

Research integrity: a landscape study Approach and findings

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Background



House of Commons Science and Technology Committee Research Integrity report 2018

"We recommend that UKRI commission research to understand the effects of incentives in the research system on researcher behaviour and assess where adjustments or counterbalances may be needed to support research integrity."

Objectives



Understand the effects of incentives in the research system on researcher behaviour and organisational practices in the context of research integrity by:

- reviewing existing evidence to inform further data collection and to propose conclusions
- collection of further data to identify incentives and how they affect researcher behaviour and institutional practices
- analysing existing and new evidence of incentives and how they affect researcher behaviour and institutional practices

...so as to enable UKRI to assess where adjustments or counterbalances may be required

Project team









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Background



The Concordat to Support Research Integrity (2019) defines research integrity as

"upholding the highest standards of rigour and integrity in all aspects of research"

Including:

- Honesty in all aspects of research
- Rigour in methods, interpretations and communication
- Transparency and open communication
- Care and respect for participants, subjects and the stewardship of research and scholarship

https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/the-concordat-for-research-integrity.aspx

Literature review



Limited data on levels of research integrity: including frequency of retractions, reporting of misconduct cases, UKRI audits of grant-holding organisations, institutions' annual Concordat statements

Unclear whether increased frequency of issues, improved detection, or greater awareness

Considerable commentary on the influence of career-related pressures and use of metrics

Increasing interest in 'research culture' and the influence it may have on quality and ethical standards of research

This study is one of many ultimately aiming to encourage positive behaviours and a healthy research culture

Interdisciplinary working

Performance management

Intersectoral research

Workload managment

Annual objectives

Disciplines

Respect for careers beyond academia

RI training

Nature of the research undertaken

Institutional research strategy

Reproducibility

Promotion and progress

Reputation

Bullying and harassment Mentors and role models **Institutions and**

employment

Research objectivity

Codes of practice

Research activity

Headline seeking

Research impact

Research Excellence Framework

Open science

Pressure to publish

Metrics/KPls

Job security

Citation index

Terms and conditions of Concordat(s) Career guidance

Authorship

Length of funding

Career stage Block/QR funding

Research intensity

Doctoral submission rates

funding

Peer view

Funding objectivity

Targeted research calls Governments' policies

Funding and policy instruments

Funders' research strategies

Government funding

Public reputation of research

Examples of potential incentives

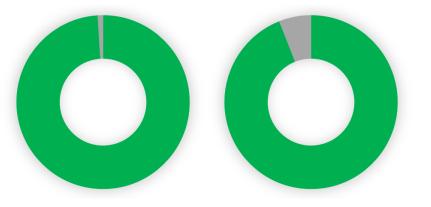
Vitae, ©Careers Research and Advisory Centre (CRAC) Limited.

vitae Research ecosystem: Spheres of influence realising the potential of researchers **GLOBAL** UK **INSTITUTIONAL DISCIPLINE LOCAL INDIVIDUAL**

What do researchers think about research integrity?

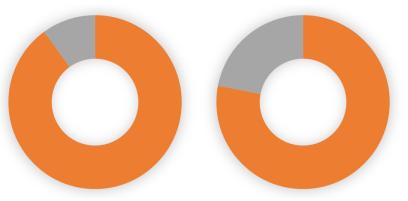


99% agree that **their** personal integrity drives research integrity



94% agree **they** understand the levels of research integrity expected

90% believe research integrity is compromised **by others** at least some of the time



78% believe **others** feel tempted or under pressure to compromise on research integrity at least some of the time

Complex ecosystem of incentives



TOP FIVE INCENTIVES FOR EACH CATEGORY AS RATED FOR THEIR POTENTIAL IMPACT ON RESEARCH INTEGRITY*

Strongly positive perceived impact:

Data sharing policies and requirements

Open access publishing

Interdisciplinary research

Professional development and training opportunities

Research leadership and management

Positive and negative perceived impact:

Media coverage and public perception of research

Research leadership and management

How funding for specific projects is awarded

How researchers are assessed for promotion during their careers

Institutional research strategy

Strongly negative perceived impact:

Incidents of bullying and harassment

Use of journal impact factor (JIF), h-index and other metrics

League tables of institutions

Institutional workload models

How researchers are assessed for promotion during their careers

^{*}Incentives phrased as asked in the survey. To some extent negatively perceived incentives can be caveated with 'poor' or 'inappropriate' (e.g. 'poor workload models' or 'inappropriate use of league tables') but not entirely.

Messages for research culture



Research culture plays a fundamental role in research integrity

Research integrity is perceived to be supported by a research culture and ecosystem that:

- Is trustworthy and inspires trust (honest)
- Rewards and values the process and quality of research (rigorous)
- Applies the right metrics in appropriate ways (transparent)
- Facilitates flow of ideas and information (open)
- Embeds continuous improvement (respect and stewardship of research)
- Reduces competitive and career pressures (care for the people of research)

Opportunities for all



GLOBAL Collective responsibility of all stakeholders – all can and

should act

UK Culture of continuous improvement – encourage openness

of research integrity issues

INSTITUTIONAL Research integrity upheld at all levels – raise awareness,

embed and act on policies

DISCIPLINE Interdisciplinarity as a potential positive – have research

integrity conversations across discipline boundaries

LOCAL Culture of continuous professional development – recognise,

reward and give time for engagement

INDIVIDUAL High levels of personal responsibility – engage with broad

range of opportunities to learn and improve

Thank you



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