

The adverse impacts of research malpractice

Insights on the socio-economic impacts of research misconduct

Daniel Pizzolato, EUREC Rowena Rodrigues, Trilateral Research







Background

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 responsibility (individual and institutional). This policy brief shares some of the key findings and recommendations.

Results

Addressing the socio-economic consequences of research misconduct has become increasingly important. It is suggested that the incidence of fraud might be higher than what is currently reported. Additionally, there are growing concerns about generative AI facilitating and accelerating misconduct, making detection more challenging, despite the deployment of tools to mitigate this issue. When research misconduct occurs, it undermines public trust in science. This erosion of trust adversely impacts the reception and acceptance of scientific research and innovation. It also affects investment in, and the progression of, innovation. Research misconduct carries significant career consequences, affecting the wellbeing of those involved and their associates. Furthermore, It poses reputational risks and financial costs to the organizations implicated or tasked with addressing these issues.

Impacts on what?

Categories of socio-economic impacts identified



- Business and investmen
- Careers and employmen
- Health and well-being

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

• Competition

Impact drivers

- Funding pressures

Psychology and

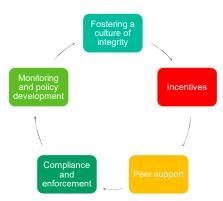
 Personal circumstances Career pressures

Mitigation measures

- · Preventative (measures to prevent or reduce potential impact before it occurs)
- Corrective (measures to reduce the impact to an acceptable level)
- Compensatory (measures that are applied when the other two fail and to compensate for unavoidable harmful impact).

Recommendations

The recommendations presented in this section are not new, as experts in research ethics and integrity, including international organizations like ALLEA, UNESCO, DORA, and ENRIO, have advocated for measures to address Research Risks and Quality Problems (RM and QRPs). However, the approach is unique in that it focuses on addressing socio-economic impacts, presenting them as part of a cohesive framework that can synergize and complement each other, creating a more robust and effective strategy to address RM and QRPs.



Beyond partners

the European Network of Research Ethics Committees • the French Office for Research Integrity • the French Research Institute for Agriculture. Food and the Finnish National Board on Research Integrity TENK • Trilateral Research, University of Central Lancashire-Cyprus . University of Helsinki . University of Humanistic Studies in the Netherlands • University of Latvia • University of Tartu • the Embassy of Good Science

FIND OUT MORE!

BEYOND Policy Brief



BEYOND online Policy event





Funded by the European Union

BEYOND has received funding from the European Union's Horizon Europe research and innovation programme under GA No 101094714 (University of Oslo). UK participants in BEYOND are supported by UKRI grant number 10062742 (Trilateral Research) and by UKRI grant number 10067440 (Heriot-