



**WCRI Symposium 7:  
The intersection of research integrity and  
academic integrity:  
Multi-country perspectives**

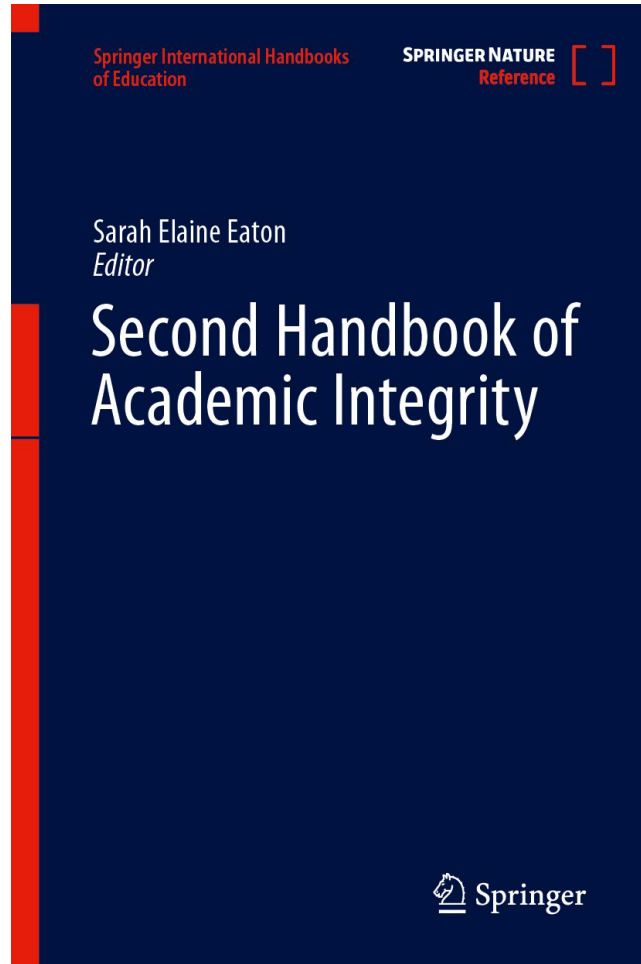
June 4, 2024

Athens, Greece

Panel chair: Sarah Elaine Eaton

Panelists: Erika Löfström (University of Helsinki),

Brenda M. Stoesz (University of Manitoba), and Anu Tammeleht (University of Helsinki)



# Welcome and Agenda

- Welcome
- Overview
- Individual papers
- Q & A

Let's welcome  
our first presenter:

Brenda M. Stoesz



# Promoting Academic & Research Integrity: Connecting the Two in Undergraduate Education

The intersection of research integrity and academic integrity: Multi-country perspectives on policy and Innovation

Brenda M. Stoesz, BEd, BSc (Hons), MA, PhD

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# Canadian Treaty Areas



## Canadian context

Pop. 40 million  
(2023)

450 ethnic and  
cultural origins

200 places of birth

100 religions

450 languages



Sources: <https://www.statcan.gc.ca/o1/en/plus/3861-40-million-strong-canada-reaches-new-population-milestone>

Jones, G. A. (2014). An introduction to higher education in Canada. In K. M. Joshi and Sae Paivandi (eds.), Higher education across nations (vol. 1, pp. 1-38). Delhi: B. R. Publishing

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In your role as  
*Faculty  
Specialist –  
Academic  
Integrity*, where  
do you see this  
area going?



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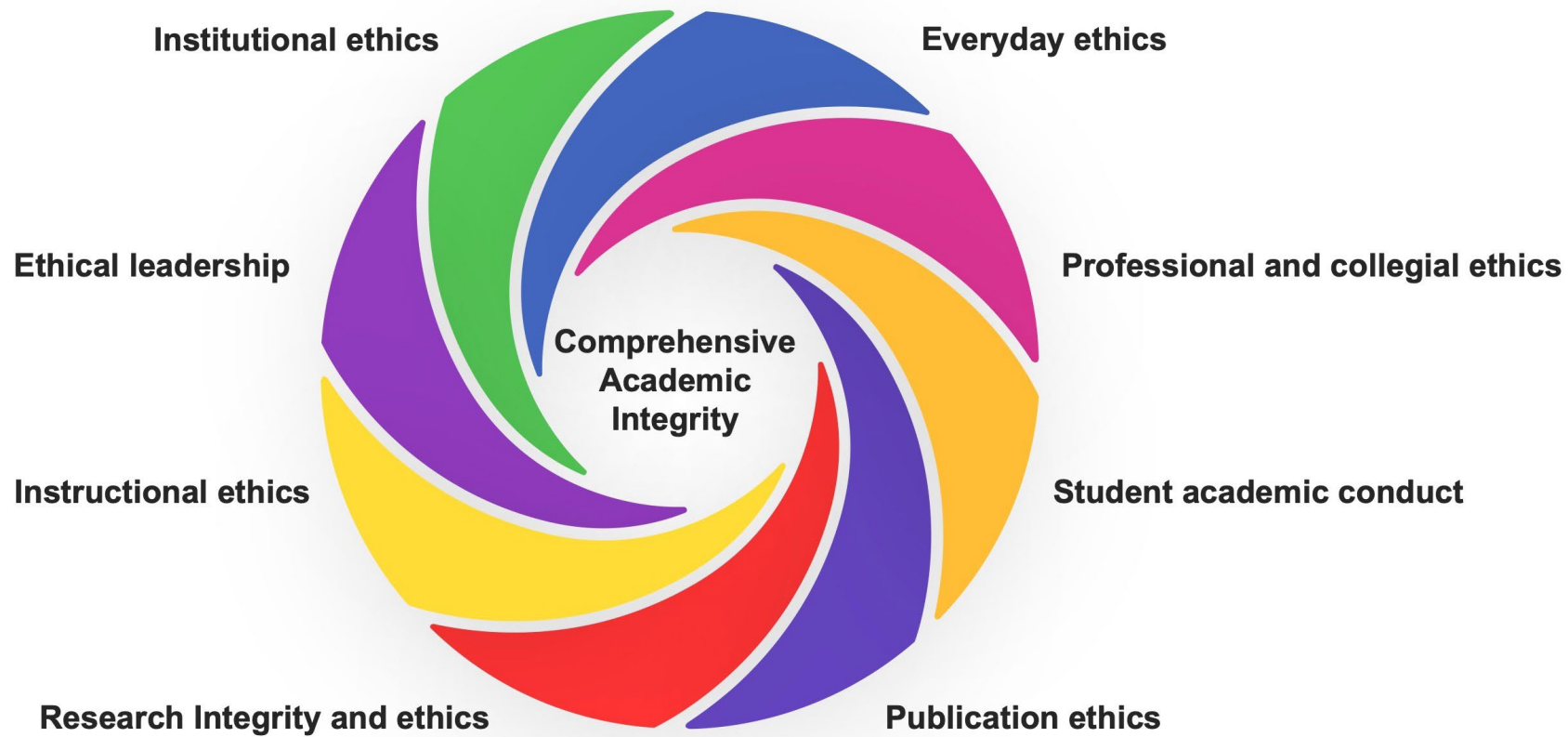
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“Don’t  
open that  
can of  
worms!”



Credit: [Miravision](#)





Eaton, S.E. (2023). A Comprehensive Academic Integrity (CAI) Framework: An Overview. Calgary, Canada: University of Calgary. <https://prism.ucalgary.ca/handle/1880/116060>



# B.Sc. (Honours) Degree in Psychology

## Honours Research Seminar

- Completion of research projects under the supervision of faculty members over two academic terms
- Understanding of research ethics, and build specific research, writing, and public speaking skills

## Department of Psychology

Duff Roblin Building, University of Manitoba Fort  
Garry Campus

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## LOCAL PROCESSING ADVANTAGE IN MUSICIANS: EVIDENCE FROM DISEMBEDDING AND CONSTRUCTIONAL TASKS

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BRENDA M. STOESZ, LORNA S. JAKOBSON, ANDREA R. KILGOUR AND SAMANTHA T. LEWYCKY  
*University of Manitoba, Winnipeg, Manitoba, Canada*

WHEN PROCESSING MUSIC STIMULI, MOST PEOPLE show a global bias (e.g., Evers et al., 1999). Extensive music training, however, develops both global (Halpern & Bower, 1982) and local (Burton et al., 1989) music processing abilities. Our goal was to determine whether enhancement of musicians' local processing abilities is domain-specific or extends to processing nonmusical, visual stimuli. Musicians outperformed nonmusicians on the Group Embedded Figures Test (Experiment 1)

been linked to two levels of representation for melody, namely scale or interval (the local level) and contour (the global level) (e.g., Dowling, 1978; Dowling & Harwood, 1986; Peretz & Morais, 1980, 1987). It has been argued that most people show a bias to process music at a global level (Evers, Dannert, Rödding, Rötter, & Ringelstein, 1999; Schiavetto, Cortese, & Alain, 1999; Zatorre, Evans, Meyer, & Gjedde, 1992), and greater involvement of the right than the left hemisphere (Schiavetto et al., 1999; Zatorre et al., 1992). With extensive music training, however, there is an attenuation of these biases. Thus, not only do musicians show greater involvement of the left hemisphere than non-

ORIGINAL PAPER

## Medical undergraduates' contributions to publication output of world's top universities in 2013

M.A. Gouda<sup>1</sup>, H.S. Zidan<sup>1,2</sup>, A.A. Marey<sup>1,3</sup>, M.G. Gameal<sup>1</sup>, R.G. Elmahrook<sup>1,4</sup>, A. Saleh<sup>1</sup>, A.A. Nasr<sup>1</sup>, O. Seifelnasr<sup>1</sup>, A.E. Radwan<sup>1,5</sup>, A. Shahan<sup>1</sup>, M.M. Elgayar<sup>1</sup>, A.A. Elabd<sup>1,6</sup>, K.S. Mohamed<sup>1</sup>, M.F. Halim<sup>1</sup>, M.M. Badr<sup>1</sup>

<sup>1</sup>Faculty of Medicine, Menoufia University, Yassin Abdelghaffar St., Shebin Al-Kom, Menoufia, Egypt, <sup>2</sup>National Liver Institute, Menoufia University, Yassin Abdelghaffar St., Shebin Al-Kom, Menoufia, Egypt, <sup>3</sup>Shebin Al-Kom Hospital for Mental Health and Addiction, Ministry of Health, Shebin Al-Kom, Menoufia, Egypt, <sup>4</sup>Shebin Al-Kom Teaching Hospital, Ministry of Health, Shebin Al-Kom, Menoufia, Egypt, <sup>5</sup>Harvard Medical School, Boston, Massachusetts, USA, <sup>6</sup>Faculty of Medicine, Menoufia University, Albar Al-Sharky, Shebin Al-Kom, Menoufia, Egypt

Address correspondence to Mohamed Alaa Gouda, Department of Clinical Oncology and Nuclear Medicine, Faculty of Medicine, Menoufia University, Yassin Abdelghaffar St., Shebin Al-Kom, Menoufia, Egypt. email: mgouda@med.menofia.edu.eg

Methodology and Research Practice

## Successfully Publishing With Undergraduate Coauthors in Psychology: Insights From Faculty With Top Track Records

Jennifer L. Howell<sup>1</sup>, Traci A. Giuliano<sup>2</sup>, William I. Hebl<sup>2</sup>

<sup>1</sup> Department of Psychological Sciences, University of California, Merced, CA, USA, <sup>2</sup> Department of Psychology, Southwestern University, Georgetown, TX, USA


Keywords: Publishing with undergraduates, Mentoring in psychology, undergraduate coauthors, undergraduate publication  
<https://doi.org/10.1525/collabra.94261>

Articles

## Undergraduate research as a student engagement springboard: Exploring the longer-term reported benefits of participation in a research conference

Chris Little 

Pages 229-245 | Received 30 Aug 2019, Accepted 23 Mar 2020, Published online: 16 Apr 2020

 Cite this article  <https://doi.org/10.1080/00131881.2020.1747360>



# Types of experiential learning



APPLIED RESEARCH



COMMUNITY ENGAGED  
LEARNING (CEL)



CAMPUS AND GLOBAL  
INTEGRATED LEARNING



CO-OPERATIVE  
EDUCATION



CREATIVE WORKS



ENTREPRENEURSHIP



INDUSTRY PROJECT



INTERNSHIP



LABORATORIES  
AND STUDIOS



PROGRAM-BASED  
PLACEMENT



PROJECT-BASED



WORK EXPERIENCE

Source: <https://umanitoba.ca/centre-advancement-teaching-learning/experiential-learning>

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## How to publish as an undergraduate? How important is publishing as an undergraduate?

Today I was at a talk about publishing and how having published papers is a sort of currency in research. We, as undergrads, were urged to start publishing as soon as we can, but my question is how? They made it seem very easy and painless, but is it really? In all the labs I've been in as an undergraduate, I feel as though my work has not been significant enough to publish (field is astrophysics btw).

tlr; How do I approach publishing as an undergrad?

Source:[https://www.reddit.com/r/AskAcademia/comments/8xcmj9/how\\_to\\_publish\\_as\\_an\\_undergraduate\\_how\\_important/](https://www.reddit.com/r/AskAcademia/comments/8xcmj9/how_to_publish_as_an_undergraduate_how_important/)

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# Importance of mentoring undergraduate students



Professors/research supervisors' roles as mentors and ethical exemplars are important for supporting students' growth as learners with integrity.

Source: Gray, P.W., Jordan, S.R. Supervisors and Academic Integrity: Supervisors as Exemplars and Mentors. *J Acad Ethics* 10, 299–311 (2012).  
<https://doi.org/10.1007/s10805-012-9155-6>



# Undergraduate students presenting their research at a conference



**What's  
next?**



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Let's welcome our  
second presenter:  
Erika Lövström





# The intersection of research integrity and academic integrity:

## SUPERVISION

Erika Löfström

WCRI Athens June 4, 2024

Symposium:

The Intersection of Research Integrity and Academic Integrity

Chair: Sarah E. Eaton

## **Supervision**

### **- A collective and nested enterprise**

- Supervision is one of the central determinants of doctoral experience. It contributes to degree completion, time to candidacy, student well-being and satisfaction, and competence development (Sverdlik et al., 2018)
- In the supervisory relationship, PhD students learn disciplinary traditions, practices, cultures, and norms, including ethical codes, norms, and practices of how the research community deals with ethical issues (Alfredo & Hart, 2011; Lofström et al., 2015).



## Why should we care about ethical aspects in supervision?

- Academic integrity stands out as the attribute students value the most in their supervisors (Roach et al., 2019).
- The supervisory relationship provides a context for developing academic expertise AND ethical awareness, learning ethical problem-solving and cultivating integrity.
  - Supervisors play an important role in promoting students' acceptance of academic integrity values and norms (Gray & Jordan 2012)
  - Most students learn ethical standards of conduct from their supervisors and seniors (Alfredo & Hart, 2011; Löfström, et al., 2015)
  - Researchers not well integrated into the research community apply more often ethically poor practices (True et al., 2011)



# Challenges in supervision

- Juggling a variety of role expectations and expectations regarding supervision
- Handling the professional—personal relationship continuum
- Recognition and use of power
- Supervisor availability
- Juggling a push for independence vs. students becoming overtly reliant on supervisor
- Supporting doctoral students' wellbeing

(e.g. Ahlberg 2021; Almlöv & Grubbström, 2024; Backhouse et al., 2015; Bongaardt & Krane, 2021; Gray & Crosta 2019; Parker-Jenkins 2018)



*Research Article*

## **The Supervisory Relationship as an Arena for Ethical Problem Solving**

Erika Löfström and Kirsi Pyhältö



## **Ethics & Behavior**

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/heb20>

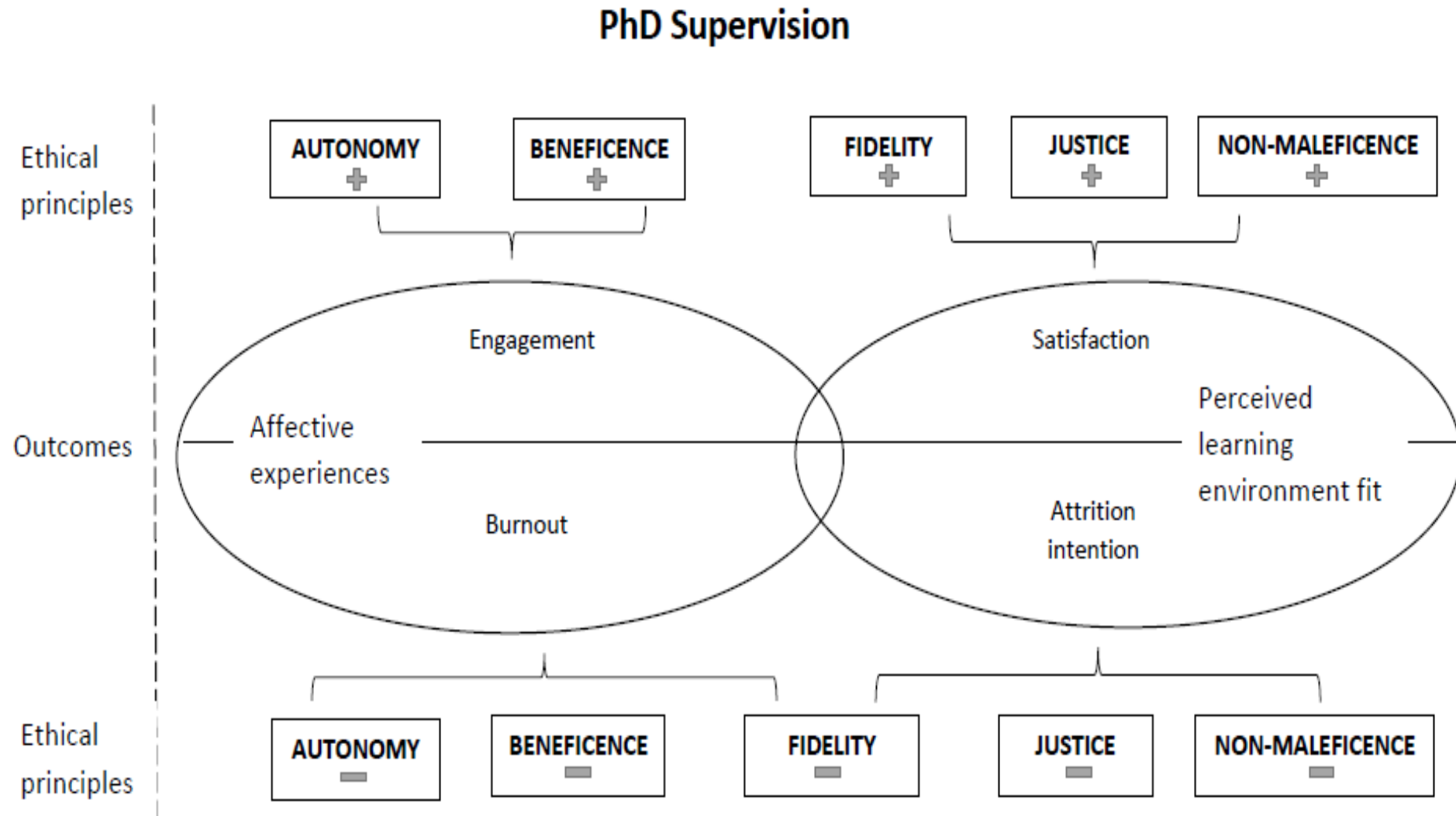
## **Ethical Issues in Doctoral Supervision: The Perspectives of PhD Students in the Natural and Behavioral Sciences**

Erika Löfström<sup>a</sup> & Kirsi Pyhältö<sup>a</sup>

<b>Principle at stake</b>	<b>Ethical issues</b>
<b>Avoiding harm</b>	Exploitation and abuse, dual relationships
<b>Beneficence</b>	Lack of competence, inadequacy of support, blurred boundaries of supervisor role
<b>Respect for autonomy</b>	Intrusion of supervisor views and values, failure to support students' independence
<b>Fidelity</b>	Supervision abandonment, failure to provide supervision
<b>Justice</b>	Inequity, unfair treatment

# Ethical aspects in supervision matter to Ph.D. students

(Löfström & Pyhältö, 2020)



## Doctoral student profiles on experiences of ethics in supervision

- **Ethically non-troubled students** (n = 412, 47.9%)
- **Seekers of Ethical Allies** (n = 192, 22.3%)
- **Students puzzled by supervision relationship** (n = 160, 18.6 %)
- **Strugglers in the ethical landscape** (n = 96, 11.2 %)

(Löfström et al., 2022)



## Engagement, exhaustion and cynicism in the ethics experience profiles

	Puzzled n=160		Strugglers n=96		Seekers of Allies n=192		Non- troubled n=412		
Variables	M	SD	M	SD	M	SD	M	SD	F
Engagement	4.83	1.20	4.35	1.49	4.79	1.21	5.46	1.02	33.78***
Exhaustion	4.05	1.24	4.75	1.51	3.72	1.30	3.28	1.27	39.01***
Cynicism	2.99	1.39	3.66	1.82	2.91	1.53	1.90	1.06	65.85***

\*\*\*  $p < .001$

(Löfström et al., 2022)

# Conclusions

- Ethical principles fundamental to the academic community are present in ordinary supervision encounters; explicitly and implicitly.
- Scrutinizing and dealing with the implicitly/latently present ethics require an awareness/recognition of these in the first place.
- It is in the supervision practices that the principles are manifested and “lived” making it supervision a powerful teaching and learning environment of ethics and integrity.





**Thank you  
for your attention**



Let's welcome our  
next presenter:  
Anu Tammeleht



# Ethics and Integrity in HE context – the case of Estonia

Dr Anu Tammeleht  
University of Tartu  
Centre for Ethics

# Estonia – country profile

- Population: 1,3 million people (about 1 million Estonian speakers)
- 6 research-intensive state universities, all offering programmes in Estonian
- Re-independence in 1991 (before that 50 years under the Soviet rule) – some disciplines are still influenced by the past practices (topics include – authorship, data collection, informed consent, etc.)
- The first committee dealing with REI (medical research, bioethics) established in 1990 (at the University of Tartu)
- Center for Ethics (University of Tartu) established in 2001 – interdisciplinary centre for research and education on ethics

# Estonia – country profile



Research ethics and integrity have nationally gained more prominence only in the past decade – advantages and disadvantages of a small research community



No separate term for 'research ethics' and 'research integrity' – it is all under 'teaduseetika' (directly translates to 'research ethics', we use the term REI to combine both aspects)



Academic integrity includes preventing plagiarism and student cheating and is dealt with in departments at universities; REI – ethical research practices but also relationships.

# Academic integrity

- Universities promote academic integrity by outlining good practices of learning, e.g. <https://ut.ee/en/content/good-practice-learning>
  - Focus on positive behaviour and prevention
  - Importance of students' personal motivation and responsibilities – including working hard
  - Integrates research and academic integrity: *‘Good learning is **honest and ethical and respects academic practices**. Good learning **excludes plagiarism, cheating and other dishonest methods**. In **studies and research work**, especially in case of research on humans and other living beings, the student **complies with ethical requirements**. The student does not engage in irrelevant activities and is **awake and sober during learning activities**. If the student notices that fellow students or teaching staff **violate good academic practice** they react in an appropriate manner. ‘*
- Implementation lies with the departments and programmes.

# First National REI Survey in Estonia

- Conducted in spring 2023 (Simm et al., 2023)
- Included N=354 respondents
- ‘The UNESCO Science Report estimates the number of researchers in Estonia to be 3755 (in 2018) which would result in the sample being 9.3% (Schneegans et al., 2021)’
- Methodology of the survey based on national surveys of:
  - Finland
  - Norway
  - Lithuania
  - + ideas from REI advisors and other stakeholders



## First National REI Survey in Estonia

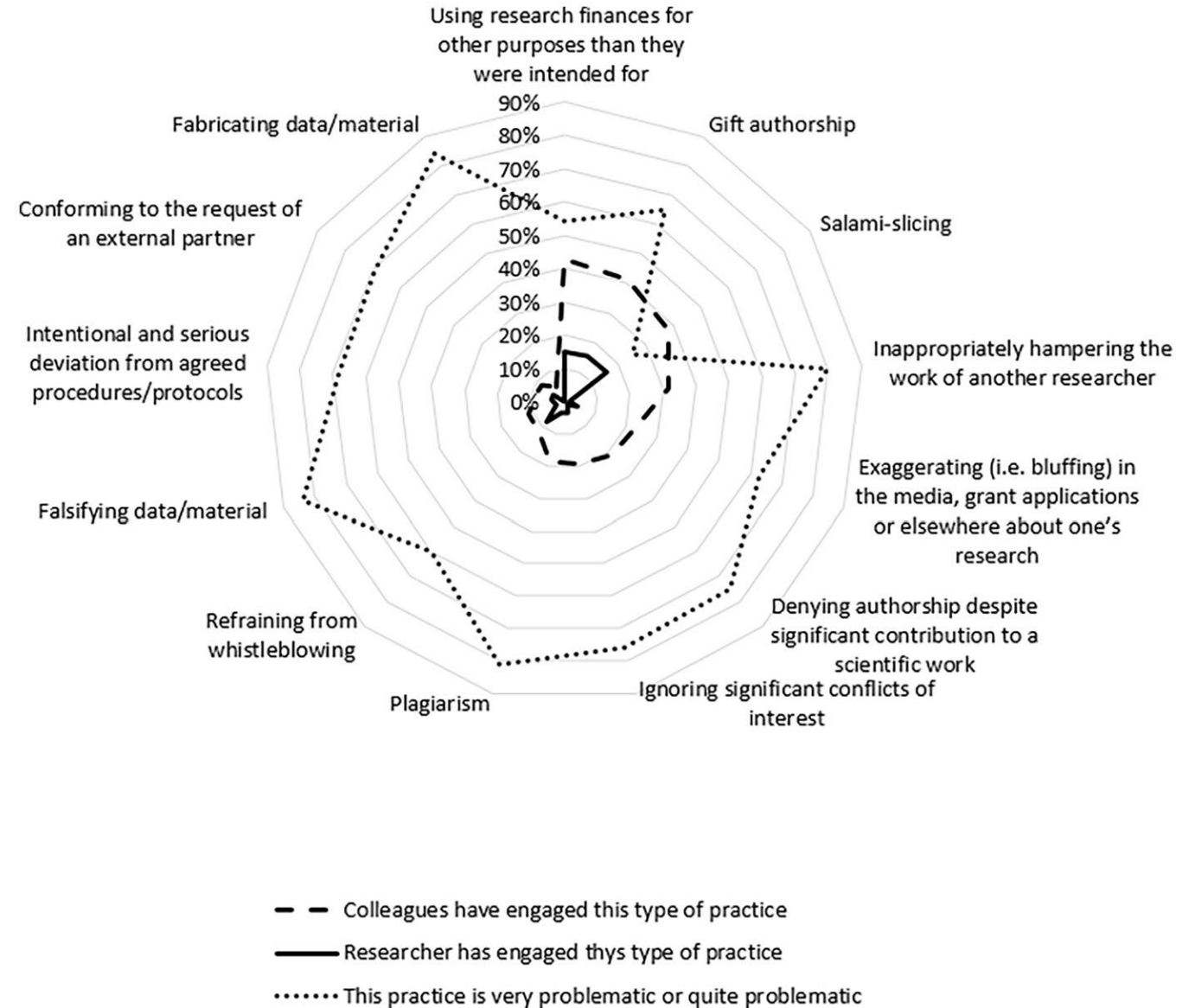
- The questionnaire consisted of 7 sections:
  - 1) background information;
  - 2) authorship criteria;
  - 3) FFP and QRPs;
  - 4) risks for REI;
  - 5) elements of the REI infrastructure;
  - 6) training;
  - 7) ethical awareness vignettes
- **How are academic integrity and research integrity displayed in the national survey of Estonia?**

## Display of academic integrity

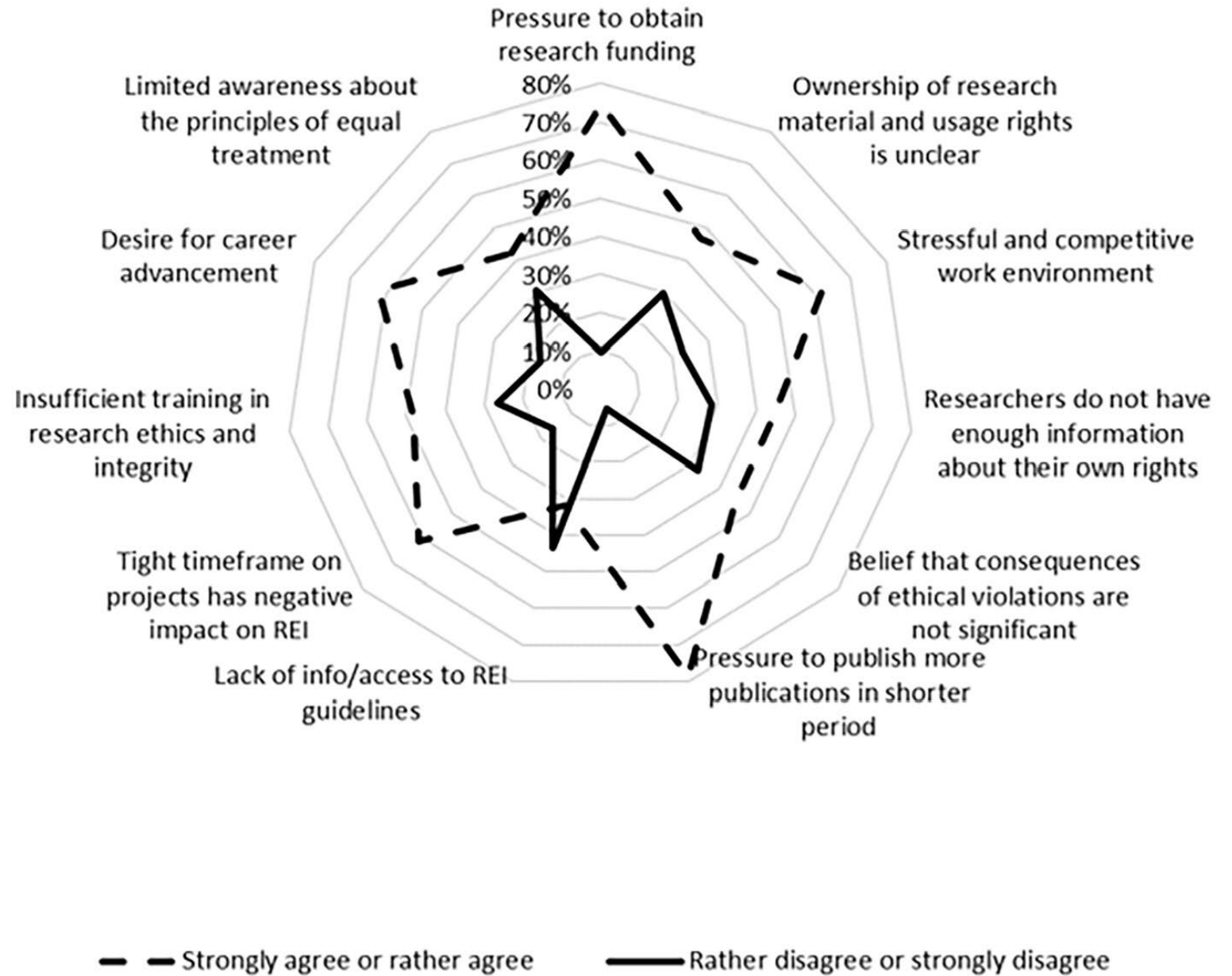
- The survey was focused on REI
- FFP was present in the survey – self-reported FFP was similar to other international surveys (at 1 and 2%), seeing colleagues do it: plagiarism 18%, fabrication 11% and falsification 5%
- Data from Simm et al., 2024



# Display of REI – FFP and QRPs

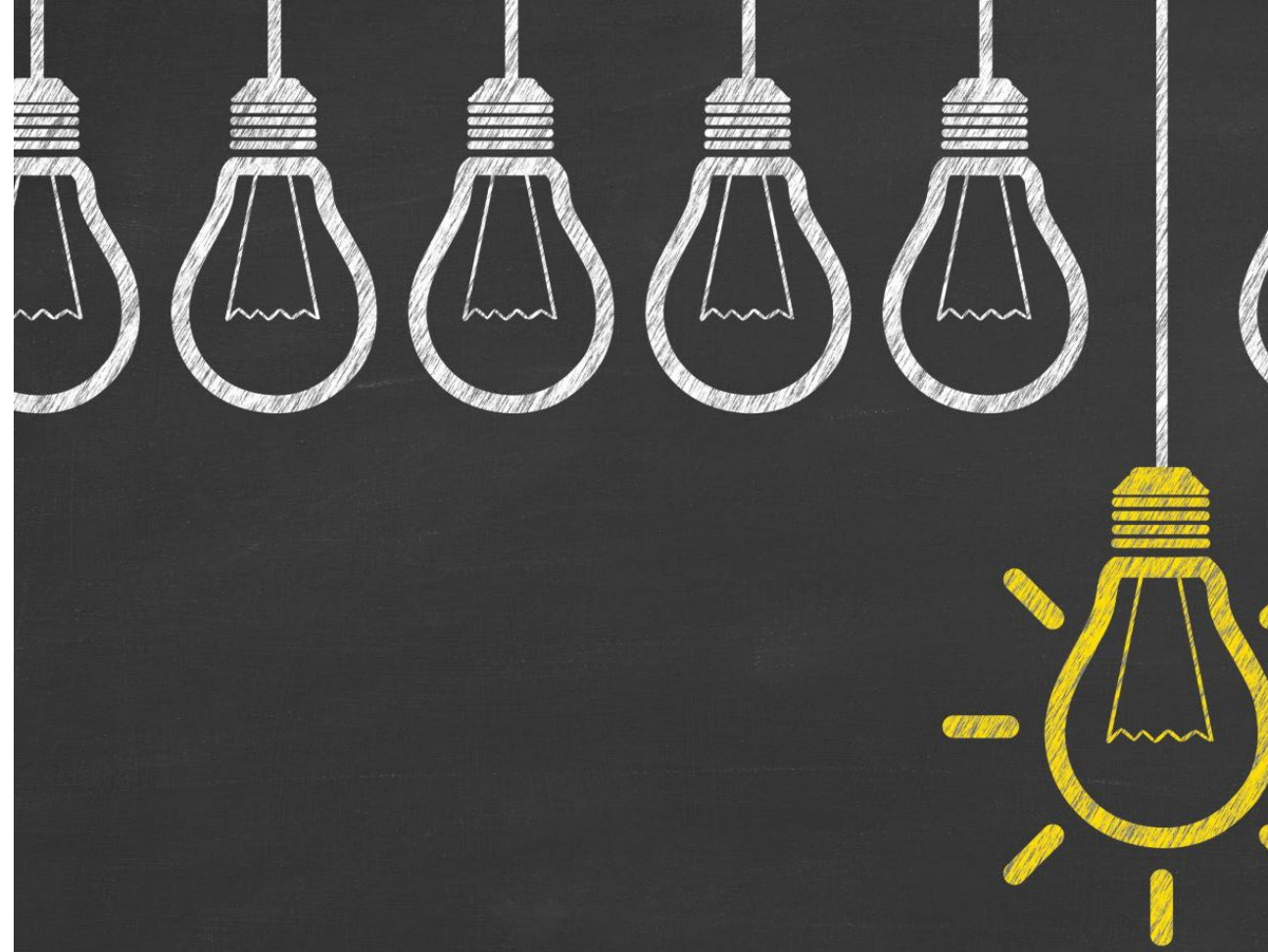


# Threats to REI



## REI infrastructure – guidelines and training opportunities

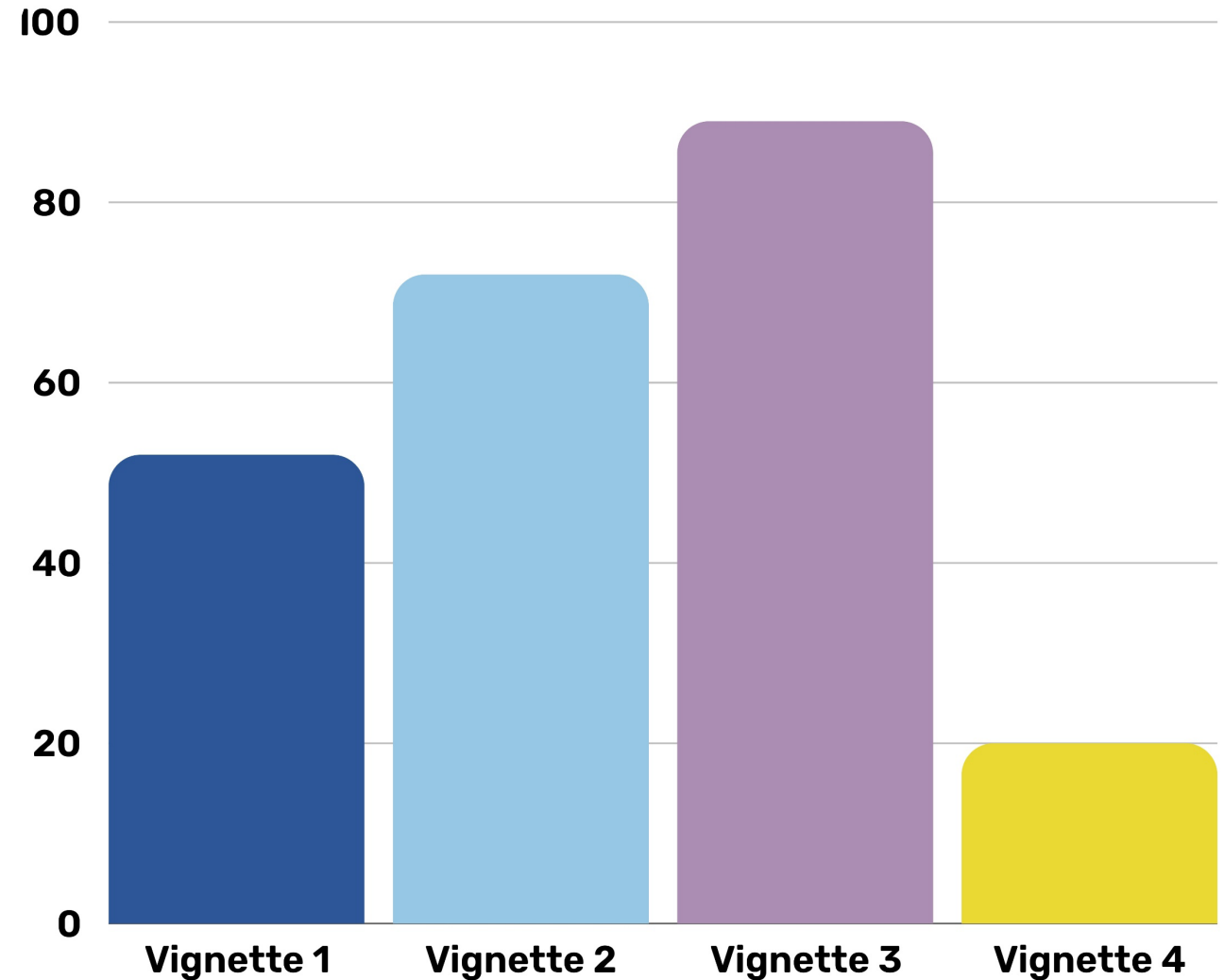
- About 70% are aware of guiding documents
- About 60% have not participated in any REI training in the past 5 years, about 45% know that training has been available
- More than 60% of PhD students have participated in REI training
- Only about 25% of respondents felt they have sufficient knowledge about REI



# Ethical sensitivity

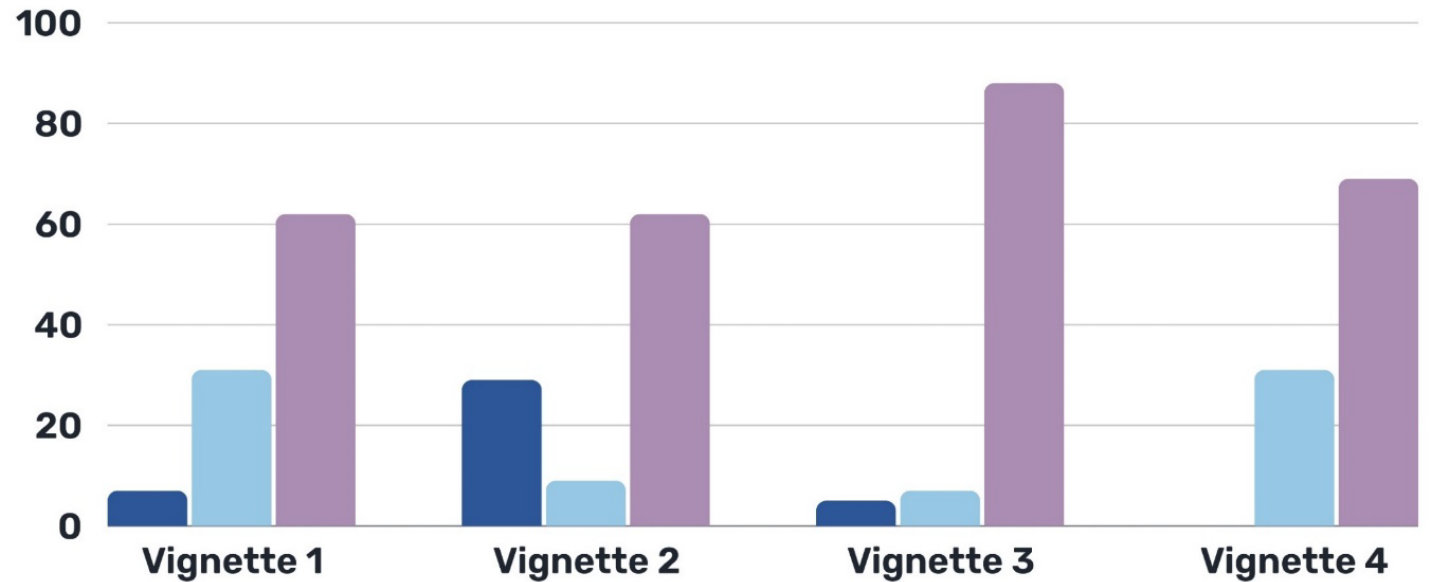
- 4 vignettes in the survey
- 328-332 respondents
- 2 tasks:
  - 1-5 Likert scale to express ethicality of the situation
  - Possibility to comment on the case (about half of respondents used this opportunity)
- Likert scale results for noticing ethicality in the vignettes

## Unethical behaviour



# Ethical sensitivity – open answers

- About half of respondents provided also comments on the vignettes
- Open answers were analysed based on the SOLO taxonomy
- See more details on the poster by Parder et al., 2024 (WCRI)



**Vignette 1:**  
IRB approval after the study

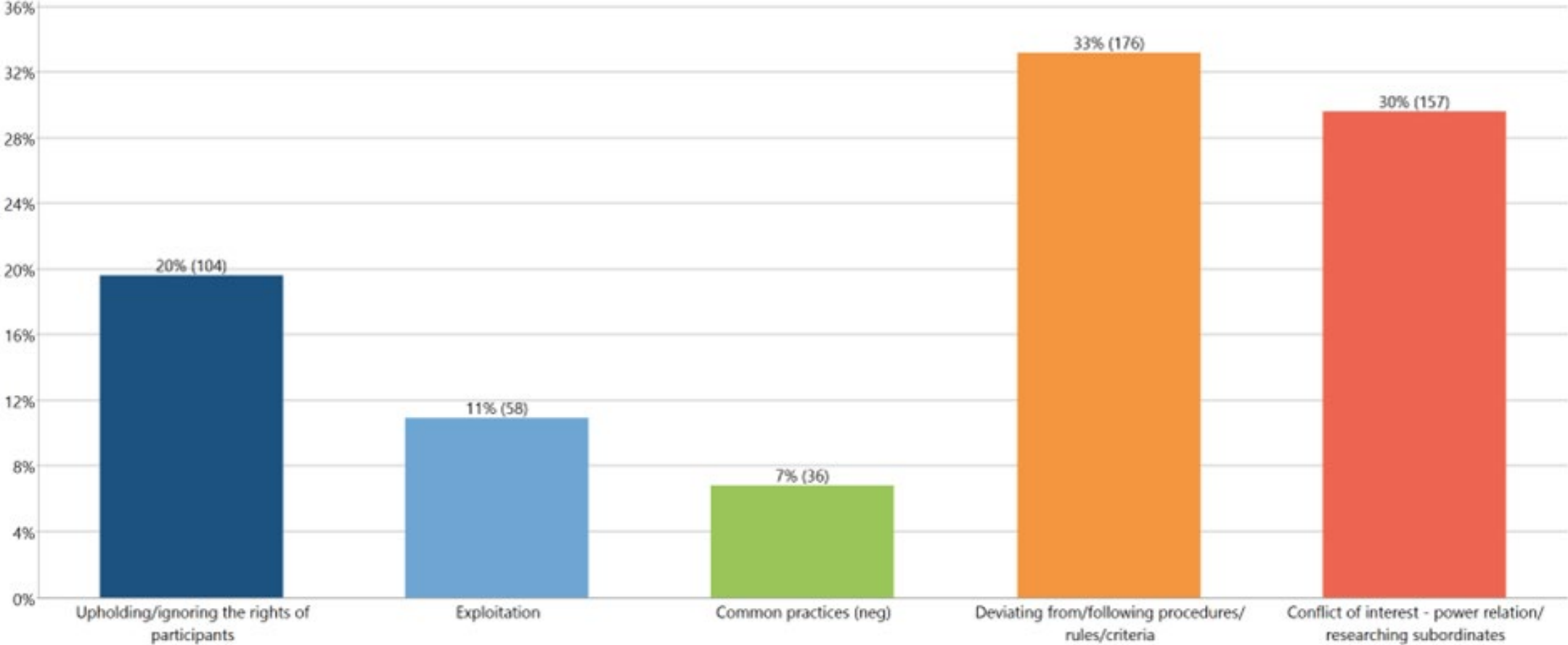
**Vignette 2:**  
Pressuring research participant

**Vignette 3:**  
Including a co-authorship in a manuscript after a request from senior co-worker

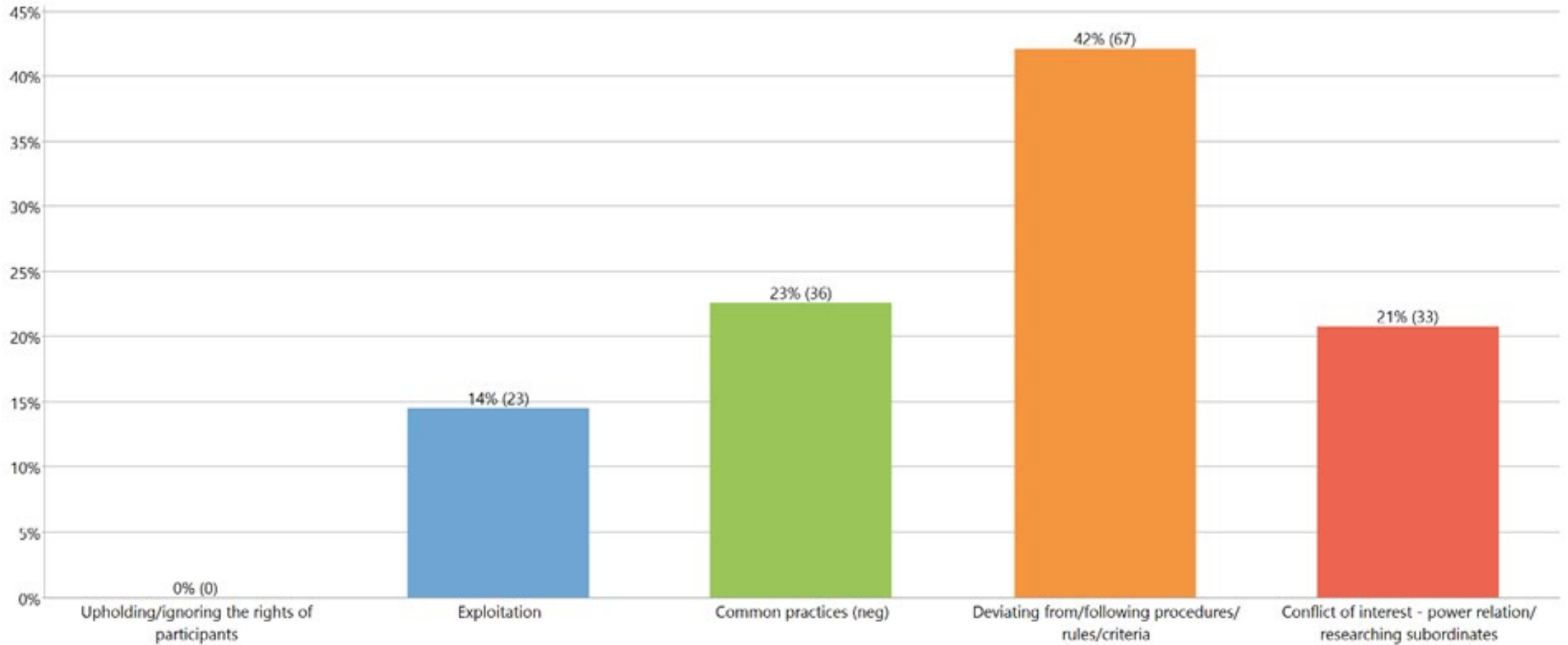
**Vignette 4:**  
Having an intimate relationship with a co-worker



# Central topics recognised in the vignettes (overall results)



# Vignette 3 – recognised topics



# Where are we going?

- Awareness towards ethical issues in the HE context is becoming more important – both related to academic and research integrity;
- The society is becoming more demanding towards research ethics and integrity (a ‘good’ scandal always helps this) – TRUST;
- The national survey helped map the needs for infrastructure as well as training (topics);
- The lack of a separate term for ‘research integrity’ may influence the way researchers see various topics in situations;
- Bringing up the next generation of REI leaders is crucial – they will (hopefully) discard old practices and build the culture of integrity:
  - PhD students are already better trained and ethically more sensitive
  - International collaboration helps a lot
  - It is important to question some ingrained practices and build new ones – this is not always easy!
  - Supervision of PhD students is crucial!



Thank you for listening!

Anu Tammeleht

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# Q & A

