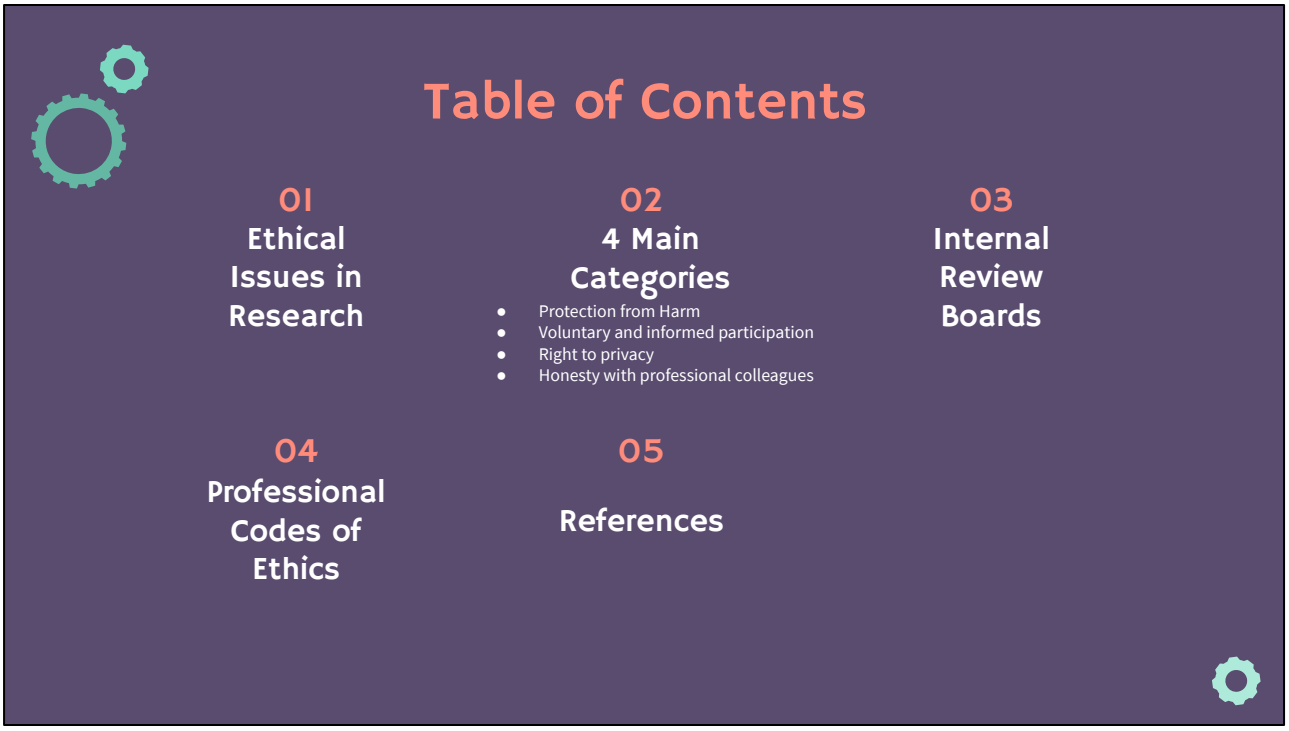
- Welcome to my in class presentation about ethical issues in research
- Our previous ethics class was much fun so why not continue discussing ethics even more?
- We have all learned a lot about research itself working on the research proposal, so the combination of these two is something i was looking forward to work on
- Walk you through the table of contents for this short 15 min presentation



- Ethical issues in research - what does that mean and how does it affect research?
- Most research falls into four categories, so i will guide you through those with specific examples I have come up with
- Then we're going to have a look at the internal review boards
- Followed by the professional codes of ethics
- To then move on to an outlook
- And my references

01

Ethical Issues in Research

Ethical Issues in Research

- Research has improved not only the quality but also the quantity of life
- Means to answer specific questions, rather than collecting data
- How can studies uphold a high standard? - Introduction of Ethics
- What makes a study groundbreaking but is scientifically and ethically justifiable / acceptable?
- EXAMPLE: How ethically handled are studies to test a vaccine for COVID?

- Research is an integral part of where we are at today and has not only improved our lives for the better but also managed to give it more quality and quantity, be it in the fields of medicine, biology, technology and so forth
- I see it as a means to not just collect data but make the data have a meaning and answer specific questions that will progress and improve people or society's life
- Over time, the need to collect data has breached boundaries - how can studies uphold a high standard?
- But also, what makes a study believable, scientifically ethicially speaking?
- This brings me to a very current topic. COVID19. As governments were pushing researchers to find a vaccine, how ethical do you think the studies were being conducted in a phase of high uncertainty around the globe and pressure to find a cure and be the first country to do so?
- This makes my topic so interesting as we will take this example to go through the four main categories of ethical issues in research
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02

4 Main Categories

- Protection from harm: This means that no research participant - be it human or nonhuman animals should be exposed to unnecessary physical or psychological harm. In my COVID research example, this would mean that all participants that will be tested on with the newly-found vaccine should be sure that the benefits outweigh the risk, i.e. if the vaccine is 95% successful the participant will most likely not get COVID 19 (that his potential benefit) but his risk should also not amount to his life. Hence, in the worst case scenario, he will get COVID and experience small side effects and in the best case he will not get COVID at all. Overall, this would lead to advancements in society's collective and should convey a high sense of satisfaction to the participant.
- The next big category is the voluntary and informed participation of human beings: in general, research requires informed consent, as in, they must know the nature of the study and themselves granting a written permission. In case of my COVID example, this means that all participants should be aware of a) how the study is conducted and all risks involved (side effects, etc), b) that they can choose to leave the study without further penalties, c) that after the completion of the study to find a vaccine, they will be informed about the findings (and the accuracy) and of course d) that all info will remain confidential. The trick in this category but not for my covid example, is to give participants enough information to give informed consent but also to not take away the purpose of the research in a sense that participants will behave differently if they knew too much. MRI example testing for Parkinson, told me not to swallow..or move my head..
- Next up is the Honesty with professional colleagues - this is something we all

- know from writing papers - give credit where credit is due! You cannot use another one's findings or fabricate data to support your own conclusion, drawn from someone elses findings. Regarding my covid example, if i were to lead the study for one pharma company but mine isnt the first to get 99% success rate, i cannot claim certain findings with my 90% succesful vaccine and should give credit to my fellow researchers from the other pharma company, referring to their findings and conclusion and give full acknowledgement of such.
- Last but not least, the Right to privacy - it should be respected at all times unless the participant has granted written permission to publish certain information. My COVID example is a great way of explaining why that is important. If were looking at how success rates are measured for vaccines, we know that half of the participants get a placebo vaccine with no active ingredients, whereas the other group will receive the actual vaccine to be tested. If the vaccine is effective, the number of people who fall sick in the vaccine group should be lower than the number of people who get ill in the placebo group. 95% effective vaccine? Pfizer's efficacy analysis featured 170 people who fell sick with Covid-19 in the seven days following the second dose, But it's enough to say the result is statistically significant with a high-degree of certainty. That's because 162 people who fell ill were on the placebo, and only eight were in the vaccine group -- a difference so great it's extremely improbable to come about by chance. An efficacy of 95 percent signifies that the risk of catching Covid-19 is reduced by 95 percent in the vaccinated group compared to the placebo group. And in any case the right to privacy is important to not get the control group and test group mixed up.
- I hope that gave you a good overview of how ethical issues occur in research, lets now move on to discuss internal review boards!

03

Internal Review Boards

Internal Review Boards

Short: IRB

Scrutinizes all proposals for research to ensure appropriate procedures, privacy and anonymity!

Review at proposal stage

Before any data is collected, all proposals must be submitted and approved by the IRB!

Approval required

No study can be conducted without the approval of the board!

- The Internal Review Boards (at university, research institutions) have been put in place to ensure appropriate procedures are taken that respect the participants (human or non-human).
- All proposal for studies need to be reviewed by the IRB and give approval before any data can be collected
- In case of my COVID example, before Pfizer and so forth were able to even do clinical trials, they had to present their research proposal and get approval. Due to the pressure of finding a vaccine, im sure it was quite a fast approval :-)
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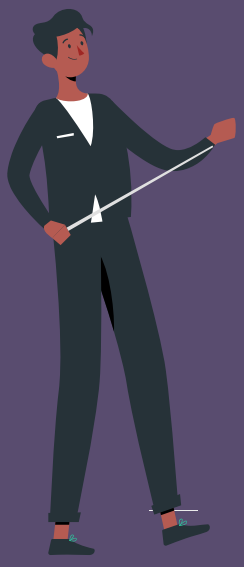
04

Professional Code of Ethics

Professional Code of Ethics

Organisations with their own codes of ethical standards

Governing research on humans and non-humans



04

References

References

- Leedy, P. D., & Ormrod, J. E. (2015). Chapter 4. In *Practical Research: Planning and Design, Global Edition.* Boston: Pearson.