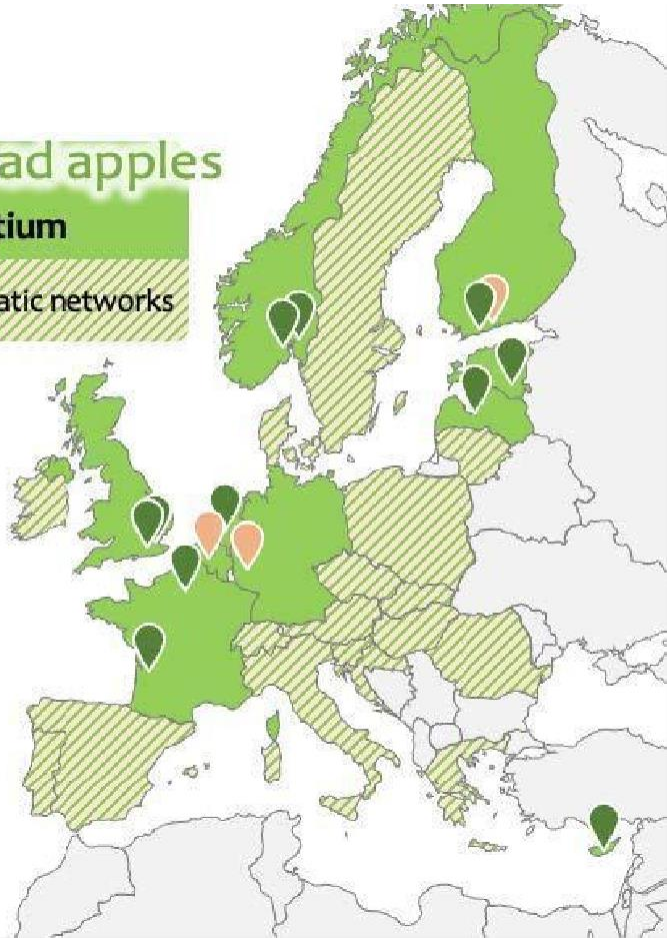


Research integrity **BEYOND** bad apples

A European consortium

including three thematic networks



D7.3 Policy Brief

Project title: BEYOND BAD APPLES: Towards a Behavioral and Evidence-Based Approach to Promote Research Ethics and Research Integrity in Europe

Project acronym: BEYOND

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**DISCLAIMER
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Consortium:

	ROLE	NAME	Acronym	Country
1.	Coordinator	University of Oslo	UiO	Norway
2.	Partner	European Network of Research Ethics Committees	EUREC	Belgium
3.	Partner	French Office for Research Integrity	OFIS	France
4.	Partner	French Research Institute for Agriculture, Food and the Environment	INRAE	France
5.	Partner	Oslo Metropolitan University	OsloMet	Norway
6.	Partner	Finnish National Board on Research Integrity TENK	TENK	Finland
7.	Partner	University of Central Lancashire-Cyprus	UCLanCY	Cyprus
8.	Partner	University of Helsinki	UH	Finland
9.	Partner	University of Humanistic Studies	UHS	The Netherlands
10.	Partner	University of Latvia	UL	Latvia
11.	Partner	University of Tartu	UTARTU	Estonia
12.	Partner	Stichting VUMC / The Embassy of Good Science	VUMC	The Netherlands
13.	AP	Trilateral Research LTD	TRI	UK
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VERSION	DATE	Revised by	Reason

BEYOND policy brief # 1

Addressing the socio-economic consequences of research misconduct

December 2023

Key messages

- Research misconduct is still a growing problem that affects trust in science, the credibility of research and harms researchers
- Mitigation measures must be taken to minimize the negative impacts and maximize the beneficial socio-economic impacts of research

Key recommendations

- Promote a culture of integrity at individual and institutional levels
- Enhance monitoring and policy development on data handling, authorship and publication ethics, conflict of interest and reporting mechanisms
- Improve compliance and enforcement via audits, independent oversight, and improved whistle-blower protections
- Enhance of peer review support, standards and mechanisms
- Provide the right incentives to support researchers in meeting research ethics and integrity requirements

Who is this for?

- European Commission
- European Network of Research Ethics and Research Integrity (ENERI)
- European Network of Research Integrity Offices (ENRIO)
- National research integrity offices

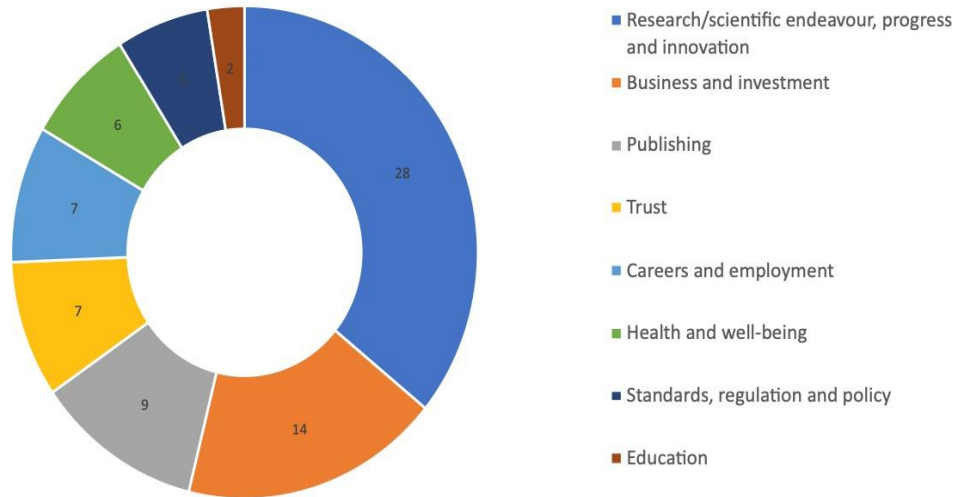
Introduction

Research misconduct (which includes fabrication, falsification and plagiarism) and related questionable research practices (problematic practices that might compromise research in some contexts) have a [significant impact](#) on [researchers](#), [economy](#), and [society](#). The Horizon EU-funded [BEYOND](#) project identified a diversity of socio-economic impacts of research misconduct to support the measures developed to promote research ethics and integrity through shared responsibilities (individual and institutional). This policy brief shares some of the key findings and recommendations.

Impacts on what?

As depicted below, research misconduct impacts come in a diversity of forms and impacts different aspects of social and economic life:

Categories of socio-economic impacts identified in BEYOND



Impact drivers

Impact drivers of research misconduct include:

INSTITUTIONAL

- Culture and environment
- Power dynamics
- Inadequate research ethics and integrity investment and training
- Lack of supervision of researchers and activities
- Few deterrence mechanisms

ENVIROMENTAL

- Competition
- Funding pressures
- Precarious jobs/economy

INDIVIDUAL

- Psychology and self-control issues
- Personal circumstances
- Career pressures

Affected parties and related impacts

Stakeholders (across the private-public spectrum) are affected by research misconduct. Examples of some affected groups (in no order of significance) and the impacts they face are provided below:

- **administrators** – investment of extra effort and resources to deal with cases of misconduct
- **authors** – denial of credit, stigmatization through association
- **educators and educational institutions** - sapping of educational budgets due to additional security measures needed
- **funders of research** – resource wastage, misallocation of funds
- **medical/paramedical professionals** – flawed decision-making based on bad research, malpractice accusations, reputational harm and other consequences of harm to patients
- **patients (relatives)** – health and care impacted by decisions based on flawed research and data, treatment delays
- **perpetrators** – loss of jobs, licences and impact on careers, incarceration
- **policy makers** – negative impact on future research and policy making process; flawed policy decision-making, negative influence on guidelines
- **public health bodies** – public health implications, bad press, misallocation of resources
- **publishers** – threats to peer review integrity, impacts on trustworthiness of publications
- **research collaborators** – extended loss of trust, stigmatization through association
- **research participants** – loss of trust in science and researchers, increased reluctance to participate in research activities
- **research performing organizations (including businesses)** – loss of reputation, liabilities, mistrust
- **researchers (all sectors)** – career and professional impacts for those carrying out misconduct or associated with it
- **society (the public)** – negative impacts on trust in and the perception of science, loss of public confidence
- **students** – impacts on careers, harms from relying on flawed research/data, risks from association with perpetrators
- **the scientific community** – loss of trust in and relevance of research, opportunity costs of lost trust and goodwill, funding withdrawal/loss, undermined relationships, impact on future studies
- **whistle-blowers** - retributions, stigmatization, career damage

The challenge/why does this matter?

Addressing the socio-economic consequences of research misconduct is even more important now than ever before. One report estimates that there is [more fraud than reported](#). [Concerns](#) have also been expressed about generative AI facilitating and [accelerating](#) misconduct and making it harder to detect, even though some tools are being deployed to that effect.

When research misconduct occurs, there it [affects](#) trust of the public in science – this is harmful as it affects how scientific research and innovation are received and accepted. It also affects investment in and the advancement of innovation. Research misconduct has significant career consequences that affect wellbeing and the lives of those connected with persons implicated in research misconduct and brings reputational risks and financial costs for the organizations that are implicated and/or must deal with it.

Recommended Actions

To this effect, BEYOND recommends that the following mitigation measures are taken to minimize the negative impacts of research misconduct and QRPs, reduce their severity, and maximize the beneficial socio-economic impacts of research:

Fostering a culture of integrity

- Education & training on ethics, plagiarism prevention, responsible authorship
- Guidance on research integrity and generative AI
- Institutional support via integrity committees
- Awareness via events and media

Monitoring and policy development on

- Data handling
- Authorship and publication ethics
- Conflict of interest
- Reporting mechanisms

Compliance and enforcement

- Audits and independent oversight
- Improved whistleblower protections including legal support and counselling
- Timely, thorough investigations of reported cases

Peer support

- Transparent peer review
- Clear communication of reviewer guidelines
- Supportive mechanisms for conflict resolution

Incentives

- Ethical metrics and indicators for evaluation/performance reviews of researchers
- Support (financial/time) for researcher training and professional development in responsible research practices
- Funding for research on generative AI and research misconduct/questionable research practices

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This policy brief was prepared by Rowena Rodrigues, Trilateral Research and Daniel Pizzolato, EUREC on behalf of the BEYOND project consortium. The policy brief was reviewed by Ian Slesinger, Trilateral Research and Susanne van den Hoof, University of Humanistic Studies. The brief draws from work carried out in the project in 2023 on the socio-economic consequences of research misconduct. The opinions expressed here do not represent the views of the European Commission or the UKRI.

About BEYOND

The BEYOND Horizon Europe project - [Beyond Bad Apples: Towards a Behavioral and Evidence-Based Approach to Promote Research Ethics and Research Integrity in Europe](#) (2023-2025) is funded by the European Union, Grant agreement ID: 101094714. Trilateral Research is supported by UKRI Grant 10062742. BEYOND is exploring and advancing individual and institutional responsibilities in research misconduct and promoting research ethics and research integrity in Europe.