Research Ethics

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Senior Lecturer, FTMK | UTeM Press

Education

- PhD (Interactive Media)
- MSc (Multimedia System)
- BIT (Artificial Intelligence)
- Diploma in Education

Career

- Senior Lecturer (2003-present)
- Director- UTeM Press (2019-2022)
- Program Manager-Life Long Learning Centre (2018-2019)
- Research Group Leader (2018-2019)
- President AKRAB (2017-2018), Secretary KAUTeM (2019-present)
- Head of Research & Innovation Unit (2014-2015)
- Head of Programme (2007-2011)
- Consultant | Programmer | Freelancer (Since 2002)

"Deliver More Than 100 Workshop & Training As Invited Speaker/ Trainer/ Advisor. Published More Than 100 Journals, Proceeding, Books, Book Chapter, MOOC, OCW, Ebook, Ibook, Creative Book, Article, IP etc.

Honors

- The Best UTeM OCW Award (2019)
- Candidate Anugerah Akademik Negara (2018)
- The Most Active UTeM MOOC Award (2018)
- Anugerah Akademik Universiti (2017)
- Anugerah Perkhidmatan Cemerlang (2016, 2008)
- Anugerah Gemilang Akademik JPPKK (2015)

Also received - 9 Special Awards, 5 Teaching Awards, 30 Innovation Awards, 8 Service Awards

Professional

- Certified HRDC Trainer
- Adobe Campus Leader
- Adobe Creative Educator
- Microsoft Innovative Educator Trainer
- Microsoft Office Specialist Master
- Microsoft Teams Coach
- Digital Storytelling with Ms. Sway
- Adobe Certified Expert
- Oracle Academy: Database Design & Programming with SQL | CCNA etc.

Expertise

21st Century Educational Tools | Gamification | MOOC | Augmented Reality | Virtual Learning | Adaptive Learning | Game Design | Game Development | MOS | E-Learning | M-Learning | Digital Teaching Portfolio | Multimedia Application | I-Book | e-Book | Wearable Technology | Instructional Design | Edutainment | Digital Storytelling | Alternative Assessment etc.

CREATIVE EDUCATOR | *UTEM*

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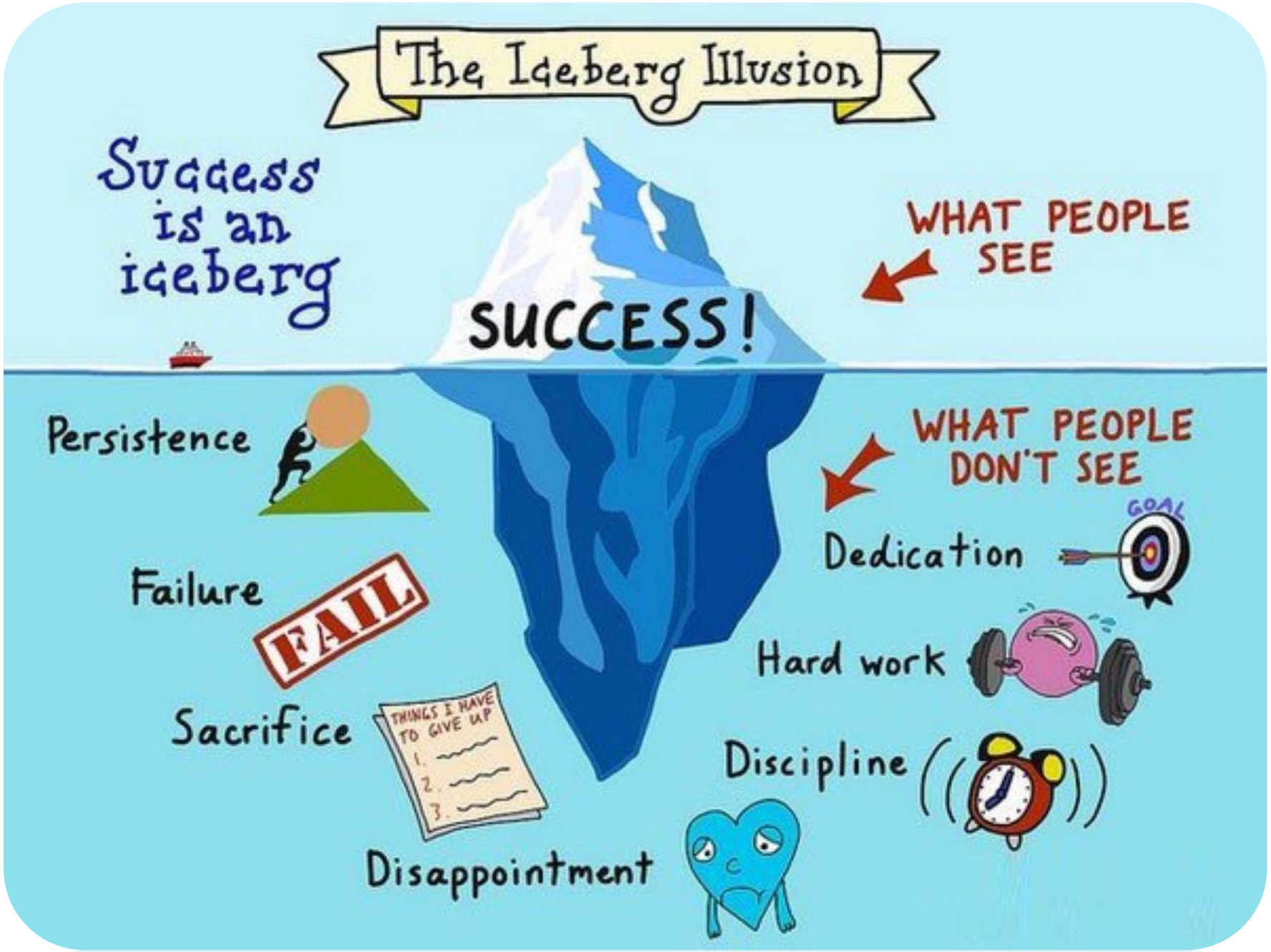
PhD Journey

https://medium.com/@AceGreen1989/the-iceberg-illusion-what-people-see-vs-what-they-dont-see-d56dd464d5b



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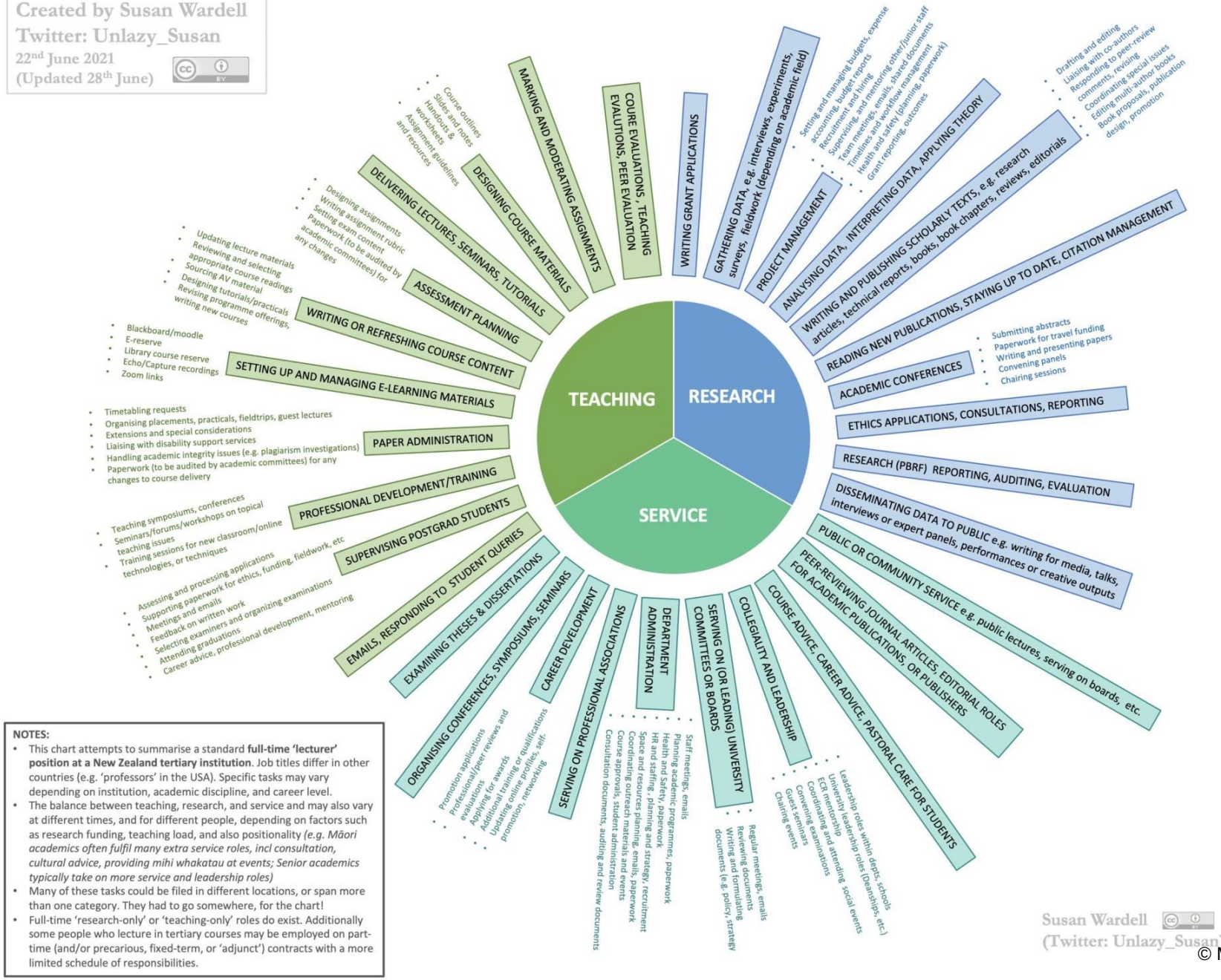
Consultation

ACADEMIC LIFE: WHAT DOES A "LECTURER" DO?

Created by Susan Wardell
Twitter: Unlazy_Susan
22nd June 2021
(Updated 28th June)



NOTES:

- This chart attempts to summarise a standard **full-time 'lecturer' position at a New Zealand tertiary institution**. Job titles differ in other countries (e.g. 'professors' in the USA). Specific tasks may vary depending on institution, academic discipline, and career level.
- The balance between teaching, research, and service and may also vary at different times, and for different people, depending on factors such as research funding, teaching load, and also positionality *(e.g. Māori academics often fulfil many extra service roles, incl consultation, cultural advice, providing mihi whakatau at events; Senior academics typically take on more service and leadership roles)*
- Many of these tasks could be filed in different locations, or span more than one category. They had to go somewhere, for the chart!
- Full-time 'research-only' or 'teaching-only' roles do exist. Additionally some people who lecture in tertiary courses may be employed on part-time (and/or precarious, fixed-term, or 'adjunct') contracts with a more limited schedule of responsibilities.

Susan Wardell
(Twitter: Unlazy_Susan)

Involves the application of fundamental ethical principles to planning, conduction and publishing of research

Deepthi (2000)

Code of Ethics

What Is a Code of Ethics?

A code of ethics is a guide of principles designed to help professionals conduct business honestly and with integrity.

A code of ethics, also referred to as an "ethical code," may encompass areas such as business ethics, a code of professional practice, and an employee code of conduct.

https://www.investopedia.com/

Meaning of Ethics

Similar to moral commitment but not identical

Lack of moral commitment might lead a person to act unethically, and some one with moral commitment might still act unethically if he became under pressure to do so.

Derived from the Greek *ethos,* meaning character, custom, or usage, or morality (from the Latin synonym meaning manner, custom or habit), is the philosophical study of normative behavior, the “shoulds” and “oughts”, the”rights” and “wrongs” of our conduct.” (Penslar, 1995).

Ethics –moral principles of right and wrong – not absolute; may vary by person, by time, by place – and may be in competition with each other

Research Ethics

Incorporating ethical principles into research practice –may involve a balance between and within principles and practices – all stages, all those involved, from inception of research through to completion and publication of results and beyond

What You Research
How You Research
What You Do With Research

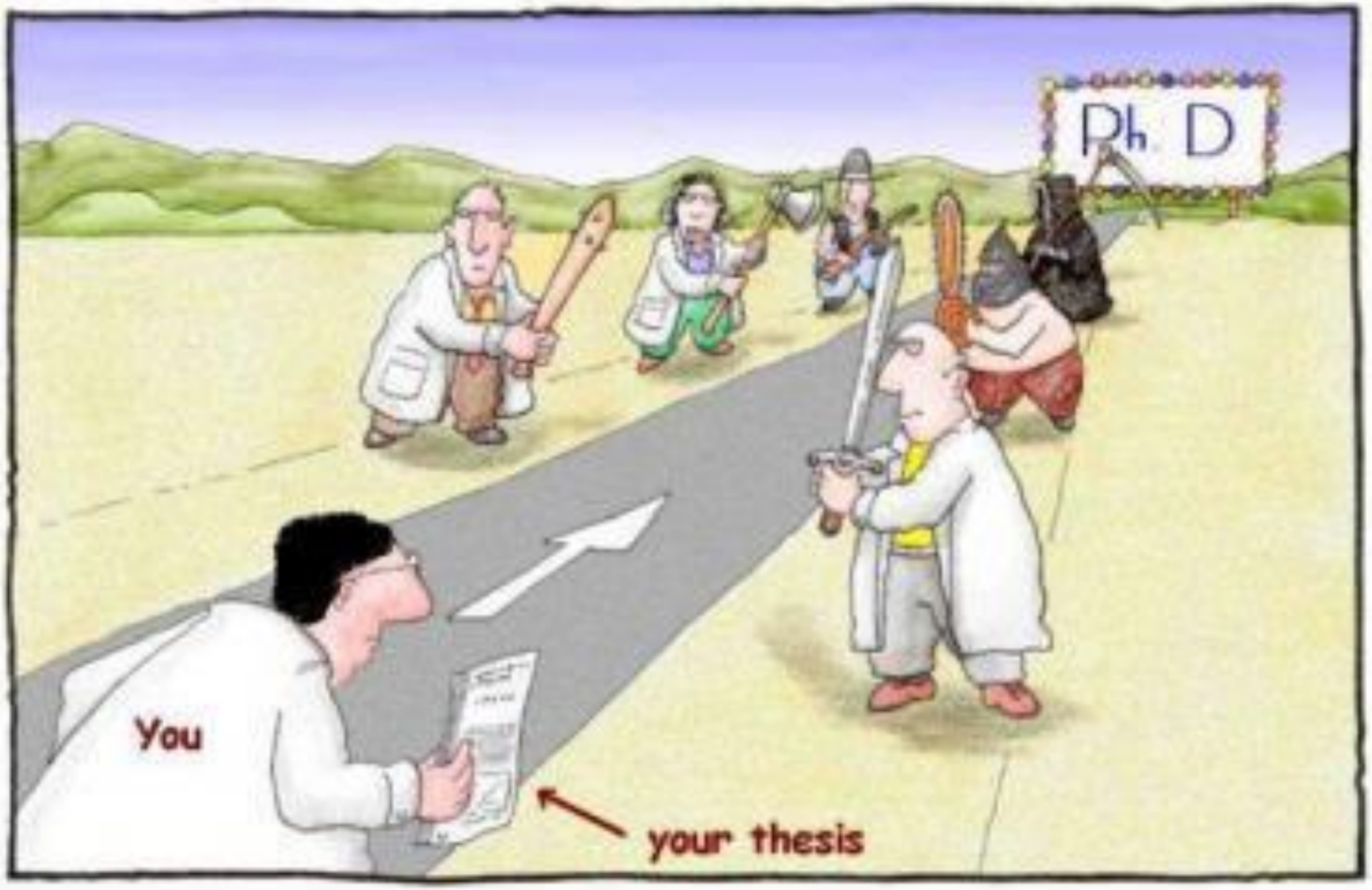
https://www.investopedia.com/

Why should there be research ethics?

- To protect participants /patients /society /resources /researcher?
- To ensure accuracy of scientific knowledge
- To protect intellectual and property rights

Ethical Issue

- Problem Formulation
- Literature Review
- Product
- Methodology
- Publication
- Visibility
- Result and Analysis

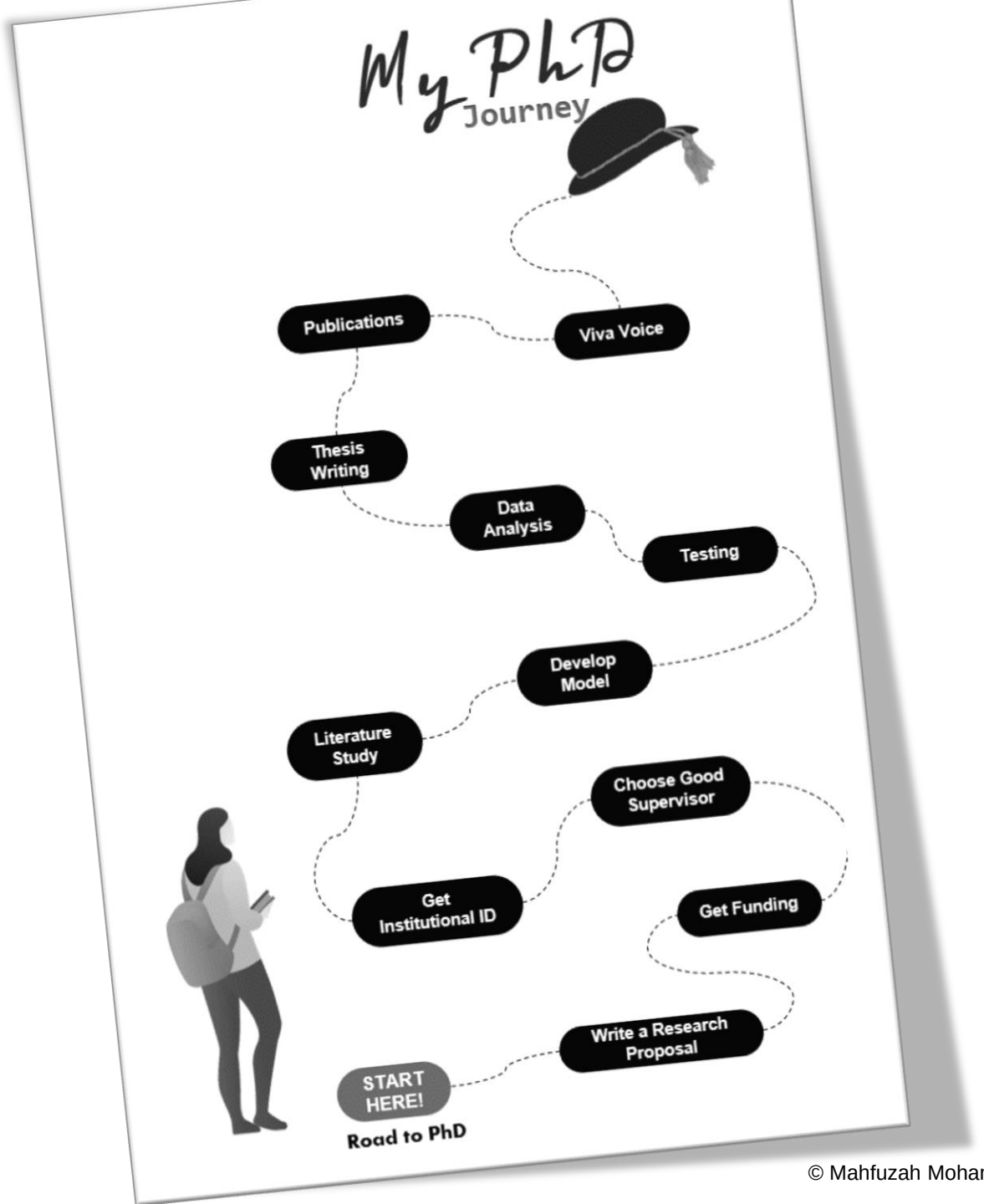


https://prabash78.wordpress.com/2015/11/01/becoming-a-successful-phd-student-self-reflections-from-a-three-year-journey/

02

Planning

My PhD Journey



Writing Research
Proposal

Q1

Is it an original topic?

Q2

Do you need research partner?

Q3

What type of research is it?

Submission of Research Proposal

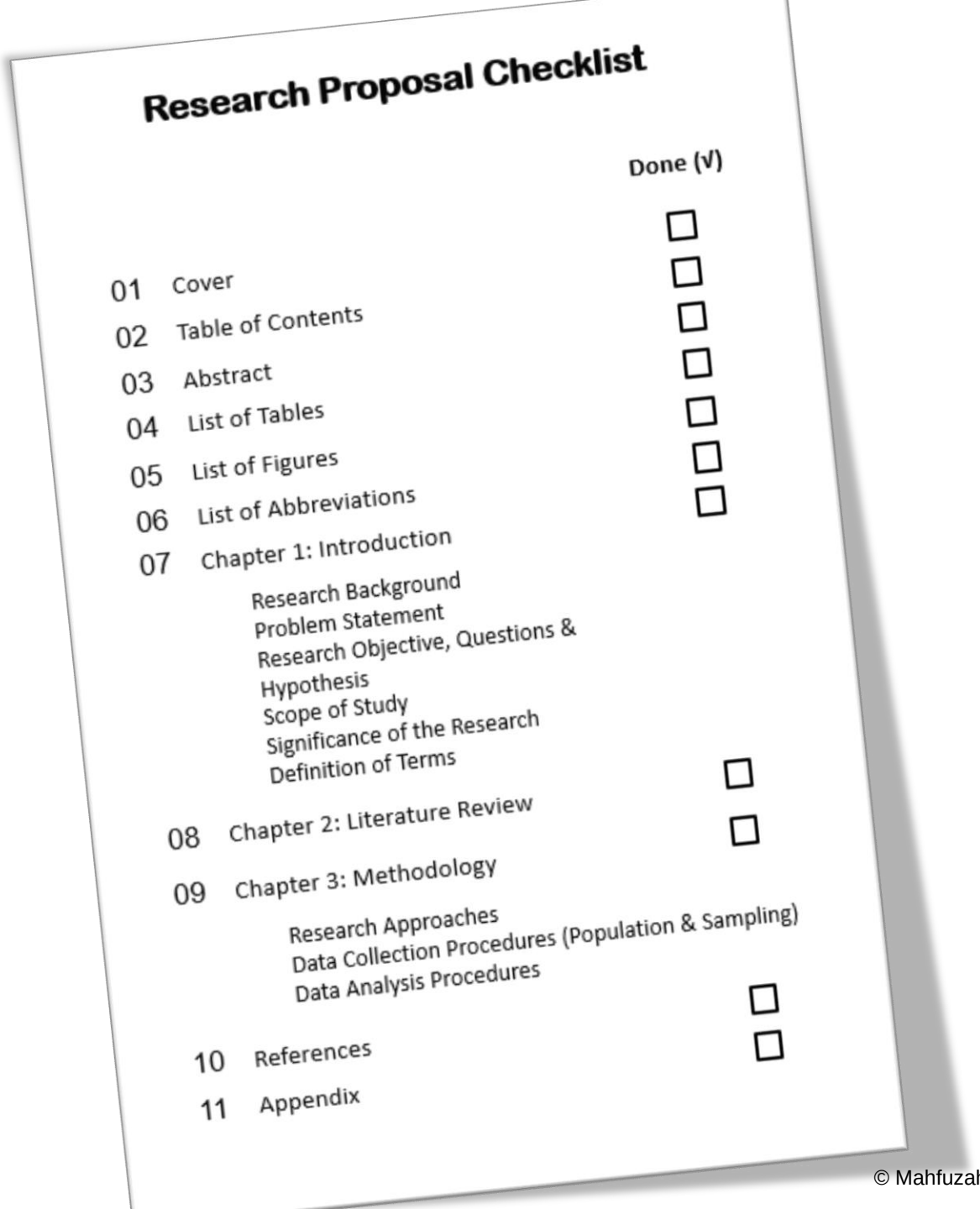
Q1

Do you send it thru' the right channel?

Q2

Does it conform to the rules and regulations?

Research Proposal Checklist



Research Proposal Checklist

		Done (√)
01	Cover	☐
02	Table of Contents	☐
03	Abstract	☐
04	List of Tables	☐
05	List of Figures	☐
06	List of Abbreviations	☐
07	Chapter 1: Introduction Research Background Problem Statement Research Objective, Questions & Hypothesis Scope of Study Significance of the Research Definition of Terms	☐
08	Chapter 2: Literature Review	☐
09	Chapter 3: Methodology Research Approaches Data Collection Procedures (Population & Sampling) Data Analysis Procedures	☐
10	References	☐
11	Appendix	

Principle Investigator (PI) Roles and Responsibilities

- Responsible for the success and failure of the project
- Responsible for complete the project on time
- Integrity of data/ inspection of records
- Number of quotations based on the price of the instrument
- Instruments purchased must be listed in the original proposal
- Avoid high percentage of virement
- Aware of the deadline for project reports

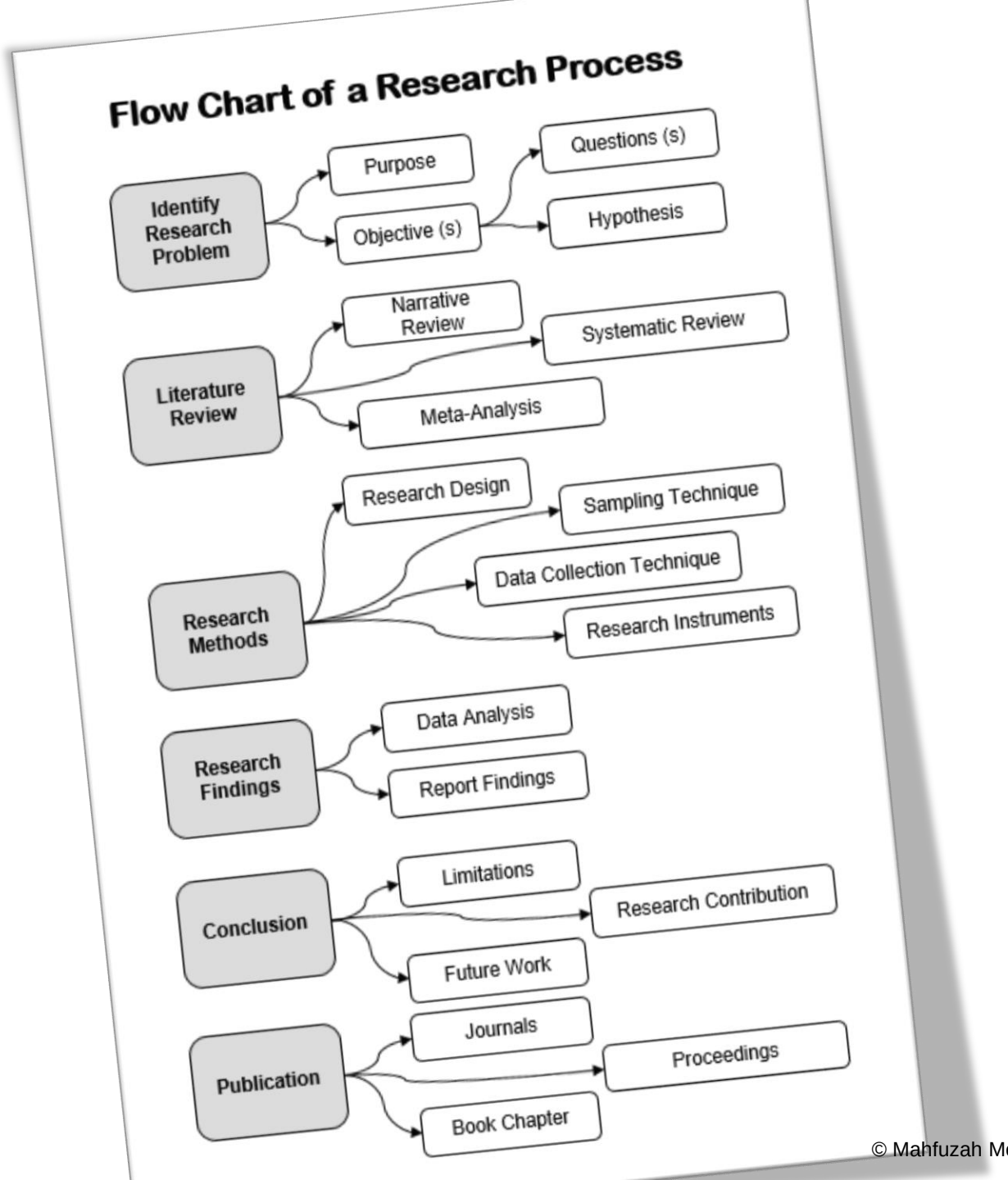
“DO WHAT IS RIGHT,
NOT WHAT IS EASY”

acmemag.net

03

Conduct

Research Process



Ethical Principles that Guide Research

01

HONESTY

Researchers ought to honestly report data and results of the study, including the methods and procedures employed in data gathering as well as publication status.

Researchers should **NOT** falsify **fabricate** and **misrepresent** data and results

Data Gathering

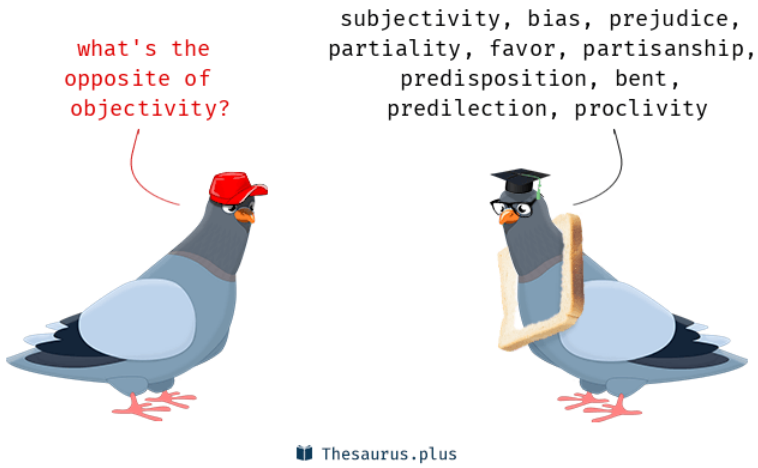
- Collecting data from participants **who are not complying** with requirements of the study
- Using **faulty equipment**
- **Treating** participants inappropriately
- Recording **data incorrectly**
- Most important and most aggravating.

- Treat subjects with respect and dignity.
- Record data accurately.
- Fix **broken equipment**.
- Always drop non-compliers.
- Store data in a safe and private place for 3 years.

Voluntary Participation

- Subjects must agree to reveal information about themselves.
- Subjects must be able to provide informed consent.
- Behavior observed in public settings is assumed to imply agreement to being observed.
- Subjects contacted after being observed in a public setting must be informed they were observed in a public setting.

Ethical Principles that Guide Research



02

OBJECTIVITY

Researchers should uphold objectivity and scientific rigor at all time.

Researchers should strive to avoid all forms of bias in research such as bias in experimental design, data analysis and interpretation, peer-review process, grant writing and other aspects of research.

Ethical Principles that Guide Research

03

CONFIDENTIALITY

Researchers should always uphold the principle of confidentiality.

One way of effectively doing this is to protect confidential communications, such as papers or grant submitted for publications, patient records.

3. Reviewers Responsibilities

Confidentiality: Manuscript reviewers, the editor, and the editorial staff must not disclose any information regarding submitted manuscripts. All submitted manuscripts are to be treated as privileged information.Editors should provide guidance to reviewers on everything that is expected of them including the need to handle submitted material in confidence.

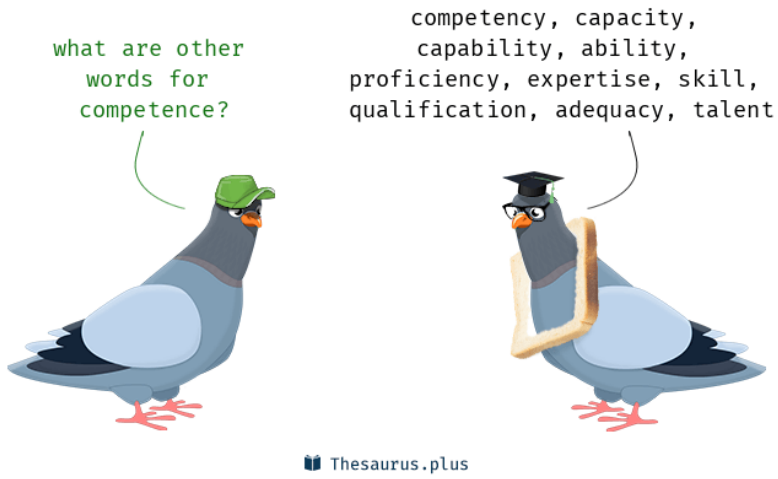
Acknowledgement of Sources: Reviewers must ensure that authors have acknowledged all sources of data used in the research.Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation. A reviewer should also call to the editor's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

Standards of Objectivity: Review of submitted manuscripts will be conducted objectively. The reviewers shall express their views clearly, with supporting arguments. Personal criticism of the author is inappropriate.

Promptness: If a reviewer believes it is not possible for him/her to review the research reported in a manuscript within the designated guidelines, or within stipulated time, he/she should notify the editor, so that the accurate and timely review can be ensured.

Conflict of Interest: All reviewers should have no conflict of interest with respect to the research, the authors and/or the funding bodies.

Ethical Principles that Guide Research



04

COMPETENCE

Researchers are supposed to be knowledgeable and experts in their own discipline or field of specialization.

Researchers ought to maintain and improve their professional competence and expertise through life-long education and learning.

Ethical Principles that Guide Research

05

INTEGRITY

Researchers ought to keep their promises and honor agreements, such as agreements with donors and research participants.

Researchers need to strive for consistency in thought and action.

Ethical Principles that Guide Research

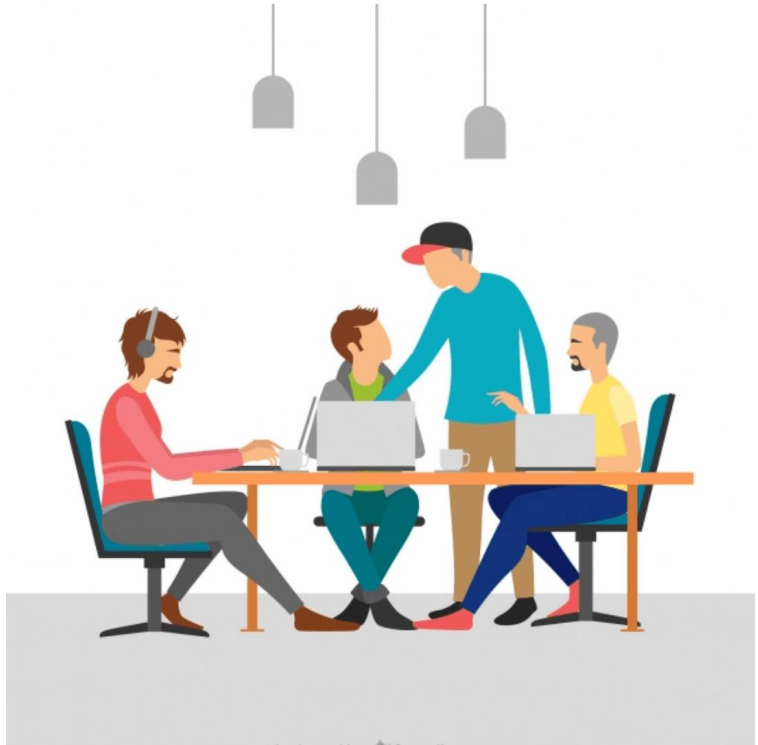
06

LEGALITY

Researchers always has a legal dimension.

Researchers ought to obey laws and relevant institutional and governmental policies.

Ethical Principles that Guide Research



07

MATURITY AND OPENNESS

Knowledge is supposed to be free.

Researchers must willingly share data, results, ideas and resources.

They must be open to constructive criticisms and new ideas.

Ethical Principles that Guide Research

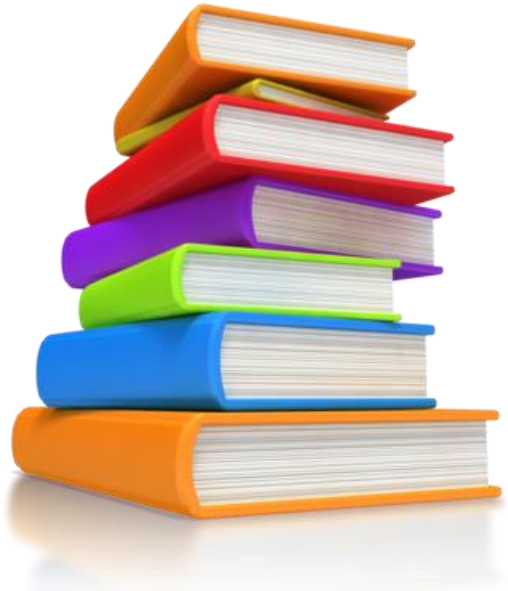
08

RESPECT FOR INTELLECTUAL PROPERTY

Researchers ought to honor copyrights, patents and other forms of IP.

Researchers should not use methods, data and results owned by other researchers or scholars without permission or proper acknowledgement.

Ethical Principles that Guide Research



10

RESPONSIBLE PUBLICATION

Researchers need to publish in order to advance knowledge and scholarships and not just to advance one's own career

Researchers also need to avoid wasteful publication, such as publishing in predatory journals and duplicative publication

http://sersc.org/journals/index.php/ijast

Journal Paper Publication Policy

- The publication will not be an Open Access repository (Effective January 2017).
- A maximum of thirty-nine (39) papers will be included in every journal issue (effective April 2013).
- Multiple submission of the same paper on different journal submission will all be discarded (effective January 2017).
- Paper title, author and corresponding author(s) names should be the same to the submitted paper and on the submission system (effective January 2017).
- Each paper should only have one (1) corresponding author and cannot be changed (effective April 2013).
- If plagiarism problem was found, all authors including the corresponded authors cannot submit paper(s) to our journal for three years.
  The paper will be removed even though it was already published, and this will be noticed on the home page (effective April 2013).
- If double submission was found, all authors including the corresponded authors cannot submit paper(s) to our journal for three years.
  The paper will be removed even though it was published, and this will be noticed on the home page (effective April 2013).
- Only paper(s) containing simulation, implementation, case study or other evidence of research advancement will be published.
  Ideal paper can be published after the editorial board grants permission after reviewing the paper (effective April 2013).
- Papers from one country cannot exceed 60% in every journal issue; it will be based by the first authors' nationality (effective July 2014).
- Only one (1) paper from same author can be included in each issue regardless of role and order (effective July 2014).
- SERSC DOES NOT ALLOW ANY AGENTS FROM CHINA to act on our behalf in collecting papers for our journals. SERSC have standard procedures in publication of submitted papers.

Ethical Principles that Guide Research

11

NON-DISCRIMINATION

Researchers ought to avoid all forms of discrimination against colleagues and students on the basis of sex, race, ethnicity and other factors that are related to their scientific competence and integrity.

Senior researchers need to help educate, mentor and advise students, they have to promote the welfare of their students and allow them to make their own decisions.

Ethical Principles that Guide Research

Human Subjects Protection (HSP)

12

HUMAN SUBJECTS PROTECTION

Researchers should respect human dignity, privacy, and autonomy at all times.

When conducting research on human subjects, researchers should take precautionary measures to minimize, if not completely avoid, harms and risks.

Ethical Principles that Guide Research

13

ANIMAL CARE/ ANIMAL RIGHTS

Researchers should respect animal rights at all times

Researchers should NOT conduct unnecessary or poorly designed animal experiments.

Ethical Principles that Guide Research

Social Responsibility

14

SOCIAL RESPONSIBILITY

Researchers should conduct research not only for the advancement of their career but for the good of society as a whole.

Researchers should strive to promote social good and mitigate social harms.

Scientific Misconduct

- **Fraud** : invention/fabrication of data
- **Plagiarism** : copying data, ideas, text without acknowledgement of source
- **Piracy** : infringement of a copyright
- **Submitting/Publishing** the same paper to different journals
- **Not informing** a collaborator of your intent to file a patent in order to make sure that you are the sole inventor
- **Including a colleague as an author** on a paper in return for a favor even though the colleague did not make a serious contribution to the paper
- **Trimming outliers** from a data set without discussing your reasons in paper

5. Penalties

Double Submission: If double submission was found or noticed from other sources, editorial board should check the status. If the double submission was confirmed as intentional thing,

- Review process will be terminated.
- The reason should be sent to reviewers, editorial board and authors.
- All authors' name will be marked as black list, and these authors cannot submit any paper to all SERSC journals for three years.

Double Publication: If double publication was found or noticed from other sources, editorial board should check the status. If the double publication was confirmed as intentional thing,

- This will be reported to editorial board and author(s).
- This will be sent to publisher published same (or very similar) paper.
- Paper will be removed according to the "Removal" part in Section 4.
- All authors' name will be marked as black list, and these authors cannot submit any paper to all SERSC journals for three years.

Plagiarism: If plagiarism (including self-plagiarism) was found or noticed from other sources, editorial board should check the status. If the plagiarism (including self-plagiarism) was confirmed as intentional thing,

- This will be reported to editorial board and authors.
- This will be sent to publisher published same or similar paper.
- Paper will be removed according to the "Removal" part in Section 4.
- All authors' name will be marked as black list, and these authors cannot submit any paper to all SERSC journals for five years.

Scientific Misconduct

- Using an inappropriate statistical technique in order to enhance the significance of your research
- Bypassing the peer review process and announcing your results through a press conference without giving peers adequate information to review your work
- Conducting a review of the literature that fails to acknowledge contributions of others
- Stretching the truth on a grant application in order to convince reviewers that your project will make a significant contribution to the field
- Giving the same research project to two graduate students in order to see who can do it the fastest
- Overworking, neglecting, or exploiting research students

Scientific Misconduct

- **Making derogatory comments and personal attacks in your review of author's submission**
- **Making significant deviations from the research protocol approved by the Review Board without informing the committee**
- **Not reporting an adverse event in a human research experiment**
- **Wasting animals in research**
- **Exposing students and staff to biological risks**
- **Rejecting a manuscript for publication without even reading it**
- **Sabotaging someone's work**
- **Rigging an experiment so you know how it will turn out**
- **Deliberately overestimating the clinical significance of a new drug in order to obtain economic benefits.**

04

Publish

Writing Report and Publications

Q1

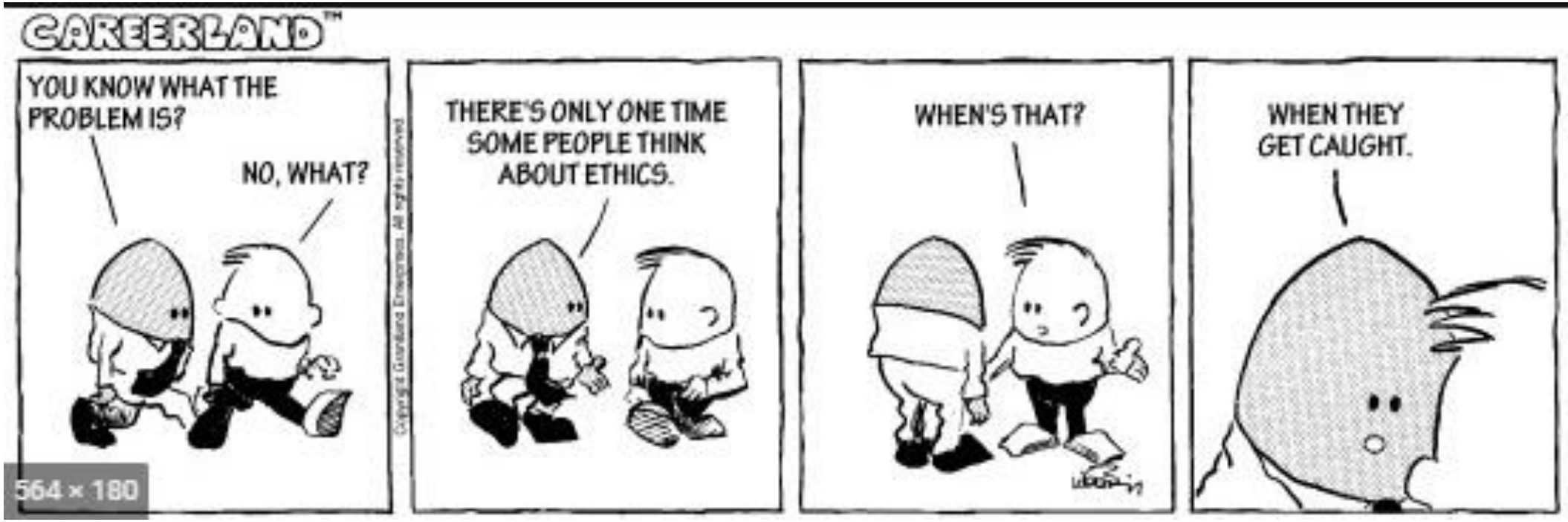
Do you write the report yourself?

Q2

Have you acknowledged contributions from others?

Ethics
Supervisor vs Students

- Authorship
- Many Supervisors ..
- Affiliation
- Case Study
  - Signing Progress Report
  - Selling Degree….



- The question of whether and in what way students are allowed to participate in research.
- Students participating in research for credits should be given the fair alternative of either special projects, brief reports, or brief quizzes for extra readings .
- Misleading authorship—who should be an author?

2. Author's Responsibilities

Reporting Standards: Authors should precisely present their original research, as well as objectively discuss its significance. Manuscripts are to be edited in accordance to the submission guidelines of the proceedings.

Originality: Authors must certify that their work is entirely unique and original.

Redundancy: Authors should not concurrently submit papers describing essentially the same research. Submitting the same paper to more than one journal constitutes unethical publishing behavior and is unacceptable.

Acknowledgement of Sources: Author(s) should acknowledge all sources of data used in the research and cite publications that have influenced their research.

Authorship of the Paper: Authorship should be limited only to those who have made a significant contribution to conceiving, designing, executing and/or interpreting the submitted study. All those who have significantly contributed to the study should be listed as co-authors. The corresponding author should also ensure that all the authors and co-authors have seen and approved the final submitted version of the manuscript and their inclusion as co-authors.

Data Access and Retention: Authors should retain raw data related to their submitted paper, and must provide it for editorial review, upon request of the editor.

Fundamental errors in published works: When an author discovers a significant error or inaccuracy in his/her submitted manuscript, the author must immediately notify the editor.

Registration of Intellectual Properties

Q1

Do you protect your IP?

Q2

Do you reveal everything?

Closing
Research Project

Q1

Have you submitted your final report?

Q2

Do you report all your findings?

05

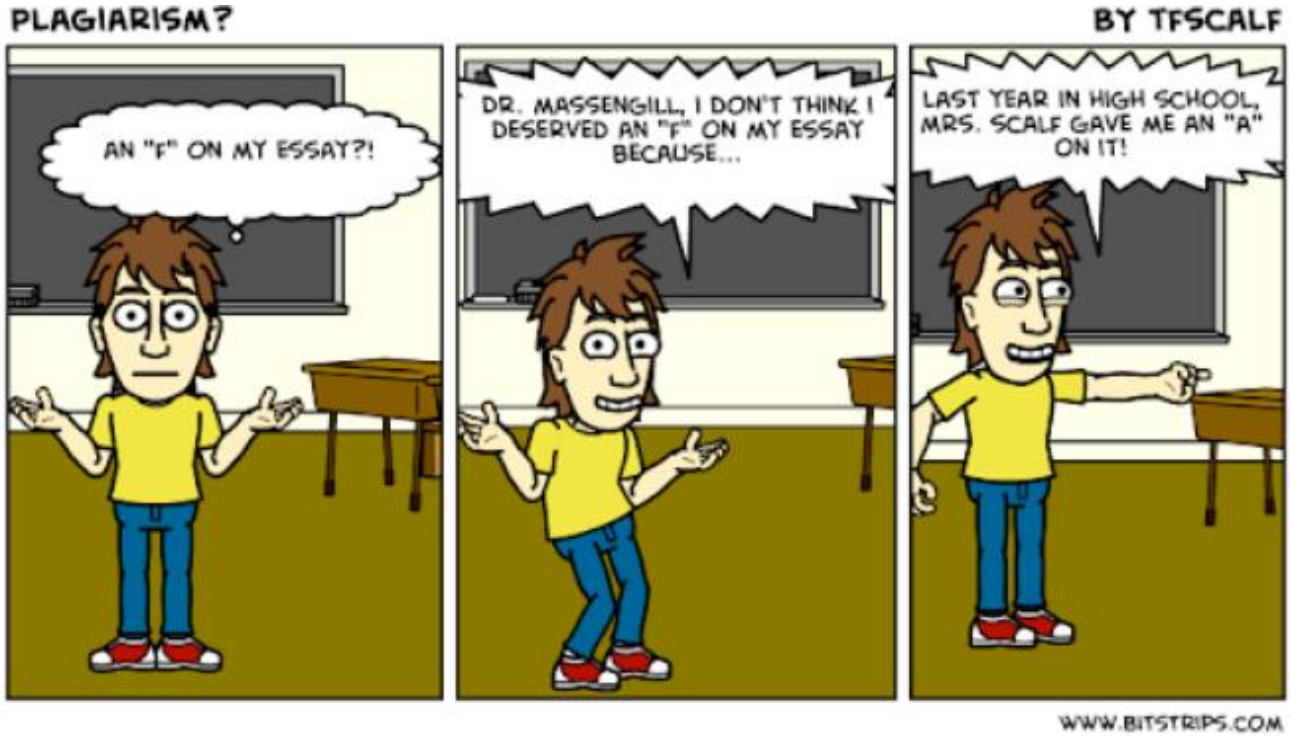
Case Studies

https://miro.com/welcomeonboard/H8DWDjF6mor42VeR8kfTg255XsrxUQO54ILh2eybxZ5lKzYcKGwydzPd3V8ln8jp

Case Studies 01

Students are required to prepare a research proposal during their undergraduate program. Aiman developed the idea for his project and discussed with a friend. Several months later, he found that his idea had been submitted as a research proposal by his friend without his knowledge.

- **Unethical as failure to give credit to the person whose idea it is (intellectual property) amounts to plagiarism**



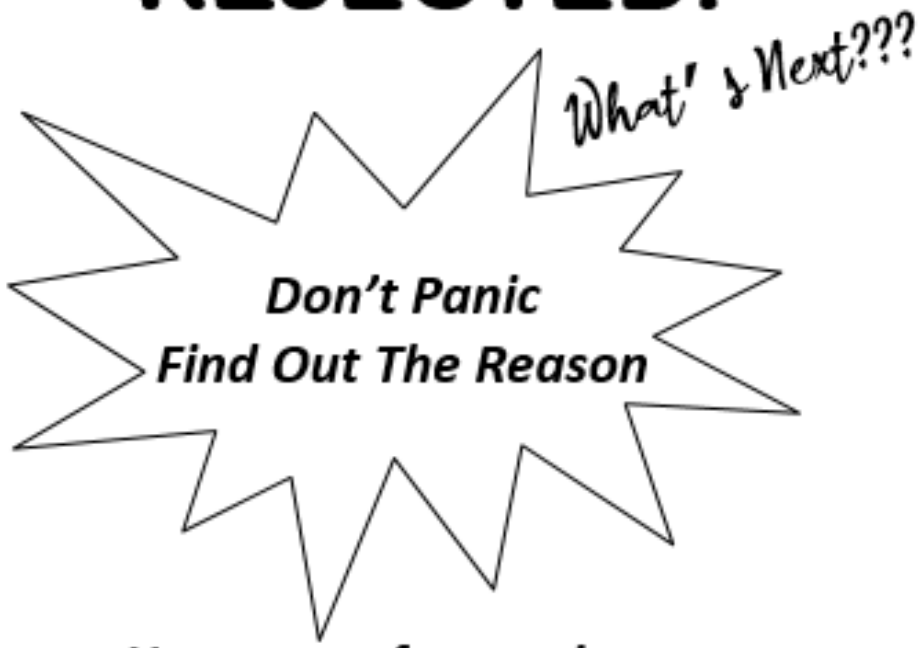
- **Should discuss and include as co-author**

Case Studies 02

A group of medical students conducted a research on the awareness of diabetic diet in medical clinic participants. Their research was recognized as the best undergraduate research and later they submitted the same research paper to two different journals to see which journal publishes it first.

- **Unethical as it would result in "inadvertent double-counting or inappropriate weighting of the results of a single study, which distorts the available evidence**
- **it would give a false idea of the number of publications in a given area**
- **wasting of resources on the review and publication process**
- **Should submit to one journal and wait for response prior to submitting to another**
- **Should not duplicate publications and submissions**

MY PAPER GOT REJECTED!



Here are a few options:

Resubmit A Revised Manuscript to the Same Journal

Submit A Revised Manuscript to Another Journal

Submit the Unchanged Manuscript To Other Journal

Submit to Conference with Journal Publication

Publish A Book Chapter

Case Studies 03

Four friends decide to work together on a research project during the vacation. One of them went abroad during the vacation and did not contribute to the research. The friends include all 4 names in a presentation made at a scientific congress.

- **Unethical as only those who contributed intellectually should be cited as authors**
- **Those who contribute in other ways may be acknowledged**

Authorship

- ❑ **Credit for one's effort and contributions is allocated.**
- ❑ **Who should be the author and in what order should the authors be listed?**
- ❑ **More than one author , how will the responsibility and the contribution be distributed ?**
- ❑ **"Authors are those who made a significant scientific contribution to the original, new information that is the core of the paper" (Stern, 1997)**
- ❑ **Should technicians, secretaries, programmers be considered authors ? Why ? Or why not?**
- ❑ **Authorship is contribution and responsibility to the final product.**
- ❑ **Must be able to take public responsibility for the contents of the paper**
  - Why and how observations were made, and how conclusions follow from the data.

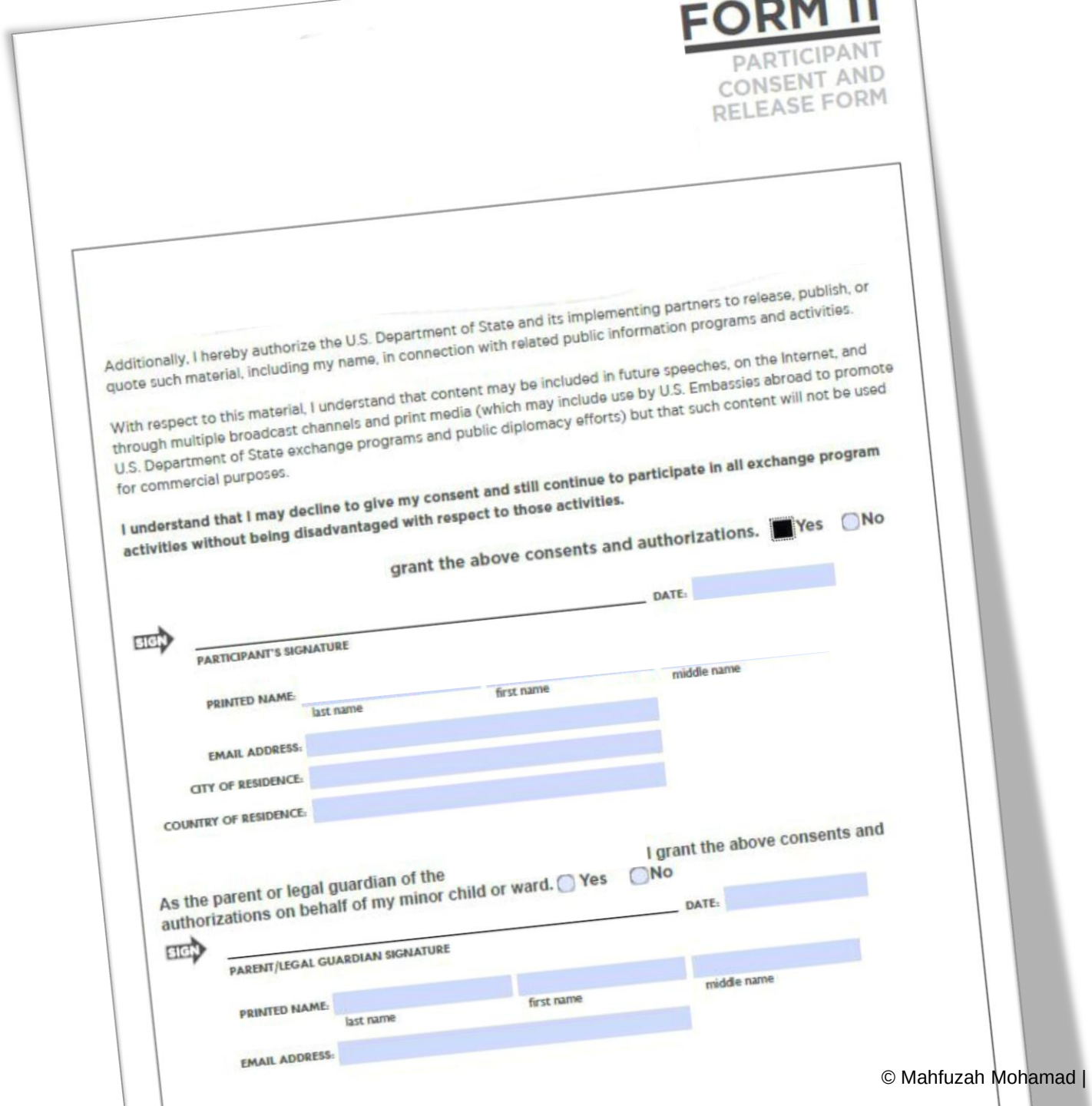
Case Studies 04

A group of undergraduate students planned a research project on the detection of fetal abnormalities in the second trimester, by ultrasound scanning. They collected data from the scan room without informing the mothers.

No Informed Consent

- **Unethical as informed consent was not taken**
- **Should have informed mothers of their intent even though there is no particular advantage/ disadvantage to the mother in doing so**

Consent Letter



FORM 11

PARTICIPANT CONSENT AND RELEASE FORM

Additionally, I hereby authorize the U.S. Department of State and its implementing partners to release, publish, or quote such material, including my name, in connection with related public information programs and activities.

With respect to this material, I understand that content may be included in future speeches, on the Internet, and through multiple broadcast channels and print media (which may include use by U.S. Embassies abroad to promote U.S. Department of State exchange programs and public diplomacy efforts) but that such content will not be used for commercial purposes.

I understand that I may decline to give my consent and still continue to participate in all exchange program activities without being disadvantaged with respect to those activities.

I grant the above consents and authorizations. ■ Yes ☐ No

SIGN _____ DATE:

PARTICIPANT'S SIGNATURE

PRINTED NAME: last name first name middle name

EMAIL ADDRESS:

CITY OF RESIDENCE:

COUNTRY OF RESIDENCE:

As the parent or legal guardian of the minor child or ward, I grant the above consents and authorizations on behalf of my minor child or ward. ☐ Yes ☐ No

SIGN _____ DATE:

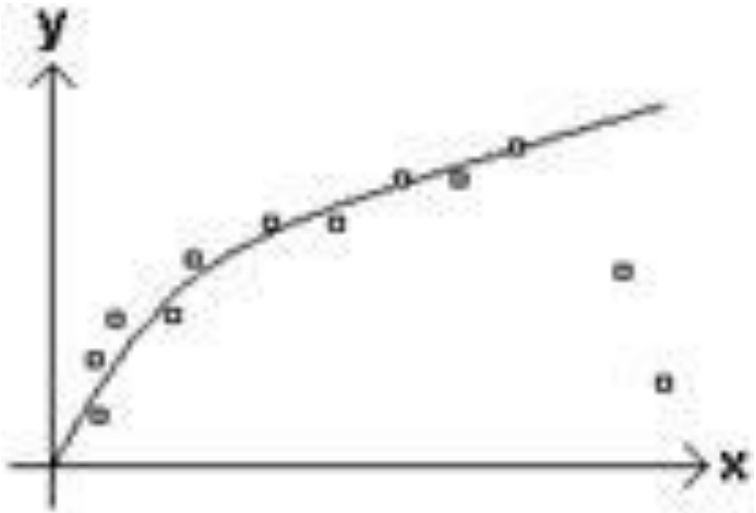
PARENT/LEGAL GUARDIAN SIGNATURE

PRINTED NAME: last name first name middle name

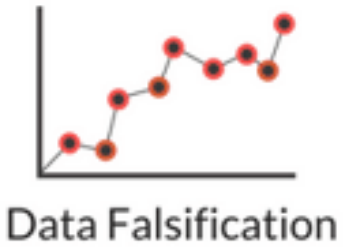
EMAIL ADDRESS:

Case Studies 05

Two graduate students have made some measurements on a new material. The data points are as shown. To prove their hypothesis the results should lie on the curve shown. The two students considered omitting the two data points which were off the theoretical curve.



Unethical as it would amount to falsification of data



Should include outliers and give probable reasons or find out statistically acceptable ways of trimming outliers

Case Studies 06

A group of undergraduate students collected data from a group of bank officers, with their consent, regarding their working hours and salary with regards to the prevalence of high blood pressure. Subsequently the researchers gave the same data to another group who were in need of same data variables.

No Permission for
Data/Information Usage

- **Unethical as violating principles of consent and confidentiality**

- **Data can be used for a secondary purpose which was not first considered as long as**
  - **informed consent for sharing has been given**
  - **identities anonymised**
  - **due consideration to access restrictions**

Expert Reviewer Consent Form

The objective of Expert Review:

To conduct expert validation on the proposed _____ model. The output of the expert review will be used to improve the proposed model.

Items for Review:

Correctness/ appropriateness of the proposed component and elements of the model. If the proposed construct, items and questionnaire are not relevant/ inappropriate, please comment and provide suggestions accordingly.

Expert/Reviewer Details

Name : _____

Area of expertise : _____

Years of experience : _____

Affiliation : _____

Position : _____

Expert Consent

I volunteer to be an expert reviewer to validate the components/ elements/ questionnaire of _____ model proposed by _____ from the Faculty of _____.

I understand this is an information-gathering process and the comments given will be used to improve the proposed model.

I understand that no part of the proposed model may be reproduced, stored in a retrieved system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without prior permission from the researcher and her supervisory committee.

I understand that the researcher will not identify me by name in any report using information obtained from this review. My confidentiality as a participant in this study remains secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

I understand that this study has been reviewed and approved by the Faculty of _____.

I have read and understood the explanation provided. I have had all questions answered to my satisfaction and voluntarily agreed to participate in this study.

_____ _____

Name and Official Stamp **Signature/ Date**

Do you have any questions?

“A DREAM DOESN’T BECOME REALITY THROUGH MAGIC; IT TAKES SWEAT, DETERMINATION AND HARD WORK”

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