

# Negotiating RI as academic survival strategies

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# Outline

1. Introduction
2. Conceptual framework
3. Strategies to reconcile uncertainties
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# Introduction

- The causes for breaches of RI are many but often portrayed as originating in a deficit of information
- EU and national projects, as well as strategies by policy makers and funders centre on guidelines and procedures
- Clear information can be helpful, however there are structural issues that play a role in research misconduct
- Rather than owing to a deficit of information, QRPs can be seen as endemic to academic research practices embedded in a particular economic & social system.
- Our proposal is to analyse QRPs as strategies to reconcile tensions between uncertainties in the scientific work and the conditions of academic employment.
- Such an analysis can be the basis for institutions & funders to consider additional ways to reduce research misconduct

# Conceptual framework & data - I

- Research on role of motivations & systemic incentives in RI breaches.
  - Bruton, S. V., Medlin, M., Brown, M., & Sacco, D. F. (2020). Personal motivations and systemic incentives: Scientists on questionable research practices. *Science and Engineering Ethics*, 26(3), 1531–1547. <https://doi.org/10.1007/s11948-020-00182-9>
  - Sacco, D., Brown, M., & Bruton, S. V. (2019). Grounds for ambiguity: Justifiable bases for engaging in questionable research practices. *Science and Engineering Ethics*, 25(5), 1321–1337. <https://doi.org/10.1007/s11948-018-0065-x>
- Uncertainties around scientific endeavour
  - Sigl, L. (2016). On the Tacit Governance of research by uncertainty: How early stage researchers contribute to the Governance of life science research. *Science, Technology & Human Values*, 41(3), 347–374. <https://doi-org/10.1177/0162243915599069>
- Epistemic uncertainty
  - The inherent uncertainty of scientific inquiry, a perpetual source of unpredictability.
  - Example - “failed” experiments > uninteresting, unpublishable results.
- Social uncertainty
  - Unpredictability from human-made conditions of academic enterprise.
  - Examples: access to research resources (grant competition), employment conditions (short-term contracts).

# Conceptual framework & data - II

- Relation between epistemic & social uncertainty
  - Failed experiment, missing grants > end of career?
  - Fochler, M., & Sigl, L. (2018). Anticipatory uncertainty: How academic and industry researchers in the life sciences experience and manage the uncertainties of the research process differently. *Science as Culture*, 27(3), 349–374. <https://doi.org/10.1080/09505431.2018.1485640>
  - Kaltenbrunner, W. (2020). Managing budgetary uncertainty, interpreting policy. How researchers integrate “Grand Challenges” Funding Programs into their research agendas. *Journal of Responsible Innovation*, 7(3), 340–341. <https://doi.org/10.1080/23299460.2020.1744401>
- How do epistemic & social uncertainty relate to RI breaches?
  - Behaviour that contradicts good practices > loose the coupling of epistemic & social uncertainties of research
  - QRPS as strategies to decrease epistemic uncertainty & reduce social uncertainty
- Data
  - 30 focus groups, 8 EU countries (2019-2020) – SOPs4RI (Horizon Grant Agreement no. 824481)
  - Goal – prioritise themes that were lacking guidelines or SOPs
  - OSF page <https://doi.org/10.17605/OSF.IO/E9U8T>

# Strategies to reconcile uncertainties - I

- **Cutting corners**

- To optimize research time given time (budgetary) constraints
- Avoiding analytical steps that could increase epistemic uncertainty, or engagement with primary sources (humanities)
- “Time is very important, if we have time there is no reason to go towards misconduct.” (professor, public health).

- **Gray area of data practices**

- To increase quantitative output
- Fabricating/manipulating data
- “I think fraud, real fraud is I think very rare, but you can make yourself believe that something is not p-hacking, whereas in the end it is.” (associate professor, social sciences).

- **Ticking boxes**

- Deluge of bureaucratic measures for external scrutiny
- Recycling of DMP or ethics deliverables
- “then you just create another tick box because we already have to apply to a lot of things and you don’t really create a change in mentality, which is more important, I think, than having all, then you can prove, you have a document in place because I don’t think you change mentality with only documents. (research coordinator)”

# Strategies to reconcile uncertainties - II

- **Avoiding trouble/obligations**

- uncomfortable confrontations, freeing up time (skipping trainings/gatherings due to time constraints)
- “(...)it is also not going to help if people who see something, and they are like: Yeah, but it will in the end cost me my job and the person that did the wrongdoing might still, you know like (...).” (member of compliance review committee, private research institution).
- “And I’m sure if I had a permanent position now, then I would be a lot braver to speak out about a lot of things which are bothering me...” (assistant professor, humanities).

- **Authorship & grant writing practices**

- Surviving a highly competitive job market
- Gift authorship, pimping up your proposal
- “You need to have many publications and many citations, and so the system reacts to external forces. So if you look at the average number of co-authors on our papers, it’s just going up and up and up, because people are just, and they say “you’ve put me on you paper, I’ll put you on my paper”.” (associate professors, natural sciences)
- [name] who is the head of the [academy] used to work in my department and I worked with [them] and [they] said, if you can’t figure out a way to get [multinational conglomerate corporation], the company, to sponsor your research, then you’re not creative enough. And then I think, well... you know, how should I make [the specific type of literary criticism practiced by the speaker] relevant to [a multinational conglomerate corporation]? (researcher, humanities)

# Ways to address uncertainties

- QRPs reflect how social uncertainties are coupled with epistemic uncertainties
  - Organisation of funding of science, erosion of public funding, short-term contracts, higher workload
  - Quantified decision making (managerial cutting corners)
  - > Poor scientific practices
- Normative approaches – ignore underlying problems
- Other approaches
  - Publication cultures where uncertainties are part of the collective resource of knowledge production (preregistration, publication of negative results, publication of data, rethinking publication criteria).
  - Explore alternative publishing formats from within academic communities
  - Responsible research evaluation > consider broad variety of activities & impacts
  - Spaces to openly discuss issues & challenges (Ahmed, 2021)
  - Addressing job precarity -> organizations & funders need to be realistic and fair; discourse of “healthy work environment” vs unrealistic expectations; support from non-precarious staff to precarious staff.
  - Collectivising time & resource allocation vs individualizing social risks for efficiency



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## Data availability

Sørensen, M. P., Mejlgaard, N., Ravn, T., Charitidis, C. A., Marusic, A., Buljan, I., et al. (2023). Focus group interviews (WP5). <https://doi.org/10.17605/OSF.IO/E9U8T>.

## Paper

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