

Thursday, Week 2

2b Answer questions related to the Ethical Guidelines for Statistical Practice.

What do the professional Integrity and accountability of an ethical statistician should include?

The ethical statistician:

1. Identifies and mitigates any preferences on the part of the investigators or data providers that might predetermine or influence the analyses/results.
2. Employs selection or sampling methods and analytic approaches appropriate and valid for the specific question to be addressed, so that results extend beyond the sample to a population relevant to the objectives with minimal error under reasonable assumptions.
3. Respects and acknowledges the contributions and intellectual property of others.
4. When establishing authorship order for posters, papers, and other scholarship, strives to make clear the basis for this order, if determined on grounds other than intellectual contribution.
5. Discloses conflicts of interest, financial and otherwise, and manages or resolves them according to established (institutional/regional/local) rules and laws.
6. Accepts full responsibility for his/her professional performance. Provides only expert testimony, written work, and oral presentations that he/she would be willing to have peer reviewed.
7. Exhibits respect for others and, thus, neither engages in nor condones discrimination based on personal characteristics; bullying; unwelcome physical, including sexual, contact; or other forms of harassment or intimidation, and takes appropriate action when aware of such unethical practices by others.

What are the responsibilities of an ethical statistician to other statisticians or statistics practitioners?

Out of respect for fellow statistical practitioners, the ethical statistician:

1. Promotes sharing of data and methods as much as possible and as appropriate without compromising propriety. Makes documentation suitable for replicate analyses, metadata studies, and other research by qualified investigators.
2. Helps strengthen the work of others through appropriate peer review; in peer review, respects differences of opinion and assesses methods, not individuals. Strives to complete review assignments thoroughly, thoughtfully, and promptly.
3. Instills in students and non-statisticians an appreciation for the practical value of the concepts and methods they are learning or using.
4. Uses professional qualifications and contributions as the basis for decisions regarding statistical practitioners' hiring, firing, promotion, work assignments, publications and presentations, candidacy for offices and awards, funding or approval of research, and other professional matters.

What are responsibilities of an ethical statistician to research team colleagues?

The ethical statistician:

1. Recognizes other professions have standards and obligations, research practices and standards can differ across disciplines, and statisticians do not have obligations to standards of other professions that conflict with these guidelines.
2. Ensures all discussion and reporting of statistical design and analysis is consistent

with these guidelines.

3. Avoids compromising scientific validity for expediency.
4. Strives to promote transparency in design, execution, and reporting or presenting of all analyses.

3b Answer the questions below:

What can you do to protect your data?

- Stop deliberately signing up for online programs that are supposedly “free.”
- Make sure to be informed what data certain apps or websites store about you
- Turn off unnecessary app and website data permissions (like access to location).

What was the main point of this TED talk?

The TED talk’s main point is that in our modern technologically driven society, even if there are data protection laws in place which forbid direct correlation to an individual based on a singular piece of information about them (e.g., name), personal data is already being collected in high enough amounts that anonymity is impossible to keep if you have a smartphone device. While this should concern the public, we also must understand that it is pointless trying to recollect and/ or keep up with the data that has already been stored about us and that living without the functionalities of a smart device is not the solution. Instead, one must know that knowledge is power, and that being informed about what type of data is stored and how it is used, as well as pushing governments to implement more robust regulations regarding the subject, is the only viable alternative we have as of today.

3d Answer questions below:

What is the idea behind GDPR?

The primary goal of GDPR is to give individuals greater control over their personal data and to ensure that organizations handle that data responsibly.

For what type of data companies need a consent from people?

For personal data, such as health information, location, gender, etc.

Which organization can hold your data without "a right to be forgotten"?

Government organizations, health officials, and even journalists.

3f Answer questions below:

Should a controller provide the details of a data protection officer?

Yes, a data controller is required to provide the contact details of their Data Protection Officer (DPO) to both the supervisory authority and data subjects in certain situations.

What are the principles related to processing of personal data?

Personal data shall be:

- (a). processed lawfully, fairly and in a transparent manner in relation to the data subject (‘lawfulness, fairness and transparency’);
- (b). collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical

purposes shall, in accordance with Article 89(1), not be considered to be incompatible with the initial purposes ('purpose limitation');

- (c). adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed ('data minimisation');
- (d). accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay ('accuracy');
- (e). kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) subject to implementation of the appropriate technical and organisational measures required by this Regulation in order to safeguard the rights and freedoms of the data subject ('storage limitation');
- (f). processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures ('integrity and confidentiality').

The controller shall be responsible for, and be able to demonstrate compliance with, paragraph 1 ('accountability').

What are the conditions for consent?

1. Where processing is based on consent, the controller shall be able to demonstrate that the data subject has consented to processing of his or her personal data.
2. If the data subject's consent is given in the context of a written declaration which also concerns other matters, the request for consent shall be presented in a manner which is clearly distinguishable from the other matters, in an intelligible and easily accessible form, using clear and plain language. Any part of such a declaration which constitutes an infringement of this Regulation shall not be binding.
3. The data subject shall have the right to withdraw his or her consent at any time. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal. Prior to giving consent, the data subject shall be informed thereof. 4It shall be as easy to withdraw as to give consent.
4. When assessing whether consent is freely given, utmost account shall be taken of whether, inter alia, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract.

What does right to data portability means?

1. The data subject shall have the right to receive the personal data concerning him or her, which he or she has provided to a controller, in a structured, commonly used and

machine-readable format and have the right to transmit those data to another controller without hindrance from the controller to which the personal data have been provided, where:

- a) the processing is based on consent pursuant to point (a) of Article 6(1) or point (a) of Article 9(2) or on a contract pursuant to point (b) of Article 6(1); and
 - b) the processing is carried out by automated means.
2. In exercising his or her right to data portability pursuant to paragraph 1, the data subject shall have the right to have the personal data transmitted directly from one controller to another, where technically feasible.
 3. The exercise of the right referred to in paragraph 1 of this Article shall be without prejudice to Article 17. That right shall not apply to processing necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller.
 4. The right referred to in paragraph 1 shall not adversely affect the rights and freedoms of others.