# Ethics ENDSEM

## MODULE 1 -

**PRIVACY**

Privacy in research refers to protecting the individual's right to control access to their participation in a study (i.e. extent, timing, circumstances).
Carefully consider the appropriate circumstances and setting for participant recruitment, enroliment, and data collection.
Limit the information collected to what is essential for research purposes.

**CONFIDENTIALITY**

Confidentiality pertains to protecting the participants personally identifiable data.
Ensure that the participants identity, personal information, responses. etc. will not be disclosed to anyone outside of the research team unless otherwise agreed upon o Notify participants:
How their information will be stored during and after the study.
That breach of confidentiality is a potential risk of participating.
The steps researchers will take to secure and protect their records.

**ANONYMITY**

Anonymity is protected when the researcher refrains from collecting any personal identifiers, direct or indirect, that would link responses to a specific individual.
Data is not collected in person. No key codes exist, and names and other identifers are not collected.

- It is possible to develop rigid codes of ethics that can be applied without exception to all psychological research.

- Lying to participants about the nature of a study is always wrong, irrespective of the type of study or the amount of information to be gained.

- The application of a particular code of ethics depends entirely upon the particular study; what is appropriate in one study might be totally inappropriate in another.

# The Tuskegee Syphilis Study

The **Tuskegee Syphilis Study** was a highly unethical clinical study conducted in the United States from **1932 to 1972**. It involved **600 low-income African-American men**, **400 of whom were infected with syphilis**. The participants were **not informed of their diagnosis** and were **denied proper treatment**, even after **penicillin was established as a reliable cure in the 1950s**. Despite ongoing free medical exams, the true nature of the study was concealed. In some cases, researchers **actively prevented participants from receiving treatment elsewhere**. The study only ended in 1973 after widespread **public outrage** and condemnation.

## Important Takeaways

1. **Violation of Informed Consent**: Participants were deliberately misled and not informed about their condition or the purpose of the study, violating the fundamental principle of informed consent.

2. **Racial and Socioeconomic Exploitation**: The study targeted **vulnerable African-American men** from poor backgrounds, exploiting their trust and lack of access to information.

3. **Denial of Treatment**: Despite the availability of penicillin in the 1950s, treatment was **withheld for research purposes**, leading to unnecessary suffering and deaths.

4. **Trigger for Ethical Reform**: Public exposure of the study prompted the formation of the **National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research**, leading to the creation of the **Belmont Report (1979)**

5. **Legacy**: The Tuskegee study is a **landmark case in research ethics**, highlighting the need for:

- **Respect for persons** (informed consent),
- **Beneficence** (maximizing benefits and minimizing harm),
- **Justice** (equitable selection of research subjects).

# The Nuremberg Code

Among the charges were that German physicians conducted medical experiments on thousands of concentration camp prisoners without their consent. Most of the subjects of these experiments died or were permanently crippled as a result.

- 'The voluntary consent of the human subject is absolutely essential,' making it clear that subjects should give consent and that the benefits of the research must outweigh the risks

# The Declaration of Helsinki :

- Research with humans should be based on the results from laboratory and animal experimentation
- Research protocols should be reviewed by an independent committee prior to initiation
- Informed consent from research participants is necessary.
- Research should be conducted by medically / scientifically qualified individuals.
- Risks should not exceed benefit

# Ethics: The Belmont Report (1976)

Respect for Persons : Informed Consent , Obtain and document , Voluntariness/ no coercion , Protect privacy

Beneficence : Procedures with least risk , Risk reasonable in relation to benefit, maintain confidentiality.

Justice : Select participants equally, do not target vulnerable populations.

# Institutional Review Board (IRB) :

1. Risk to subjects are minimized.

2. Risk to subjects are reasonable in relation to anticipated benefits,

3. Selection of subjects is equitable, i.e. fair

4. Informed consent is sought form each subject or his/her legally authorized representative,

5. Informed consent is appropriately documented,

6. When appropriate, the research plan makes provisions for monitoring data collection,

7. Privacy and confidentiality of research subjects is appropriately protected, and

8. When some or all of the subjects are likely to be vulnerable to coercion or undue influence, additional safeguards have
been included.

# What Constitutes Misconduct in Research?

**Three categories of research misconduct:**

**1. Data fabrication: Making up data or results and recording or reporting on them.**

**2. Falsification:** Manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

3. Plagiarism: The appropriation of another person's ideas, processes, results, or word without giving appropriate credit

### Brief Summary of Case Study: Using AI to Analyze Data

Dr. Falcon, a postdoc in Dr. Hawk's lab, is trying to analyze NIH health/genomic survey data but struggles with it. He decides to use an external AI platform, HotBot1, to help with analysis. Initially, he uses only public data, but later uploads de-identified NIH internal data (with no names or personal identifiers) to HotBot1

to improve the results. He discovers a promising genetic association but notes a potential issue — the finding may misrepresent an underrepresented minority group. Dr. Falcon shares this with Dr. Hawk, and they move quickly to write and submit a paper without Dr. Hawk deeply verifying the analyses.

## Answers to the Questions

**1. Has Dr. Falcon done anything wrong? If so, what actions should be taken?**

Yes, potentially. Even though the data was de-identified, uploading it to an external AI platform could **violate data usage  agreements or NIH policies**. According to **IRB guidelines**, using external platforms must be approved, especially for human subjects data.

 **Mitigation Actions:**

- Review whether NIH policies allow uploading de-identified data to outside platforms.

- Report the use of HotBot1 to the IRB or institutional review board.

- Delay publication until a full ethical review is done.

- Train researchers on data sharing rules and ethical AI use.

**2. Were Dr. Falcon's steps to protect the data sufficient? Was this a data breach?**

Dr. Falcon did de-identify the data, which is good, but **it still might not be enough**. According to **Belmont Principle of Respect for Persons**, even de-identified data must be used with care and only in approved ways.

➡️ **Was it a data breach?**

Maybe — if the platform (HotBot1) isn't approved under NIH data-use policies, uploading even de-identified data might count as unauthorized sharing.

**3. How can scientists balance quick innovation with their lack of training in new tech like AI?**

- Get **institutional training or mentorship** before using new technologies.

- Use **pilot studies** on public data first.

- Collaborate with **experts in AI/data privacy**.

## 4. How could HotBot1 misrepresent minority cohorts? How to prevent it?

AI tools often **reflect bias in training data**. If HotBot1 doesn't handle small subgroups well, the results could be misleading — especially for underrepresented groups.

➡️ **Implications:** Public health conclusions could be **harmful** or **unfair**.

✅ **Prevention:**

- Check for **fairness and bias** tools in AI models.

- Do subgroup validation.

- Always interpret AI results with **domain expertise**.

This links to **Justice** in Belmont — ensuring fair treatment of all population groups.

## 5. Is Dr. Hawk overseeing Dr. Falcon properly?

Not entirely. Dr. Hawk trusted Dr. Falcon but did **not verify the AI tools or the analysis**. While trust is important, **supervision is key**, especially when dealing with human data and novel tools.

➡️ **Belmont Principle – Respect for Persons & Beneficence** apply here. Supervision protects participants from harm or misuse.

✅ Dr. Hawk should:

- Ask for regular updates and explanations of methods.

- Understand enough to judge whether data handling is ethical.

- Possibly seek expert help in AI if unfamiliar.

## Brief Summary: Deciding What Study Results to Publish

Dr. Wyck is leading a Parkinson's disease study and finds expected risk factors (head trauma, high blood pressure, pesticides). Unexpectedly, smoking appears to *lower* the risk of PD, and so does second-hand smoke, although the latter isn't statistically significant. She worries that including the smoking result may harm

public health messaging. She's unsure whether to report it and how to handle it in the paper

**1. Should Dr. Wyck report all her findings, including smoking? What if it showed smoking increased risk instead?**

**Yes**, she **must report all valid results**, including the smoking association.

Ethically, **selective reporting** (cherry-picking results) is **misleading** and goes against the **Belmont Principle of Respect for Persons** (truthful communication) and **scientific integrity**.

If the smoking result showed increased risk, she'd likely report it — so **reporting should not depend on perceived public health impact**.

---

**2. Should she only report findings with p-values < 0.05?**

**No.** Focusing only on $p < 0.05$ encourages **publication bias**.

It's more ethical to report **all findings**, while clearly explaining their **statistical significance**, limitations, and context.

---

**3. Which findings should be emphasized in the title, abstract, and discussion?**

She should highlight:

- The main **statistically significant findings** with **biological plausibility** (head trauma, blood pressure, pesticides).
- Briefly **mention** the unexpected smoking result, but **frame it responsibly** in the discussion.

**Ethical balance**: Don't hide surprising results, but don't overemphasize them either.

---

**4. How should she discuss the protective effect of smoking? Should she speculate on mechanisms like dopamine?**

She can **briefly mention hypotheses** (e.g., nicotine's role in dopamine), but must:

- Clearly label it as **speculation**.
- Include **contrasting evidence** from public health literature.
- Emphasize the **overall health risks** of smoking.

This respects the **Belmont Principle of Beneficence**: minimize harm and maximize benefit.

---

### 5. What should the authors say about second-hand smoke finding?

- Report it transparently, but **note it's not statistically significant (p = 0.07)**.

- **Caution readers** about interpreting borderline findings.

This is **ethically honest** and promotes **scientific integrity**.

---

### 6. What about smoking's known health risks — are they relevant here?

 **Absolutely.** Even if smoking seems protective for PD, it:

- **Increases risks** for cancer, heart disease, and early death.

- Should be mentioned to **contextualize** the findings.

- Reminds readers that **net public health advice** remains unchanged.

---

## Brief Summary: Research Misconduct or Sloppy Science?

Rose Scarlett, an exchange student with prior ethics training, joins Professor Plum's lab and works on a collaborative project. She becomes secretive about her data and eventually can't produce original files when asked. When she finally shares data, it's poorly labeled, disorganized, and inconsistently documented. She offers inconsistent versions of the same figure and gives vague excuses. Dr. Peacock grows suspicious and insists on seeing the primary data, only to find serious issues with record-keeping and transparency. Rose blames time pressure for her disorganized records but claims the final figure is accurate.

---

## Answers to the Questions (Framed Ethically)

### 1. Are there problems regarding data management?

✅ Yes — **major problems.**

- Missing or deleted original data.

- No labeling or dating.

- Multiple inconsistent figure versions.

- Poor or nonexistent organization.

This violates **best practices in research integrity** and **NIH data management standards**. Good record-keeping is essential for **transparency**, **reproducibility**, and **accountability**.

## 2. Who is at fault?

Multiple parties share responsibility:

- **Rose** is primarily responsible — she failed to maintain proper records and transparency.

- **Dr. Byrdie Peacock** acted appropriately by following up, but **could have intervened earlier**.

- **Professor Plum**, as PI, has the duty to ensure the lab follows proper protocols and that new students are **closely mentored** — so bears **some oversight responsibility**.

## 3. What do you think of Rose's explanation?

❌ Not convincing.

- Saying she was "rushed" is **not a valid excuse** for poor documentation or inconsistent data.

- Given her **prior ethics training**, she **knew better**.

Her actions raise concerns about **possible fabrication**, not just sloppiness.

## 4. Is pressure ever a legitimate excuse for being sloppy?

No — **never in research.**

Everyone faces pressure — job deadlines, publication, competition — but researchers have an ethical obligation to:

- Maintain accuracy

- Protect the public trust

- Be honest and transparent

Ethical research **requires discipline under pressure**, not shortcuts.

## 5. What's an appropriate response to pressure?

- Talk to mentors or advisors

- Ask for timeline extensions if needed

- Use proper planning and data management tools

- Maintain integrity even if results are delayed

This aligns with the **Belmont principle of Beneficence** — doing good and avoiding harm.

## 6. Would your opinion change if Rose had prior training in ethics and record keeping?

Yes — it actually **makes the situation worse**.

Prior training means she knew the standards and **chose not to follow them**, making it closer to **intentional misconduct**, not just a mistake.

## 7. How could this situation have been prevented?

- Regular data audits/check-ins by Dr. Peacock or Professor Plum

- Mandatory digital backup protocols

- Clear expectations about notebook organization and labeling

- Team collaboration culture (not secrecy)

**Proactive mentorship and lab policies** are key.

## 8. Can you show your primary data from a year ago? Can others reproduce your experiments from your notebook?

These are **ethical self-check questions** every researcher should ask regularly.

A responsible researcher should:

- Be able to trace back all data

- Have experiments reproducible from clear, detailed notebooks

If the answer is "no," **improvements are needed** to meet basic standards of research integrity.

# Brief Summary: Authorship and Misconduct in Collaborative Research

Dr. Johansson, a Special Volunteer at NIH, published a paper involving AI/ML research developed using NIH resources — but without informing NIH supervisors, following NIH's manuscript clearance process, or submitting the necessary invention disclosure. The paper lists NIH as an affiliation and acknowledges its contributions, but the work described wasn't part of the official collaborative agreement (CRADA). Dr. Fathi, Johansson's NIH supervisor, had no knowledge of the work or the paper.

## Answers to the Questions (with Ethics Focus)

**1. What are some of the ethical/legal/policy concerns created by this situation?**

✅ **Major concerns:**

- **Violation of NIH publication policy:** Manuscripts involving NIH research must go through NIH's manuscript clearance.

- **Failure to disclose inventions:** NIH requires an **Employee Invention Report (EIR)** for intellectual property developed with NIH resources.

- **Breach of CRADA terms:** The project was **outside the scope** of the official agreement.

- **Improper attribution of affiliation:** Dr. Johansson listed NIH affiliation despite the NIH not being properly informed or involved.

- **Potential conflict of interest** and **undisclosed dual activities**.

These issues could amount to **research misconduct** and have legal, professional, and reputational consequences.

**2. What should the NIH/Dr. Fathi do?**

✅ Ethical and procedural steps:

- **Immediately report the incident** to the NIH ethics and technology transfer offices.

- **Request a correction or retraction** from the journal, especially if the software was used without authorization.

- **Request removal of their name** from the publication if they did not contribute or approve the work — authorship without consent is unethical.

- **Initiate an internal review** of the matter and consider disciplinary action if misconduct is found.

**Transparency and documentation** are essential to restore trust and uphold NIH standards.

---

### 3. Can Dr. Johansson remain first author but not list NIH affiliation?

🚫 **No — not ethically appropriate.**

- Dr. Johansson used NIH resources: facilities, data, and possibly mentorship.

- Omitting the NIH affiliation would be **dishonest and misleading** and would violate NIH's terms of appointment and use of resources.

Even if the research was not officially approved, **NIH support must be acknowledged truthfully**.

---

### 4. Should the NIH contest the patents that are being applied for?

✅ Likely yes.

- If the AI software or ideas were **developed with NIH resources**, NIH may have **ownership rights** or **co-inventorship**.

- NIH should review whether the intellectual property involved falls under **federal ownership rules** and whether the patents were filed **without proper disclosure**.

Failure to report inventions or include NIH as a co-developer can be a **serious legal issue** and must be addressed to protect public interest.

---

## Key Ethical Principles Involved:

- **Respect for persons and institutions** (authorship transparency, accurate affiliations)

- **Accountability and integrity** (clearance process, invention reporting)

- **Justice** (ensuring fair recognition of institutional contributions)

- **Transparency in collaboration** (respecting formal agreements like CRADAs)

## Summary: Use of AI in Scientific Writing and Citation Integrity

Dr. Blue asked Dr. Green to draft a review article. Dr. Green used an AI tool (without informing Dr. Blue) to generate content and references. The article was submitted and published with both as co-authors. Later, a post-publication blog revealed fake citations. Upon review, additional issues were found: more inaccurate references and plagiarized text. These issues raise concerns about transparency, accuracy, and ethical writing practices.

## Answers to Questions (Ethics in Research Focus)

**1. When Dr. Blue and Dr. Green submit their correction to the journal, should they also address the inaccurate and irrelevant references and the copied sentences and acknowledge the use of the AI tool?**

✅ **Yes — absolutely.**

- Ethically, **all known issues** must be transparently disclosed, not just the ones raised by the public.

- This includes:

  - Acknowledging **use of the AI tool**.

  - Correcting or removing **fake, irrelevant, and inaccurate references**.

  - Addressing the **plagiarized sentences** (and correcting them).

> Research integrity demands full disclosure and correction—not partial, selective admission.

**2. Should they retract the article?**

✅ **Probably yes.**

- The article contains **multiple serious flaws**: fake references, plagiarism, and lack of transparency about AI use.

- A simple correction may not suffice to uphold **scientific trust and rigor**.

- **Retraction** is an appropriate response when the article's **foundation is flawed** and cannot be fully salvaged.

> Retraction shows accountability and protects the scientific record.

**3. Did they commit research misconduct, i.e., plagiarism?**

✅ **Yes.**

- Copying text **word-for-word without quotation or attribution** is **plagiarism**, even if done unintentionally or by AI.

- **Intent** is not always required for it to be misconduct — especially when **negligence** is involved.

- Both authors share responsibility, though **Dr. Green** holds primary responsibility for using AI improperly, and **Dr. Blue** for not thoroughly reviewing the submission.

## Ethical Themes

- **Accountability in authorship:** All co-authors are responsible for the content of a published paper.

- **Transparency in tools used:** Use of AI must be disclosed if it substantially contributes to writing or idea generation.

- **Plagiarism and integrity:** Copying without attribution is unethical, even if from AI-generated content.

- **Scientific record integrity:** Fake or inaccurate citations damage the credibility of scholarship and must be fully corrected.

# IBM's "Diversity in Faces" Dataset Controversy

# Summary: IBM's "Diversity in Faces" Dataset Controversy

In January 2019, **IBM released a dataset** called *Diversity in Faces (DiF)* to improve fairness in facial recognition technology. The dataset included annotations on **1 million facial images** drawn from **Flickr's YFCC-100M Creative Commons** photo set. IBM stated the goal was to help reduce **biases** in AI facial recognition systems, which had shown higher error rates for **darker-skinned individuals and women**.

While initially praised as a step toward more equitable AI, **criticism emerged** after an NBC News report revealed that **individuals in the photos were unaware** their images had been used for this purpose. Many were **disturbed** to learn their facial data had been analyzed and distributed to hundreds of research organizations, without meaningful **consent or notification**.

Users also found it **nearly impossible to remove their photos** from the dataset, and even if removed from the central IBM repository, their data had already been shared widely.

**Ethical Takeaways**

1. **Informed Consent is Essential**

   - Public availability of images (e.g., on Flickr) does **not imply consent** for use in AI training or biometric research.

   - Data subjects must be informed, especially when **sensitive features** like facial geometry and skin tone are involved.

2. **Privacy vs. Public Data**

   - Just because data is publicly accessible does **not mean it's ethical** to use it in any context.

   - The line between public and private data use in AI must be carefully navigated.

3. **Data Governance & Transparency**

   - There was a lack of **transparency** around how the dataset was built and used.

   - The **difficulty in opting out** raises concerns about user agency and control over personal data.

4. **Distribution Control Fails**

   - Even when removal is requested, **widespread sharing** of data makes full retraction impossible, leading to **irreversible exposure**.

5. **Corporate Responsibility**

   - While the goal of improving fairness in AI is laudable, it must be pursued with **ethical data collection** methods.

   - Tech companies must balance innovation with **accountability and respect for individuals' rights**.

6. **Ethics in AI Research**

   - Promoting fairness in AI should not come at the cost of **violating personal autonomy or privacy**.

   - Ethical practices must be **built into every stage** of data handling—from collection to sharing and usage.

**Ethics of Student Data Tracking at Universities**

## Summary: Ethics of Student Data Tracking at Universities

At the **University of Arizona**, researchers analyzed **student ID card swipes** to map students' routines and social interactions, aiming to **predict student retention**. This data, gathered over three years, was anonymized for the initial study. However, the researcher mentioned that, in the future, **student identities could be shared with academic advisers** to inform support efforts, and **Wi-Fi tracking** might be added for even greater behavioral insight.

While the university highlighted the model's predictive power in a press release, the initiative sparked **public backlash** and **media criticism**, particularly regarding **student privacy and consent**. Many students were unaware that their CatCard data was being used this way. Although an assistant provost stated that predictive analytics already use ~800 data points, they emphasized any expansion (e.g., tracking ID swipes) would be preceded by a **campus conversation** and an **opt-out option**.

A related article from **EDUCAUSE Review** emphasized **ethical use of student data**, focusing on **transparency** and **clear communication**, though it did **not endorse opt-out mechanisms**. Instead, it justified data use as necessary to improve learning environments and contribute to general knowledge.

## Utilitarianism (Greatest Good)

- **Pros**: If the data helps improve retention and academic support for large numbers of students, the overall benefit may justify the practice.

- **Cons**: Significant harms to **privacy**, **student trust**, and potential misuse could outweigh benefits if not managed properly.

## Rights-Based Ethics

- Students have a **right to control their personal data** and to be informed about how it is used.

- Collecting behavioral data without **explicit consent** or transparent processes may violate these rights.

## Justice (Fairness)

- Data collection should not **disproportionately impact** or disadvantage certain student groups.

- Institutions must ensure **equal treatment** and avoid profiling or unfair interventions.

## Common Good

- Data could be used to **improve the overall learning environment** and educational outcomes.

- However, this goal must be balanced with **community trust and individual dignity**.

# MODULE 2-

# Core Ethical Frameworks in Research

The professor likely started by contrasting **two foundational moral theories** used to assess ethical decisions in research:

## 1.Utilitarianis "The ends justify the means."

- Focuses on **outcomes** or **consequences**.

- An action is ethical if it **maximizes happiness or minimizes harm** for the greatest number.

- Example: If deceiving a few participants leads to findings that save thousands of lives, it could be justified under utilitarian ethics.

- Limitation: Can lead to **overriding individual rights** for the sake of the "greater good."

## 2.Deontology "The means matter, not just the ends."

- Focuses on **duties**, **rules**, and **principles**, regardless of outcome.

- An act is wrong if it **violates moral rules**, even if it has good consequences.

- Example: Deceiving or harming participants is unethical *regardless* of the outcome.

- Rooted in Kantian ethics: people must be treated as **ends in themselves**, not means to an end.

---

# The Belmont Principles

These were developed in response to past ethical failures and guide all modern human subjects research:

1. **Respect for Persons**

   - Requires **informed consent**, autonomy, and respect for individual decisions.

   - Example of violation: Tuskegee Study — participants were not informed or treated with dignity.

2. **Beneficence**

- Researchers must **maximize benefits** and **minimize harm**.

- This isn't just about physical harm — psychological and social harm count too.

3. **Justice**

- Fair distribution of research benefits and burdens.

- You can't exploit certain groups (e.g., poor, racial minorities) just because it's easier.

# Historical Case Studies: Why They Still Matter

## Tuskegee Syphilis Study

- African American men were deceived and denied treatment for decades.

- Violated all 3 Belmont principles.

- Led to massive distrust in the medical system.

## Tearoom Trade Study (Laud Humphreys)

- Secretly observed men in public restrooms, tracked their license plates, and later interviewed them under false pretenses.

- **Respect for persons** was violated — no informed consent, deception was involved.

- **Privacy** was disregarded, even though identities were protected.

**BUT...** It raised important questions in sociology and inspired new methods. This shows how **ethical and scientific value** can sometimes be in tension — a central issue in ethics!

## Psychochemical Experiments / Mind Control

- Military studies (e.g., giving soldiers or psychiatric patients LSD) without consent.

- **Respect for persons**: No autonomy or informed choice.

- **Beneficence**: Caused harm with little scientific value.

- **Justice**: Often targeted vulnerable populations.

## Informed Consent vs. Implicit Consent

- Explicit informed consent = Participants fully understand what they're agreeing to.

- Implicit = Based on context, e.g., using public data.

- Modern ethical debates (like in Facebook's emotional contagion study) explore **where the line should be**.

## Subject vs. Participant

- "Subject" implies passivity or lack of agency.

- "Participant" suggests someone who consents and collaborates in the research.

- Ethical language matters — it reflects how we view people's autonomy.

## Anticipating → Doing → Disseminating

This timeline was likely emphasized to encourage students to ask:

1. Are we planning this research ethically?

2. Are we conducting it ethically?

3. Are we sharing it in a way that respects people and promotes fairness

# The Tea Room Trade Study:

**• Studied anonymous sexual encounters between men in public restrooms (called "tearooms"). Humphreys secretly acted as a lookout to observe behavior.**

• He recorded license plate numbers and later tracked down participants — interviewing them at their homes under a
**false pretense** (claiming to do a general health survey), often **without disclosing his role** in the original setting.

**The Ethical Statement**

> "Especially when informed consent cannot be obtained in human-subject research, the benefits of the study should outweigh the harm of any invasion of privacy." —
>
> **Jouhki et al., 2016**

This means:

- In **exceptional cases**, when you **can't ask for consent** (because it might bias results or reveal sensitive behavior),

- You must show that:

    - The **scientific or social benefit** is high, **and**

    - The **potential harm or violation of privacy** is **minimal or justified**.

This reflects **utilitarian reasoning** — weighing **potential good** against **ethical costs**.

- **No informed consent** — participants didn't know they were part of a study.

- **Deception** in both observation and follow-up interviews.

- **Tracking license plates** and visiting homes felt intrusive.

- Potential **emotional or reputational harm** if identities were ever revealed.

# The Facebook Emotional Contagion Study

In 2014, Facebook conducted a massive social experiment to test whether

**emotions can be transferred** ("emotional contagion") by **manipulating what users saw in their news feeds**.

- **689,003 users** had their news feeds curated for **1 week**.

- Posts were filtered to increase or decrease exposure to **positive or negative emotional content**.

- A **linguistic analysis software** examined the users' responses — no human read their posts.

- **Cornell University** analyzed the data, but the study didn't go through Cornell's **IRB (ethics review)**.

## 1.Informed Consent

- Facebook claimed that **accepting the user agreement** was enough.

- BUT: Users were **not explicitly informed**, nor given the opportunity to **opt out or debriefed after**.

- This raises questions about what "consent" really means — especially in **digital environments**.

## 2.Manipulation

- Users' emotions were influenced **without their awareness**.

- If companies do this for **profit or control**, is it different from academic researchers doing it for **knowledge**?

## ➤Utilitarianism

- The study caused **minimal or no direct harm**, and the data could be useful for improving platforms.

- Might be justified if it leads to better understanding of behavior (i.e., greatest good for most people). Such people starting to vote, making people happier , people starting to donate organs

## ➤Deontology

- Violated **informed consent** and **autonomy** — participants had no idea they were being manipulated.

- Even if the outcome was minor, the **method was ethically wrong**.

## ➤ privacy ethics

- Just because data is **public or accessible** doesn't mean it's okay to use it **without notice or consent**.

- **Access ≠ Ethical permission**

- In academia, researchers follow **strict ethical review protocols**.

- Private companies often **don't follow the same standards**, even when collaborating with universities.

- Raises the ethical dilemma: **Whose ethics prevail?** Corporate? Academic?

# PLANNING AND ANTICIPATION:

Conflict of Interest , Mentoring ,Judging value of Research

Mentoring:

- Mentors experience and judgment are necessary for informing the conceptualization of a research project and distribution of responsibility to bring it to function

- Mentors play a leading role in ensuring collegial atmosphere and accoutability for successful collaboration.

- Mentor mentee relationship is defined by an imbalance of power knowledge and expression, Mentor can abuse power by overworking by students, failing give them proper credit and discriminating against them

## What is a Conflict of Interest?

A **conflict of interest** happens when:

- You are supposed to make a fair and objective decision (e.g., in research or peer review), **but** You have a **personal or financial interest** that could influence your judgment (even unintentionally).

> Example: You're reviewing a paper written by a friend, or you're offered money/gifts by someone connected to the research.

## Why This Matters in the Planning Phase:

1. **Planning is when choices are made** about what questions to ask, how to run the study, who to work with, etc.

2. If a scientist already has a conflict of interest at this stage, **those decisions can be biased** — and that can ruin the quality and integrity of the whole research.

3. **Even small things**, like gifts or favors, can unconsciously affect your thinking and behavior, **even if you don't realize it**.

# Judging the value of the Research-

## Key Ethical Questions Scientists Must Ask:

- Is the research **genuinely useful** or valuable?

- Who will **benefit** from the results? (Just the researcher? A company? Society?)

- Could it have **harmful side effects** (e.g., misused technology, environmental damage)?

- Are the reasons for doing it morally justifiable? (e.g., is it okay to do research just for fame, profit, or military use?)

## Why This Matters:

- Scientists often need **funding** (from the government, companies, or donors), and funds are **limited**.

- This creates pressure to **exaggerate** the importance of their work to get support.

- But this raises ethical issues: **Are they being honest? Or overselling?**

- There's a fine line between **reasonable optimism** and **unjustified hype**.

# READING——-

# DOING RESEARCH -

## 1.Objectivity, Inferences & Data Management

- Define valid inferences clearly; avoid cherry-picking data.

- Identify and treat outliers properly — don't discard them to fit expectations.

- Avoid **questionable statistics**, **image manipulations**, or **incorrect referencing**.

- Never cite papers without reading them — this compromises intellectual honesty -—this perpetuates errors (e.g., citing retracted papers).

- poor record-keeping led to accusations of fraud; shows why documentation is essential.

- **Objectivity doesn't mean value-free**: It means **honesty, care, openness, skepticism**, and clear processes that allow **replication**.

## 2.Biases

-

- Biases are often **unconscious**, hard to detect, and can become **normalized**.

- Not all biases are unethical — some are just **untested hypotheses** (e.g., early craniometry).

- But when based on **racist, patriarchal, or discriminatory assumptions**, biases can be dangerous and unjustifiable.

## 3.Self-Deception

- **Self-deception**: Believing your theory is correct and seeing only confirming evidence

- A major threat to ethical science — **not fraud**, but the danger of **wishful thinking**.

- You might unknowingly **see what you want to see**.

- **Example:** Neuroscientists interpreting ambiguous fMRI results to fit expected theories.
- Ethical research emphasizes **methodological integrity** over "right answers".

*Remember: The process matters more than the outcome.*

## 4.Trust and Scientific Community

- Science is **collaborative** — each discovery builds on past work.
- If prior research is careless or dishonest, it **corrupts the whole knowledge system**.
- We rely on each other — so ethical responsibility is collective, not just personal.
- We must act **so that what is true can be verified**.

## 5.Values Embedded in Research Design

- **Models, variables, and metrics aren't neutral.**
- Choosing what to measure and how to measure it **reflects values and priorities**.
- **Ethical objectivity** means:
  - Acknowledge your assumptions.
  - Justify them transparently.
  - Be open to fairer, alternative approaches (e.g., disaggregated models that value African utility equally to North American).

# DISSEMINATION:

- Sharing research findings is essential to the scientific process.
- Involves peer review, authorship, credit allocation, and metrics for evaluating scientific work.
- Created **peer review** to ensure priority and quality.

- Peer-reviewed journals became a mechanism to **reward authors** (via citations) and **disseminate reliable knowledge**.

## laws & Concerns:

- **Insufficient review time** (especially in conferences).
- **No real incentives** for reviewers.
- **Bias and conflict of interest** (e.g., stealing ideas).
- **Lack of accountability** or confidentiality breaches.
- Questions about **who qualifies as a "peer"** (PhD students? nonexper

## Issues:

- **First authorship disputes**, especially when mentors claim it.
- **Collaborative projects** make responsibility unclear.
- Misconduct accountability: who is to blame in large teams?

## 🔄 Self-Citation:

- Acceptable only when **relevant**, not to inflate metrics.

## ❓ Fundamental Questions:

- Who **deserves credit**?
- Should all authors be **held accountable** for the full paper?

## Common Metrics:

- **Number of publications**: easy to count but doesn't show quality.
- **Citation index**: better, but doesn't explain *why* someone is cited.

**Anticipating research** raises issues about the appropriate roles of mentors, identifying potential conflicts of interest, and asking substantive questions about the value of the proposed work.

**Doing research** involves upholding the standards of objectivity. This means upholding norms of honesty, carefulness, and open-mindedness in the interpretation and management of data and critically evaluating assumptions that might be built into research designs. Objectivity is threatened by bias and self-deception and is dependent on trust.

**Disseminating research** poses questions about peerreview and quality control, authorship and allocation of credit, and the appropriate role for intellectual property rights in scientific research. As a globalizing enterprise, scientific research is engaged in a dynamic tensio between diverse local practices and standard, universa principles

# SPOTIFY READING..

## Framed Analysis of Ethical Themes in Emotion-Regulation Music Plugins

The paper explores a speculative feature called *MoodDJ*, an imagined plugin within Spotify that recommends music based on a user's self-reported current and desired emotions, paired with personality inputs. While participants appreciated the potential for emotional support and convenience, they raised profound ethical concerns, which offer significant insights into the sociotechnical implications of embedding emotion-regulation tools in commercial platforms.

## Privacy: Data Collection and Control

Participants voiced deep anxieties over the collection and potential misuse of sensitive emotional and personality data. Concerns spanned targeted advertising, unauthorized third-party sharing, and fears of surveillance capitalism—where user emotions could be mined for profit. Some feared emotion data being displayed in public profiles (e.g., Spotify Wrapped), or being accessible to other users. Even more alarmingly, the risk of such plugins being hacked and exploited for geopolitical or psychological manipulation was explicitly discussed. These insights underscore the urgent need for de-identification, user anonymity, and firm data protection boundaries within such plugins.

## Autonomy: Agency and Algorithmic Influence

Many participants emphasized the importance of maintaining control over the emotional trajectories recommended by MoodDJ. While some welcomed the technology's guidance, they insisted it be user-initiated, with the ability to adjust, skip, or disable the feature entirely. The idea that an algorithm could invisibly steer one's emotional state—especially outside the user's awareness—sparked discomfort. Autonomy, thus, was seen not only as freedom of choice, but as transparency and reversibility of the system's influence on emotion.

## Justice and Fairness: Equal Access and Algorithmic Bias

Participants highlighted risks that some users could benefit disproportionately depending on their music tastes or digital literacy. For instance, those with broader genre preferences might achieve more effective emotion shifts, while others might receive suboptimal results.

Furthermore, concerns around algorithmic favoritism—where popular artists might be unfairly promoted—raised alarms about commercial bias overshadowing therapeutic utility. This reflects broader issues in algorithmic justice where equitable access and diverse representation are essential.

## Dignity: The Stigma of Emotion Modification

The potential to stigmatize certain emotional states—particularly negative ones—was another major concern. Participants warned against a techno-centric model that might implicitly promote positivity at all costs. They emphasized that emotions like sadness, regret, or anxiety serve critical psychological and social functions. A system that discourages or pathologizes these states could undermine mental integrity and encourage emotional suppression rather than regulation. Thus, protecting users' dignity means ensuring all emotions are valid and permissible within the plugin's logic.

## Identity: Manipulation, Profiling, and Public Image

Participants feared that cumulative emotional data could be weaponized to build detailed psychological profiles—potentially impacting how others perceive them or how institutions treat them (e.g., job or housing discrimination). There was concern that such inferred mental health assessments could distort personal

identity or lead to exploitative targeting. Moreover, public exposure of someone's emotional trends—through features like playlist labels—could compromise their sense of self or social image.

## Safety and Psychological Risk

The feature's potential for over-reliance was flagged, particularly among vulnerable users. Concerns included emotional dependency on a technological fix, diminished capacity for natural coping strategies, and the risk of maladaptive rumination if users chose to reinforce negative states. To address this, participants suggested support-service links, regular algorithmic audits, and education on non-digital emotion regulation alternatives. Safety here extended not just to the user but also to others who might passively experience emotionally charged content in shared settings (e.g., speakers vs headphones).

# MODULE -3

Smith, Lingle, and Brock propose an experimental study examining individuals' emotional and psychological reactions to the death of another person, focusing on perceived similarity between the participant and the deceased (a confederate). Sixty female participants will rate similarity to a confederate using a Likert scale after a one-hour interaction. A week later, participants will be told that the confederate has died. The researchers aim to measure emotional responses based on perceived similarity levels.

## a. Ethical Issues – Beneficence, Respect, and Justice:

- **Beneficence**: This principle requires minimizing harm and maximizing benefits. In this study, participants may suffer emotional distress upon learning about the "death" of someone they recently interacted with. This distress might be significant, especially if they perceived the confederate as highly similar. The study lacks direct benefits to participants, raising questions about whether the potential knowledge gained justifies the emotional risks.

- **Respect for Individuals**: Deception is a central concern here. Participants are misled about the purpose of the study and the death of the confederate. While deception can sometimes be justified in psychological research, it must be

necessary, minimized, and followed by a thorough debriefing. Additionally, informed consent must make clear that emotional discomfort may arise—even if the exact nature of the deception cannot be disclosed upfront.

- **Justice**: All participants are female, possibly raising concerns about gender equity unless justified (e.g., to control gender-related emotional response variation). It's essential that selection of participants does not exploit a vulnerable group or impose unnecessary risk on a particular demographic.

## b. Ethical Risks of Learning About Another Person's Death:

- **Emotional Harm**: Participants may experience sadness, grief, shock, guilt, or confusion upon learning about the confederate's death.

- **Lasting Psychological Effects**: Some may carry emotional burdens or even develop trust issues in future research contexts.

- **Breach of Trust**: Deceiving participants about such a sensitive issue might damage their perception of research integrity and reduce willingness to participate in future studies.

## c. Risk Mitigation Strategies:

To ethically conduct the study, the researchers must take several steps:

1. **Pre-screening and Support Access**:

   - Screen participants for vulnerability to emotional distress (e.g., history of recent bereavement, mood disorders).

   - Provide access to immediate psychological support or counseling post-study.

2. **Informed Consent (with partial disclosure)**:

   - While the exact nature of the deception can't be revealed upfront, consent should state that the study might involve unexpected emotional reactions.

3. **Debriefing**:

   - Conduct an **immediate and thorough debriefing** after revealing the false news.

- Explain the purpose of the study, the role of deception, and the confederate's identity as a researcher.

- Allow participants to ask questions and express concerns, and offer a written debrief as well.

# 1. Le Texier (2019) – Debunking the Stanford Prison Experiment (SPE)

## Summary:

- Le Texier re-analyzes the original archives of the Stanford Prison Experiment and interviews participants.

- Finds **numerous discrepancies** between Zimbardo's published accounts and what actually occurred.

- The SPE was **not spontaneous**—guards were **coached**, and much of the structure was **copied** from a prior student-led experiment (Toyon Hall).

- Students were not given an option to out of the experiment and were treated in harsh conditions

- The experimenters exerted **significant influence**, and guards were not even told they were "subjects".

- Zimbardo wrote conclusions in advance for media appeal; data was **biased and incomplete**.

## Major Ethical Takeaways:

- **Deception** of both participants and the public.

- **Lack of informed consent** (guards didn't know they were being studied).

- **Induced harm** without proper oversight.

- **Manipulation of data and narrative** for fame violates academic integrity.

- **Failure of IRB-level responsibility** (power dynamics, harm, coercion were all unchecked).

# 3. Bartels (2015) – SPE in Psychology Textbooks

## Summary:

- A content analysis of 14 introductory psychology textbooks shows that most **fail to critique the SPE**.

- Few mention **methodological flaws**, **participant selection bias**, or **demand characteristics**.

- Most books uncritically present the **"power of the situation"** view, ignoring **critical replications** like the BBC prison study.

## Major Ethical Takeaways:

- **Misrepresentation in education**: Failure to include scientific critiques in textbooks is **ethically misleading** to students.

- **Confirmation bias**: Only presenting dramatic results (SPE) and ignoring contrary replications violates educational responsibility.

- Promotes **flawed research as fact**, affecting public understanding and policymaking.

- Raises issue of **textbook authors' ethical duty** to report nuanced, critical views—not just sensational studies.

# FACILITATED COMMUNICATION

**Facilitated Communication (FC)** is a method introduced to help people with autism communicate. A "facilitator" physically supports the person's hand or arm while they type on a keyboard or point to letters/pictures. The idea is that this support helps them express themselves when they otherwise cannot speak or gesture well.

# Main Ethical Concern

The **core problem** is that scientific studies have not proven FC to be a reliable or independent method of communication. That means:

- There's a **big risk** the facilitator might (even unintentionally) guide or control what is being said.

- This creates a lot of **ethical issues** for psychologists .

### I. Respect for the Dignity of Persons

This principle means psychologists must treat all people fairly, with respect and care for their rights and individuality.

### Potential Benefits of FC (Why people support it)

- **Hope and optimism**: FC made people believe that non-verbal autistic individuals might understand more than previously thought.

- **Self-esteem boost**: If someone is finally able to "communicate," it could raise their confidence and help them integrate better socially.

- **Belief in hidden competence**: Advocates think that many autistic people are smart but unable to show it without FC.

## Ethical Problems

- **Dependency**: FC creates a reliance on a facilitator. The person isn't truly independent, which might lower their real dignity.

- **False assumption of competence**: Just believing someone is communicating doesn't make it true unless proven.

- **"Puppet effect"**: If the facilitator is influencing what's being typed, then the person with autism is not actually communicating—they're being used like a puppet, which disrespects their autonomy.

### Informed Consent Issue

- **Informed consent** means a person must understand what they are agreeing to —especially in therapy, research, or medical treatment.

- Many people with autism may not fully grasp what they're consenting to. If FC is being used and it's not clear who is really speaking, then **the facilitator may be the one giving consent**, not the client.

- In such cases, psychologists are ethically bound to:

  - Involve guardians or parents.

  - Watch carefully for signs of distress.

  - Immediately stop if the person seems unwilling.

## Confidentiality Issue

- Normally, therapy is private. But FC involves another person (the facilitator) physically helping with every message.

- That makes it **impossible to ensure privacy**, because the facilitator hears and sees everything.

- If the client is not truly the one communicating, then the therapist may actually be speaking with the facilitator, **not the client**, which is a serious breach of confidentiality.

## Responsible Caring

This principle means psychologists must always act in the client's best interest and avoid harm.

## ❌ False Hope

- FC gave parents hope that their children could finally communicate—but if that hope is based on **invalid assumptions**, it can lead to deep disappointment.

- If people assume the client is more competent than they really are (based on influenced messages), they may set **unrealistic expectations** that hurt the client's self-esteem.

## Misuse and Misinterpretation

- One of the **biggest risks** is that people have used FC to make **serious accusations**, such as **sexual abuse**, that weren't confirmed later.

- In many cases, studies show that **facilitators were unknowingly guiding the messages** (based on what they heard/saw).

- This has led to:

  - **False accusations**, family separations, and legal action.

  - **Trauma** for families and clients.

  - Undermining the credibility of real abuse claims.

Psychologists must:

- Be extremely cautious.

- Validate the **independence of communication** before taking any messages at face value.

---

Information obtained via FC should not be used to confirm or deny allegations of abuse or to make diagnostic or treatment decisions.