overall conclusion, but without them, the findings would be less convincing.
- How would you respond?
- Is there a clear boundary between cleaning data and manipulating data?
- What if your supervisor says: everybody does this, this is not an issue
- If there was intent to “lie”, would you report it? And how?

# What would you do?

- You have spent months working on a paper. Right before submission, your supervisor asks you to add two additional co-authors who have not actively contributed to the research. You feel uneasy about this, but your supervisor insists that *“it’s normal practice and good for your career.”*
- Would you challenge your supervisor? How could you go about this?
- What are the risks of accepting without protest?
- Do you know what the institutional/international guidelines say about this?



# What would you do?

- You are writing a review article and use ChatGPT to quickly summarize relevant literature. You notice that colleagues also use AI without mentioning it.
- Is it ethical to use ChatGPT or other genAI tools for your literature review? Where do you draw the line?
- Would you disclose the use of AI?
- Would you include the genAI generated text as is or would you check the content?

# Let's take a moment to focus on AI: What are the main challenges with regard to research?



ENVIRONMENT



INFO NOT ALWAYS UP  
TO DATE



BIAS, HARMFUL  
CONTENT AND  
MISTAKES



PRIVACY AND IP



ACKNOWLEDGE USE

# What would you do?

- You submit a paper to a journal, and the editor asks for suggested reviewers. One of your close colleagues is an expert in the field, and you know they will likely provide a favorable review.
- Is it ethical to suggest a friend as a reviewer? Would it be different if your worked in the same department but weren't friends?
- What if the suggestion to use a friendly reviewer came from your supervisor instead?
- What is the role of the journal in this?

# What would you do?

- You receive funding from a private company to support your research. Your findings could impact their business interests, but you believe your research is objective. When submitting a paper, the journal asks about potential conflicts of interest.
- Should you disclose industry funding if you believe it didn't affect your research?
- What if the company explicitly asks you *not* to mention the funding?
- How to go about the difference between actual conflicts of interest and perceived conflicts of interest?

# What would you do?

- Your supervisor advises you to cite more papers from your research group and friendly colleagues to boost their citation metrics. You don't necessarily find all these papers relevant, but it might help strengthen your network.
- Is it okay to strategically cite papers?
- What if a reviewer suggests adding certain citations?
- How could citation manipulations affect the credibility of the research?
- What if it were text parts from earlier publications? Is that okay and to which degree?

# Questions?

