

WWW.VETPRO.EU.EDU.GE

T3.2 Workshops for the academic and visiting staff of Veterinary Medicine programmes

November 27-29, 2023

Title: Good and ethical scientific practice in Estonia

Trainer: Tarmo Niine, PhD,
Estonian University of Life Sciences (Estonia)

E-mail: tarmo.niine@emu.ee



Co-funded by
the European Union



Development of Veterinary Faculties at Georgian HEIs
to Create a New Pool of Young Veterinary
Professionals in Georgia



ERASMUS-EDU-2022-CBHE-STRAND 1-101082479

Tarmo Niine, DVM PhD

- | DVM 2010

- | PhD, 2019:

 - | *Impact of gastrointestinal protozoan infections on the acute phase response in neonatal ruminants*

- | Senior Lecturer of Veterinary Immunology

 - | Chair of Veterinary Biomedicine and Food Hygiene

 - | Institute of Veterinary Medicine and Animal Sciences

- | Member of EMY academic ethics committee since 2021.

Topics

- | Academic Ethics Committee in EMY
- | Cases discussed (anonymously) in EMY Academic Ethics Committee
- | Example cases of EMU ethics committee cases
- | What is Good and ethical scientific practice (in Estonia)?
- | Estonian research ethics and integrity survey methodology and piloting (Simm, K et al 2023).
- | Childless women study scandal in Estonia (2023)

Academic Ethics Committee in EMY

Formation (history)

Working structure

Making a decision

Main documents

- | Estonian University of Life Sciences (EMY) adheres to the fundamental values and principles of academic ethics outlined in:
- | the *Magna Charta of European Universities*,
- | the **Estonian Researchers' Code of Ethics** (2002)
- | **'Good Research Practice'** (2017) (*figure*)
- | In addressing academic ethics, the university applies the general principles outlined in the fifth part of **'Good Research Practice'**, titled 'Adherence to, Promotion, and Implementation of Good Research Practice,' as well as the principles of equal treatment and gender equality.



Adoption of the fundamental values and principles of academic ethics

- | In 2017 EMY signed „**Good Research Practice**“ agreement with Estonian Science Academy, Estonian Research Agency and Education and Science Ministry.
- | EMY institutional accreditation in 2019 pointed out as one of the weaknesses: *"The guidelines for addressing cases of academic ethics violations should be more widely disseminated among the university community and **should not be limited solely to plagiarism cases.**"*
- | On 26th November 2020, EMY senate adopted legislation: ***"Implementation of Good Academic Practice and Principles of Academic Ethics at the Estonian University of Life Sciences."***

https://haka.ee/wp-content/uploads/EM%c3%9c_IA_otsus.muudetud.pdf

https://www.emu.ee/userfiles/emu2015/Hea_akadeemiline_tava_ja_akadeemilise_eetika_pohimotete_rakendamine.pdf

Good Academic Practice and Principles of Academic Ethics

- | The implementation of good academic practice encompasses a set of principles and modes of operation that, when followed, allow EMY and its members **to ensure purposeful and transparent functioning, striving as the keeper and carrier of the humanistic tradition towards universal knowledge.**
- | Good academic practice delineates the expected conduct from the university community and outlines the university's responsibility in ensuring good academic practice.

Good Academic Practice

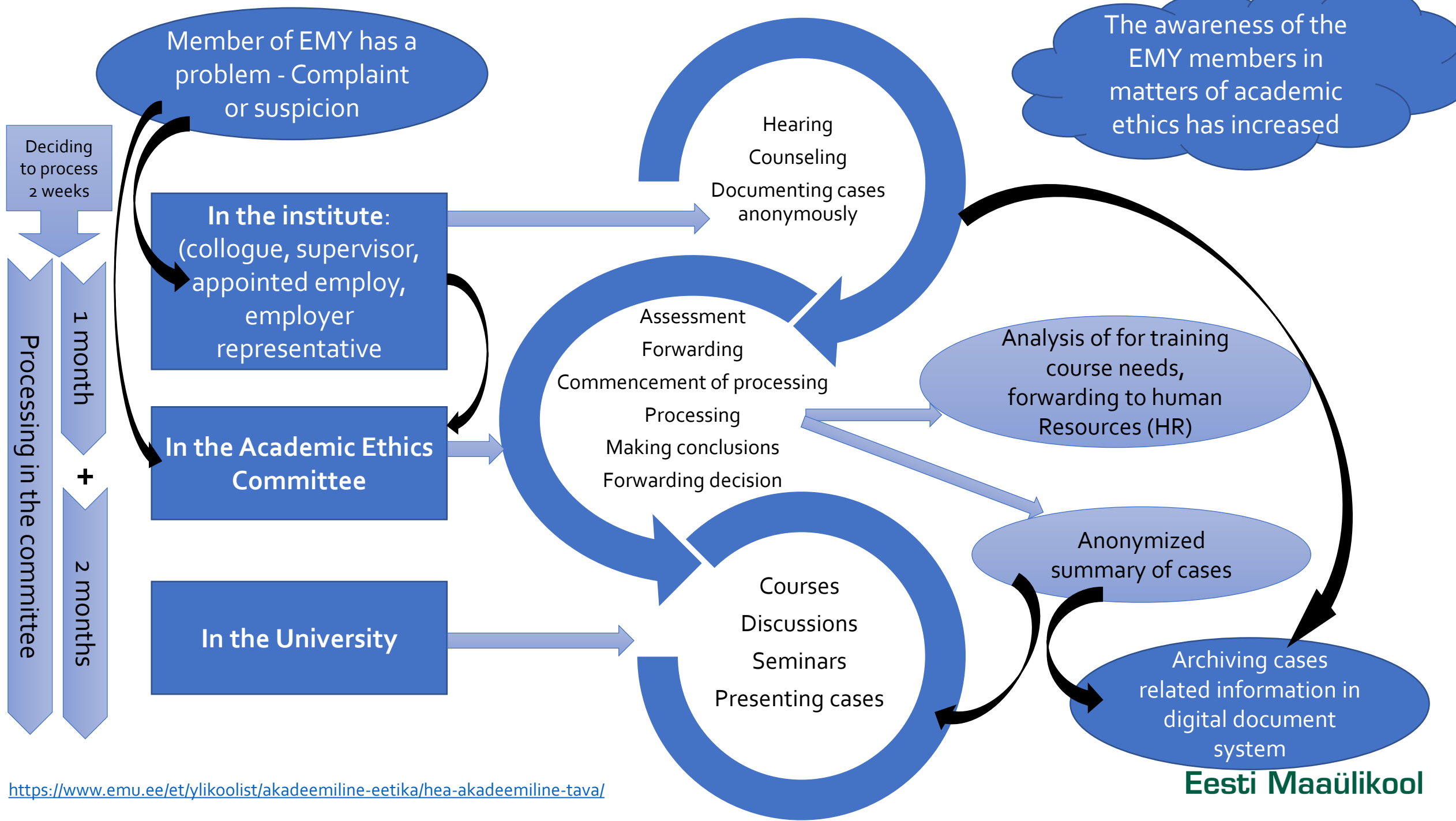
- I Good academic practice is based on **ethical behavior, positive communication, open collaboration** within the EMY and with society, and the application of principles of academic ethics. **A conducive work and learning environment, a friendly internal atmosphere, respectful attitude, acknowledgment of employees and students, exchange of experiences, open communication**, and positive reputation contribute to a sense of security for both students and staff.
- I EMY ensures effective and **open leadership**, along with **equal treatment**, in involving various interest groups in decision-making processes.
- I EMY employs transparent and open communication to address and resolve issues.

Good Academic Practice

- | "In cases of conflict of principles and the emergence of novel **situations** not covered by good research practice, academic staff and the university **have the opportunity for thoughtful consideration and decision-making** regarding the best possible behavior. However, this choice must be deliberate, justified, and based on the **underlying values of good research practice.**„
- | EMY **supports** its members in understanding and responding to ethical issues.
- | EMY community **adheres** to the principles of academic ethics and **responds** to their violations.

Academic Ethics Committee

- | The EMY Senate establishes an Academic Ethics Committee, tasked with:
 - | 1) **introducing the principles** of academic ethics at the university to **prevent systemic issues** and
 - | 2) **addressing or potentially arising problems** related to misunderstandings or violations of academic ethics within the university, applying the principle of equal treatment.



Who to turn to?

- | In case of suspected violation of principles of academic ethics, university members have the right to seek advice from a supervisor, colleague, department head, or an **authorized employee** of the institute.
- | If necessary, they may confidentially and in writing inform the chairperson of the university's Academic Ethics Committee.

Academic Ethics Committee structure

- | The committee consists of **five** [permanent] members engaged in academic activities, representing various fields and professional positions, one of whom is from outside the university.
- | The members of the committee are appointed by the Senate on the proposal of the Rector and designate the chairperson of the committee.
 - | Mandate is for 3 years.
- | In addition, each institute ($n = 3$) has an authorized employees as advisors in matters related to the implementation of good research practice principles.
 - | This should be first point of contact in ethics related problems.

Academic Ethics Committee of EMY

- | Eve Veromann, chairperson, Professor,
 - | Chair of Plant Health
- | Kalev Jõgiste, vice-chairperson, Associate Professor,
 - | Chair of Silviculture and Forest Ecology
- | Kaarel Soots, Senior Lecturer,
 - | Chair of Biosystems Engineering
- | Tarmo Niine, Senior Lecturer,
 - | Chair of Veterinary Biomedicine and Food Hygiene
- | Andres Soosaar, Visiting Associate Professor,
 - | **University of Tartu**, Faculty of Medicine, Institute of Biomedicine and Translational Medicine



https://www.etis.ee/CV/Eve_Veromann/est/

<https://www.emu.ee/et/ylikoolist/akadeemiline-eetika/kelle-poole-poorduda/>

https://sise.etis.ee/File/DownloadPublic/28e6b620-ad3a-488e-947d-bdcob40129f7?type=image/jpeg&name=Veromann_2018.jpg
<https://ut.ee/en/content/research-integrity-counsellors>
https://sise.etis.ee/File/DownloadPublic/6c7ae7d9-9cf7-4286-8d8a-6ea7475c9ab7?type=image/jpeg&name=IMG_5114.JPG

Eesti Maaülikool

Procedure for Handling Suspicion or Complaint

- I The committee initiates the processing of **Suspicion** (cases where the informant has no personal interests or demands related to the violation) or a **complaint** when the chairperson of the committee receives **a written appeal** or when **public interest** arises regarding the situation with suspicion of violation.
- I The complainant or their representative **may submit a confidential application** for their initial protection, for example, enclosing a **sealed envelope** containing personal data within the envelope of the application.

Procedure for Handling Suspicion or Complaint

- | Anonymous complaints are not accepted.
- | Official complaint has to contain:
 1. The full name, email, and phone number of the applicant;
 2. Position (for employees); Curriculum (for students);
 3. The content of Suspicion or Complaint and, if possible, the point of "Good Research Practice" that has been violated;
 4. Information on whether and, if so, to whom the complainant has previously turned for a solution;
 5. If possible, what could be the solution to the problem;
 6. In the case of a paper submission, the date and signature;
 7. If available, attached documents with a list of these.

Procedure for Handling Suspicion or Complaint

- I The committee may, if necessary, **interview** the person who submitted the complaint, provided that it does not unduly harm the person's interests.

The Suspicion or complaint process consists of five stages:

1. Initial assessment of the case;
2. Investigation and data collection;
3. Formal hearings of the parties involved;
4. Formulation of a written position containing conclusions and proposals for resolving the situation;
5. Transmitting the written position and proposals. The committee decides on the circle of persons to whom the document will be transmitted.

Procedure for Handling Suspicion or Complaint

- | **All aspects related to the process are confidential**, all activities are recorded in the protocol, and all materials are stored in a way that precludes forgery.
- | **The protocol is coordinated** with all committee members and is signed by the committee chairperson and the recorder.
 - | The recorder is chief-specialist from Science and Development department
- | With the consent of the participants, **formal hearings of the case are recorded** to prevent further disputes and misunderstandings.

Procedure for Handling Suspicion or Complaint

- | During the procedure, the committee has the **right to gather additional information** about the circumstances of the incident and, for this purpose, interview university employees.
- | **EMY employees are obliged to assist** within the scope of the committee's procedure, provide statements, and submit written materials.

The decision of Academic Ethics Committee



The decision of Academic Ethics Committee

- | **The decision is made by a 2/3 majority vote of the committee members.** Depending on the evidence found during the case, the decision may be one of the following:
 1. **Rejection of Suspicion or Complaint** – in cases where the materials collected during the procedure do not indicate a violation of academic ethics or if it is not possible to prove the violation based on the collected material.
 2. **Referral of doubt or complaint to another institution or authority** – in cases where the materials collected during the procedure reveal a violation of existing laws or rules of another institution.
 3. **Violation of academic ethics principles is proven.**

The decision of Academic Ethics Committee

- | The written decision must contain information about the circumstances of the case.
- | **The decision includes proposals** for rectifying the situation, taking appropriate next steps, or applying sanctions (e.g., in cases of fabrication, forgery, and plagiarism).
- | The decision is communicated to the parties involved, and **in cases where sanctions are deemed necessary**, it is forwarded to the **Rector** or the **employer's representative**.

The decision of Academic Ethics Committee

- | The committee aims to **identify systemic deficiencies** related to the case in its activities and **makes suggestions** to help avoid them in the future.
- | The chairperson of the Academic Ethics Committee decides when it is justified **for third parties to access procedural materials**, including granting access to materials related to structural unit leaders.
- | Such access is primarily justified in cases of proven violations, followed by the **application of sanctions**.

The decision of Academic Ethics Committee

- | The decision is an **assessment**.
 - | Sanctions have to be carried out by Rector or Chair holders etc.
- | The decision is **final**.
 - | At the moment there is no procedure to appeal, except in court of law.
- | There are discussions in creating National Academic Ethics Committee at Research Council or Academia of Science.
 - | This needs change in **legislation** and **FUNDING**

What kind of problems not solved by Academic Ethics Committee

- | **Students (undergraduates)** problems:
 - | Academic ethics issues related to study activities are addressed in the Study Regulations.
 - | Dealt within Department of Studies
- | **Equal Treatment** problems are dealt by Human Resources (HR) department.
 - | Problems affecting dignity and regardless of nationality, race, skin color, gender, language, origin, religion, beliefs, financial or social status, age, disability, sexual orientation, or other circumstances.

Institutional Accreditation Report for Estonian University of Life Sciences 2022

- I Areas of concern and recommendations:
- I It is **recommended** that the Academic Ethics Committee **be proactive in systematically analysing trends regarding ethics-related concerns and questions** in EMY to better inform the scope and ongoing refinement of policies and procedures in the context of EMY's ambition to be an internationally focused higher education institution.
- I Although regular training is provided, **some knowledge gaps may exist in research team members involved in managing ethical dimensions of research**. It is recommended that assessment of achievement of learning outcomes at a high standard be enhanced in this respect.

Institutional Accreditation Report for Estonian University of Life Sciences 2022

- I Opportunities for further improvement:
- I The proactive role of the Academic Ethics Committee should be **strengthened.**

Cases discussed (anonymously) in EMY Academic Ethics Committee

Summary of cases

From September 1, 2021, to December 1, 2022, there were a total of 13 cases

Introduction

- | Not only do the decisions of the committee have to be fair and honest, but they also have look like it (from outside)!
 - | Inclusion of temporary committee members in case of more complex cases.
- | Committee is **not** a punishment squad.

The cases in EMY Academic Ethics Committee

- | The main violations against the '**Good Research Practice**' were related to:
 - | authorship
 - | publication
 - | application of research results



Case of Delayed Article Publication

- *The author unreasonably delayed (2 years) providing feedback on the manuscript, and the comments were neither constructive nor clear.*
- | The researcher's behavior violated the European Code of Conduct for Research Integrity, Chapter 3.1, "**Research Misconduct and Other Unacceptable Practices**," point "**Unduly Delaying or Inappropriately Obstructing the Work of Other Researchers**."

Researcher as a Reviewer

- | *The researcher, acting as a reviewer, shared an unpublished article with their supervisee, violating the requirement of confidentiality.*
- | Violation of point 3.5.1, "The reviewer ensures the quality, impartiality, timeliness of the review, and the confidentiality of the scientific results known to him until their publication."

Case of Co-authorship and Duplicate Publication

- | *Firstly, the leading author added a scientist as a co-author without their knowledge and consent;*
- | *Secondly, the article was republished without proper citation, and authors were added who were not part of the original work.*
- | **Violation of points 3.1, "Who is the author of a scientific publication?" and subpoints 3.3.3, "The scientist discloses the repeated use of the same data, interpretations, or results in more than one publication, referring to the previous place of publication," and 3.1.4, "The scientist discusses the determination of authorship, the order of authors, and other publication issues with all colleagues and partners contributing to the research."**

Reducing the Role of the Scientist

- | *The scientist repeatedly provided incorrect information to a research information portal, presenting themselves as having a higher position than they actually held.*
- | The scientist's behavior misaligned with the European Code of Conduct for Research Integrity, point 3.1, "Research Misconduct and Other Unacceptable Practices," subpoint "**Manipulating Authorship or Reducing the Role of Other Scientists in Publications.**"

PhD student Supervisor Case

- | *The supervisor did not behave collegially, threatens with expulsion (exmatriculation), does not recognize achievements, and interferes in personal life.*
- | Violation of points 4.3.3, "The scientist, as a teacher and supervisor, communicates collaboratively with the student/supervisee, agrees on how and in what they support the supervisee, promotes their professional development, and recognizes the supervisee for their progress," and 4.3.4, "The scientist treats their supervisor(s) and supervisee(s) with respect, recognizing and thanking them for their contribution to the scientist's research and personal development."

Case of Uncollegiality and Role Conflict

- | *The conflict originated from an authorship issue, evolving into a role conflict where the scientist did not follow the principles of being a good colleague.*
- | Violation of point 4.3.2, **"The scientist as a colleague is helpful, polite, and considerate towards all colleagues, avoiding discriminatory and unjustifiably different treatment of them,"** and not following EMY Senate's regulation "Application of Good Academic Practice and Academic Ethics Principles at the Estonian University of Life Sciences" point 1.1.

What is Good and ethical scientific practice (in Estonia)?

Good Research Practices

Violations of Research Integrity

Violations of Research Integrity

- | The three „real sins“ against the 'Good Research Practice' are:
 - | **Fabrication**
 - | making up data or results and recording them as if they were real.
 - | **Falsification**
 - | manipulating research materials, equipment, images, or processes, or changing, omitting, or suppressing data or results without justification
 - | **Plagiarism**
 - | using other people's work or ideas without giving proper credit to the original source

<https://www.etag.ee/wp-content/uploads/2017/02/HEA-TEADUSTAVA.pdf>

<https://allea.org/wp-content/uploads/2023/06/European-Code-of-Conduct-Revised-Edition-2023.pdf>



The European Code of Conduct for Research Integrity

REVISED EDITION 2023

HEA TEADUSTAVA

Oktoober 2017

Maaülikool

What is in „Good Research Practice“

- | Consists following parts:

- | Values

1. Planning research
2. Conducting research
3. Authorship, publication, and application of research results
4. Researcher in society
5. Adherence, promotion, and implementation of good research practice

„Good Research Practice“ – Values

- I The core values of good science are freedom, responsibility, honesty and objectivity, respect and care, justice, openness, and collaboration.

„Good Research Practice“ – Planning research

- I Planning research involves setting research objectives, choosing methods, seeking resources, and considering ethical and legal requirements.

„Good Research Practice“ – Conducting research

- I Conducting research involves not only data collection and analysis but also addressing issues related to safety, security, and the well-being of involved individuals and animals. Additionally, the rights and interests of individuals included in the study must be taken into account.

„Good Research Practice“ – Authorship, publication, and application of research results

- | When publishing and applying the results of research, it is important to consider the interests and rights of all researchers and collaborators involved in the research regarding issues of authorship, intellectual property, and recognition.

„Good Research Practice“ – Authorship, publication, and application of research results

- | **Conflict of interest** can occur at any stage of a researcher's work when the credibility of the researcher, their work, or decisions comes into question due to competing interests.
- | **Role conflict** is a situation where a researcher must simultaneously consider conflicting demands of their different roles.
 - | In addition to their primary role, the researcher fulfills various academic or personally related roles such as a mentor, lecturer, leader, administrator, expert, science communicator, parent, spouse, or member of a non-governmental organization.

„Good Research Practice“ – Adherence, promotion, and implementation of good research practice

- | Understanding and adhering to the values and principles of good research practice is the obligation of every researcher.
- | The research institution can support and promote this by creating an environment that encourages adherence to good research practices.
- | Ultimately, each researcher is responsible only for their own choices and decisions.
- | However, the purpose of good research practice is not fulfilled if only a few researchers follow it, if researchers are unaware of it, or if they perceive adherence to it as burdensome or unnecessary.
- | Therefore, it is the responsibility of the research institution to support researchers and ensure whether the principles of good research practice are actually being followed.

Principles - The European Code of Conduct for Research Integrity

- | Good research practices are based on fundamental principles of research integrity.
 - | **Reliability** in ensuring the quality of research, reflected in the design, methodology, analysis, and use of resources.
 - | **Honesty** in developing, undertaking, reviewing, reporting, and communicating research in a transparent, fair, full, and unbiased way.
 - | **Respect** for colleagues, research participants, research subjects, society, ecosystems, cultural heritage, and the environment.
 - | **Accountability** for the research from idea to publication, for its management and organization, for training, supervision, and mentoring, and for its wider societal impacts.

Differences between The European Code of Conduct for Research Integrity (2023) and 'Good Research Practice' (Estonia, 2017)

- | Estonian good practice does make institutions accountable.
- | ALLEA: „Investigations into research misconduct consider the role of both individuals and **institutions** contributing to the breach of good research practice.“ (2023)
- | „Black-hat journals“!

<https://www.etag.ee/wp-content/uploads/2017/02/HEA-TEADUSTAVA.pdf>

<https://allea.org/wp-content/uploads/2023/06/European-Code-of-Conduct-Revised-Edition-2023.pdf>

Estonian research ethics and integrity survey methodology and piloting

Simm, Kadri; Lees, Kadri; Parder, Mari-Liisa; Tammeleht, Anu. 2023. „Estonian research ethics and integrity survey methodology and piloting.“ https://etag.ee/wp-content/uploads/2023/07/Teaduseetika-pilootuuringu-lopparuanne_2023.pdf, Tartu: Tartu Ülikool.

Summary of Simm, K. et al (2023) survey

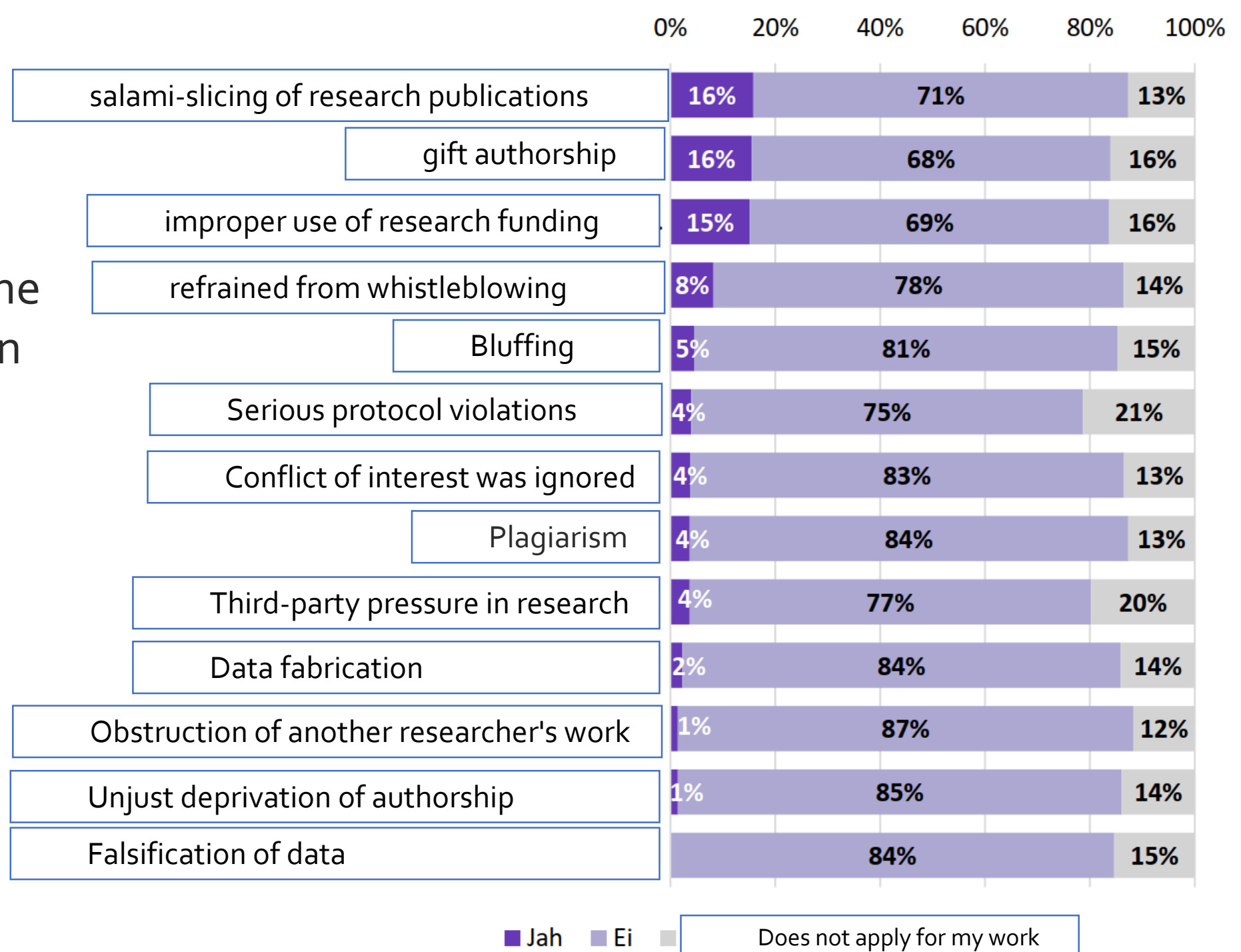
- | Online survey among Estonian researchers institutions.
 - | Participants: 341
- | 89% of responding researchers in Estonian survey sample consider issues pertaining to research ethics and integrity to be important, 2% thought the topics were not important.
- | Respondents claimed that the most severe forms of misconduct were fabrication, falsification and plagiarism.
- | 6,2% of the respondents self-reported having engaged in either fabrication, falsification or plagiarism, which is generally similar to the results in other countries.

Summary of Simm, K. et al (2023) survey

- | Two of the questionable research practices (QRP) were considered less severe:
 - | salami-slicing of research publications
 - | improper use of research funding
- | Two QRPs that were considered very problematic were noticed among one's colleagues or in their unit:
 - | gift authorship (41%)
 - | hampering the work of a colleague (32%)

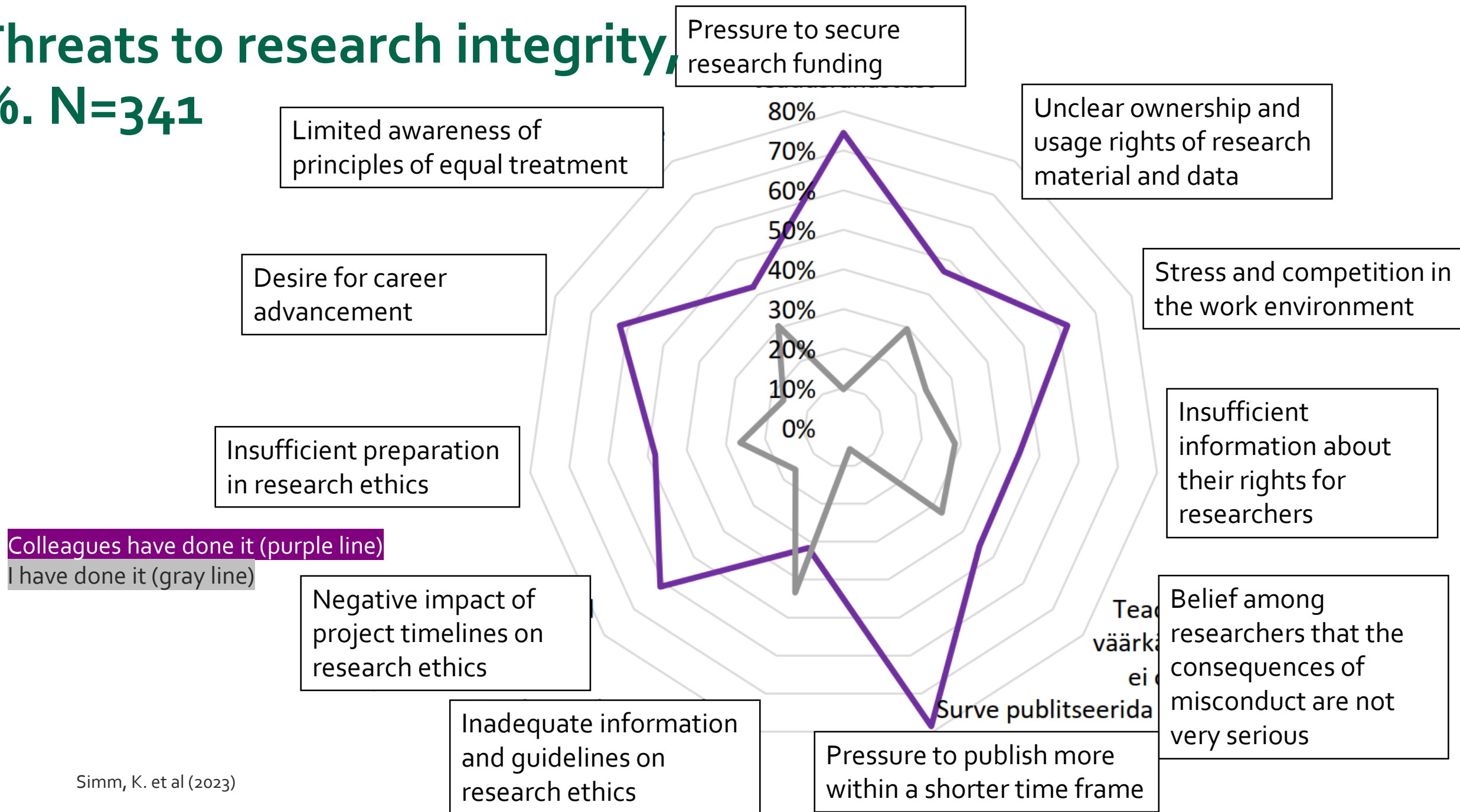
Summary of Simm, K. et al (2023) survey

I Percentage of the
researcher's own
experience with
misconduct
practices.



Threats to research integrity, %.

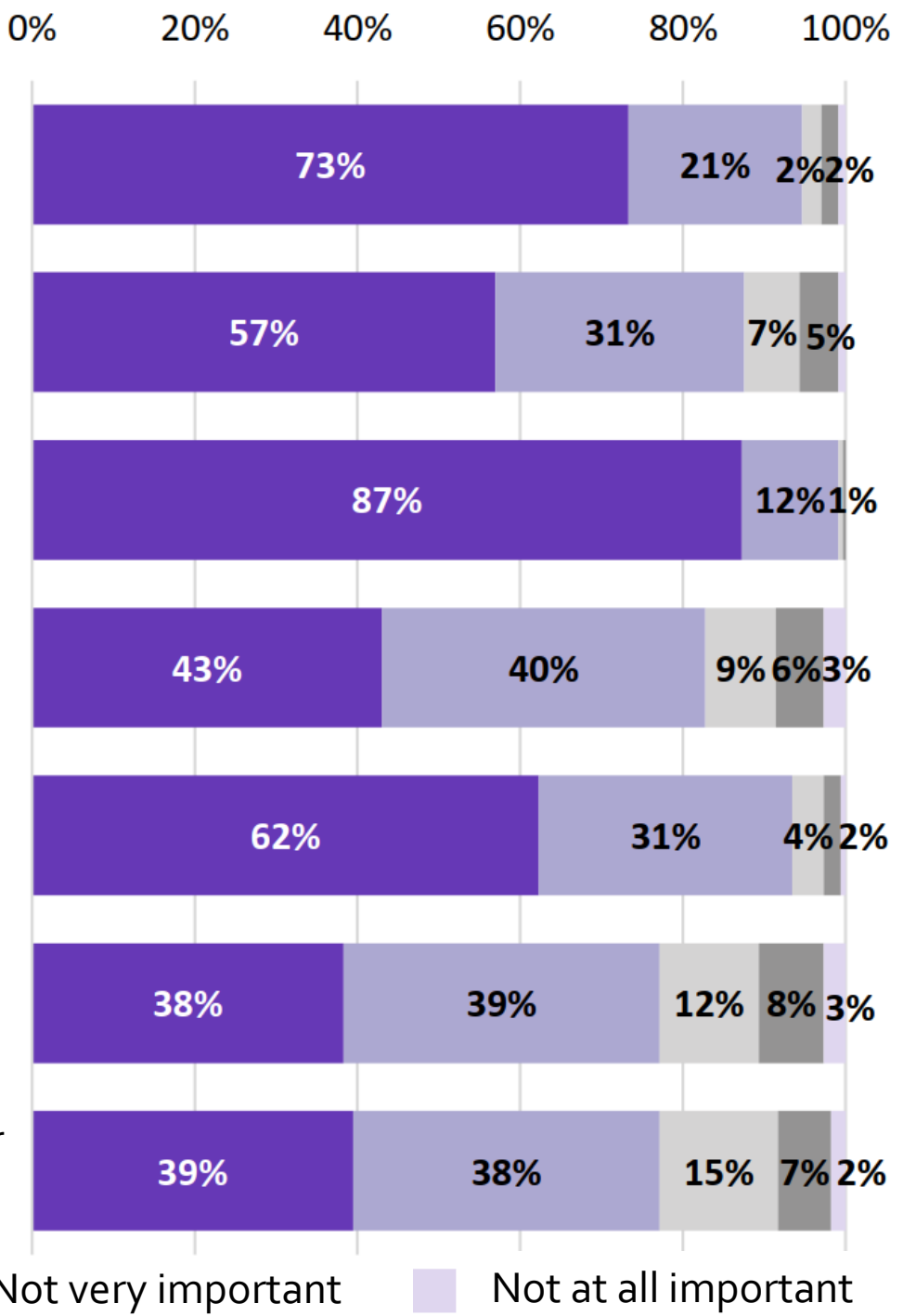
N=341



Factors that help prevent research ethics violations,

%. N=337

- Proper upbringing and socialization instilling fundamental values such as honesty and justice.
- Internal systems within the institution valuing research ethics and systematically penalizing misconduct.
- A trusting work environment within the research group that supports adherence to good research practices.
- Availability of research ethics guidelines and researchers' awareness of their content.
- Mentorship, appropriate guidance, and training of young researchers in the institution's research culture and best practices (apprenticeship approach).
- Easy access to research ethics training, counseling, and support materials.
- Increased attention to cases of misconduct and their broader discussion in society.



Threats to research integrity

- | the main threats to research ethics are primarily related to organizational issues:
- | the pressure to publish more within tight deadlines and the pressure to find funding sources for one's research.
- | Research ethics violations do not seem to result primarily from insufficient availability of guidelines.

An open response from survey highlighted how lack of funding was as a threat to research ethics:

- I *The biggest problem is actually the shortage of research funding, which destroys any ethics from the beginning. **If a researcher's job is project-based, then the researcher has to choose between being ethical or maintaining their job – both cannot be done simultaneously.** An honest and ethical researcher remains without research funding because they are not willing to compromise (e.g., putting someone on the project at the institution's pressure who actually cannot contribute much to the project, but the institution needs to pay a salary to such a person). This pressure is the main reason why PRGs (project research groups) are formed (why the institution pressures to form PRGs). **The research institution is only interested in money, not the interests and ethics of science.***

Childless women study scandal in Estonia (2023)

Our, first and big research ethics scandal

Introduction

- | A scandal erupted over a study conducted by „Pere Sihtkapital SA“ „*Family Foundation Public Limited Company* -“ on childless women in Estonia.
- | The incident raised significant questions about research ethics, privacy, and data protection.
- | The scandal has notably damaged the reputation of Estonian scientists and e-Estonia.

The study on childless women

- | The study was conducted by the think tank SA Pere Sihtkapital it used University of Tartu cover (name) to get information from national personal registry about childless women.
 - | Information received: name, telephone number, id number, email.
- | The study sought to find out why women choose not to have children.
- | The survey included different types of personal data, examining women's income, education, living conditions as well as their sexual orientation, political views, religious and philosophical beliefs.
- | Application for ethical permission for study from University of Tartu was submitted, but not recieved before start of the study.

Aftermath

- | University of Tartu, Faculty of Social Sciences dean Raul Eamets's working contract was terminated by Rector
- | The incident underscores the importance of transparency and reasonableness in the allocation and use of research funding.
- | There is a need for clear procedures on how research funding is allocated to researchers and how ministries operate in commissioning and funding research.
 - | **Collecting personal data just for fun and without clear goal is not acceptable!**

Summary



Summary

- | Academic Ethics Committee in EMY
- | 'Good Research Practice" (2017)
- | Ethical problems in EMY discussed by committee.
- | Main sins against good practice.
- | Problems affecting implementing good practice.
- | Education on ethics.

In order to implement good research practice and the code of ethics in science, we need to explain to researchers not only how to act correctly but also how to protect themselves from malicious and unethical attacks.

Tarmo Soomere, president of Estonian Academy of Sciences

Thank you for listening!



Selected References

- | Simm, Kadri; Lees, Kadri; Parder, Mari-Liisa; Tammeleht, Anu. 2023. „Estonian research ethics and integrity survey methodology and piloting.“ https://etag.ee/wp-content/uploads/2023/07/Teaduseetika-pilootuuringu-lopparuanne_2023.pdf , Tartu: Tartu Ülikool.
- | The European Code of Conduct for Research Integrity - <https://allea.org/code-of-conduct/>
- | Soomere, Tarmo „Implementation of the research ethics code for the protection of the researcher“ <https://www.sirp.ee/s1-artiklid/c21-teadus/teadustoo-eetikakoodeksi-rakendamise-teadlase-kaitseks/> (accessed 19.11.2023)