Open Science in Greece

Principles and practices of Open Science, its connections with Research Integrity and the relevant services offered by HEAL-Link

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DEMOCRATISING KNOWLEDGE
AMPLIFYING IMPACT

2nd International Week for Academic Libraries, HMU, 21-25 September 2026

Outline

- Open Science, Research Integrity, and reproducibility
- How they are operationalised
- A synthesis with an example
- How HEAL-Link promotes Open Science, Research Integrity, and reproducibility

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What is Open Science?

...and Research Integrity and reproducibility

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What is Open Science and Research Integrity and reproducibility?

It is a set of principles and practices that aim to...

- remove barriers to the communication and use of any kind of output
- Is the extent to which any part of (or a whole) study enable a third party to repeat the study and assess its findings.
- promote compliance with widely accepted professional codes and norms

...associated with all stages of the research process.

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Open Science values

Quality & integrity

Collective benefit

Equity & justice

Diversity & inclusivity

https://www.unesco.org/en/open-science/about

Research Integrity principles

Honesty

Accountability

The Singapore statement

Professional Courtesy and fairness

Good stewardship

WORLD CONFERENCES ON RESEARCH INTEGRITY

https://www.wcrif.org/guidance/singapore-statement

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A code of conduct

https://allea.org/code-of-conduct/

THE EUROPEAN CODE OF CONDUCT FOR RESEARCH INTEGRITY

Good research practices are based on fundamental principles of research integrity:

- **Reliability** in ensuring the quality of research, reflected in the design, methodology, analysis, and use of resources.
- **Honesty** in developing, undertaking, reviewing, reporting, and communicating research in a transparent, fair, full, and unbiased way.
- **Respect** for colleagues, research participants, research subjects, society, ecosystems, cultural heritage, and the environment.
- **Accountability** for the research from idea to publication, for its management and organisation, for training, supervision, and mentoring, and for its wider societal impacts.

What is NOT Research Integrity

- Fabrication of data
- Falsification of data
- Plagiarism (of ideas, data, text)

What is NOT Research Integrity

Research fraud

Research procedures

- Insufficient care for research subjects
- Violation of experimental protocols
- Failure to obtain informed consent
- Insufficient privacy protection, breach of confidentiality
- Improper research design
- Sloppiness in experimentation and use of statistics
- Lack of Standard Operating Procedures

Review/Evaluation

- Non disclosure of conflicts of interest
- Personal bias
- Scientific rivalry
- Appropriation of ideas
- Careless reviewing processes

Publication conduct

- Sequence of appearance in author listing
- Honorary, guest, ghost, hyper authorship
- Coercive citation/citation cartels
- Selective citation
- Attention to grey and non-English speaking literature

Data practices

- Careless data management
- Inadequate curation
- Hiding data from colleagues
- Inadequate preservation of original data

Honest mistake

How is Open Science operationalised?

...and Research Integrity and reproducibility

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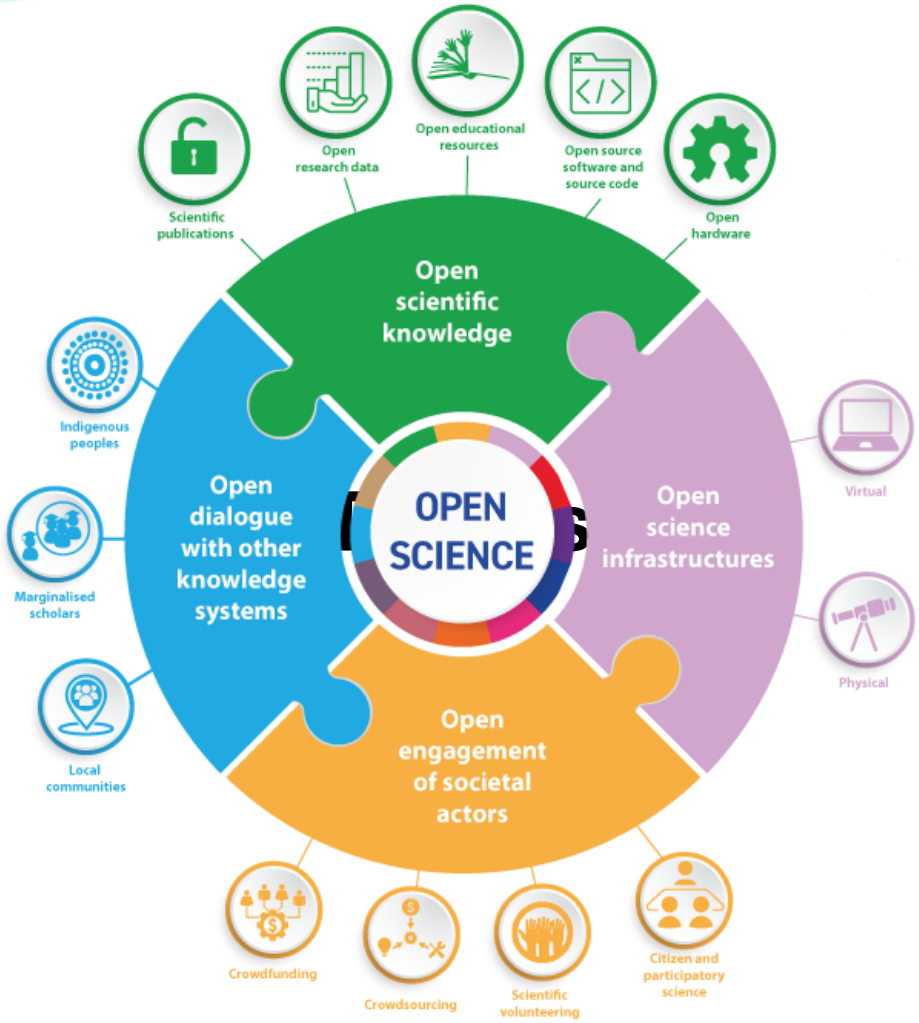
Open Science practices



Idea, literature survey, formulate main question or hypothesis

- Open educational resources
- Open collaborations

Study methodology and design

- Pre-registration
- Registered report
- Pre-analysis plans

Observation, data acquisition

- Open notebooks
- Open raw data
- Open software
- Open research material

Data analysis and consequent inferences

- Open underlying data
- Open code

Scholarly and public communication of study outputs

- Open peer review
- Open Access
- Post-publication review
- Science communication

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Research Integrity practices

SOPs4RI

https://sops4ri.eu/tools/

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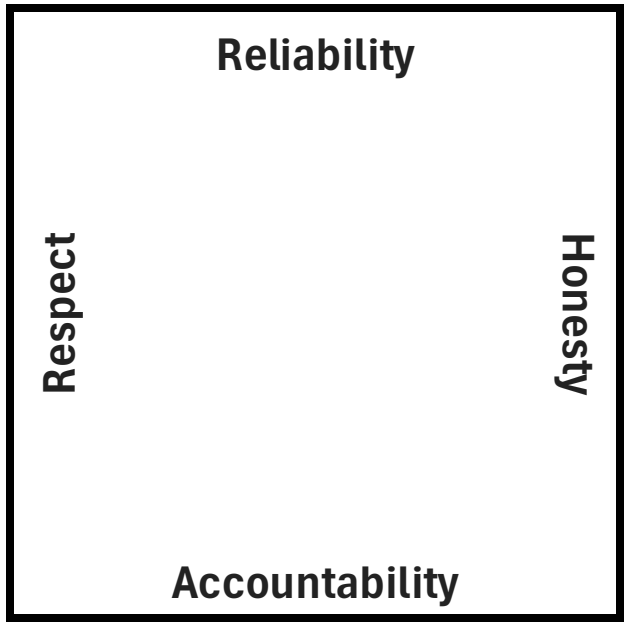
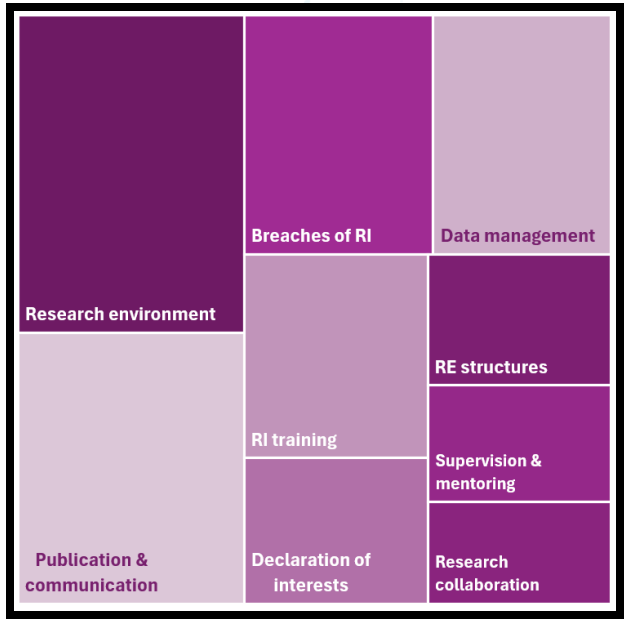
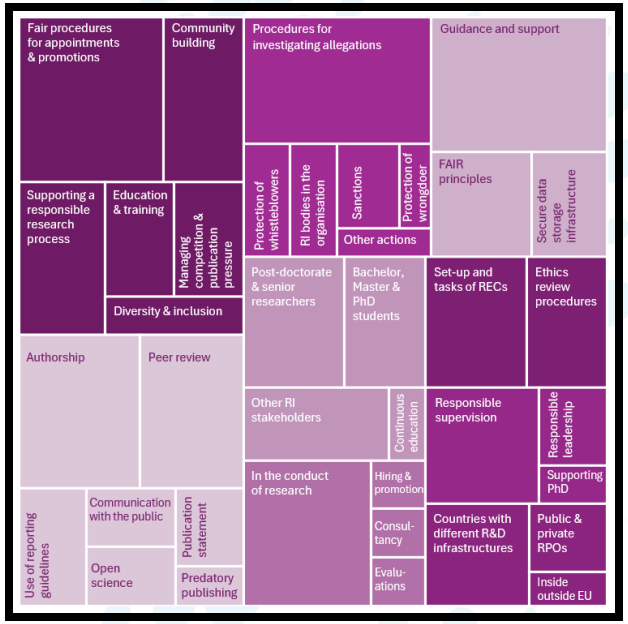
Research Integrity practices







https://sops4ri.eu/tools/

SOPs4RI

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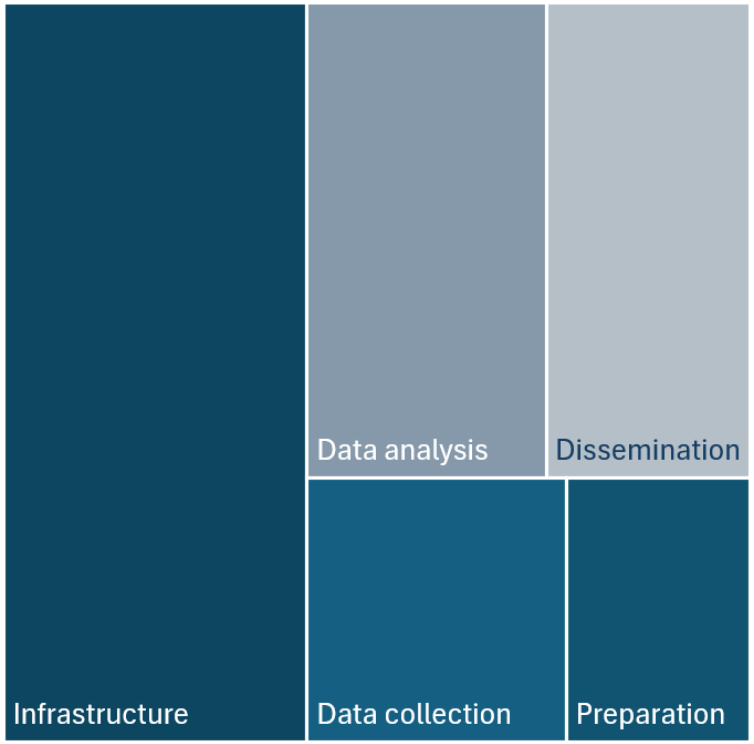
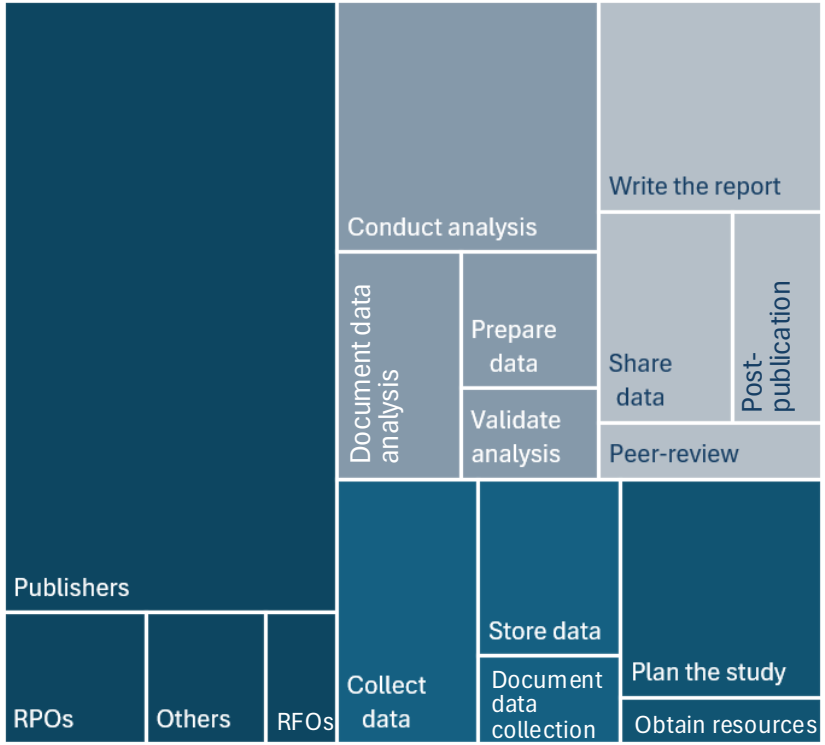
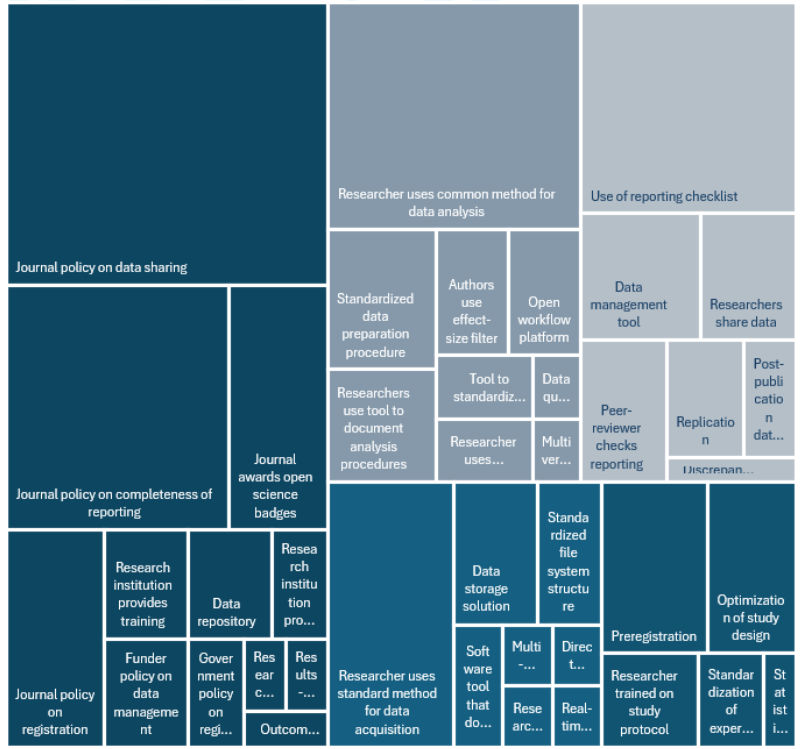
Reproducibility practices







TRUSTparency

https://trustparency-project.eu/

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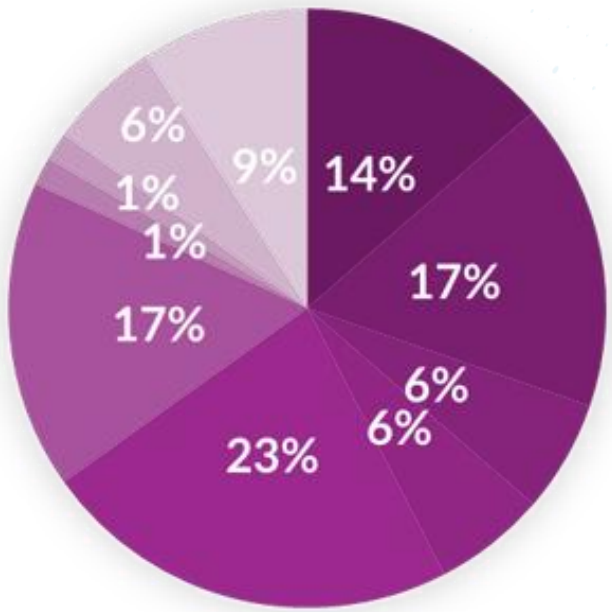
Reproducibility practices

More than 70% are clear-cut OS practices

Types of interventions



- data availability
- on data/code sharing or open science practices
- on reporting checklists or guidance
- on research quality
- open protocol
- open workflow tools, workflow, management systems
- policy guidelines (e.g. of funders/publishers)
- pre-registration, study registration, analysis plan
- project workflow
- reporting guidelines, reporting standards

TRUSTparency

https://trustparency-project.eu/

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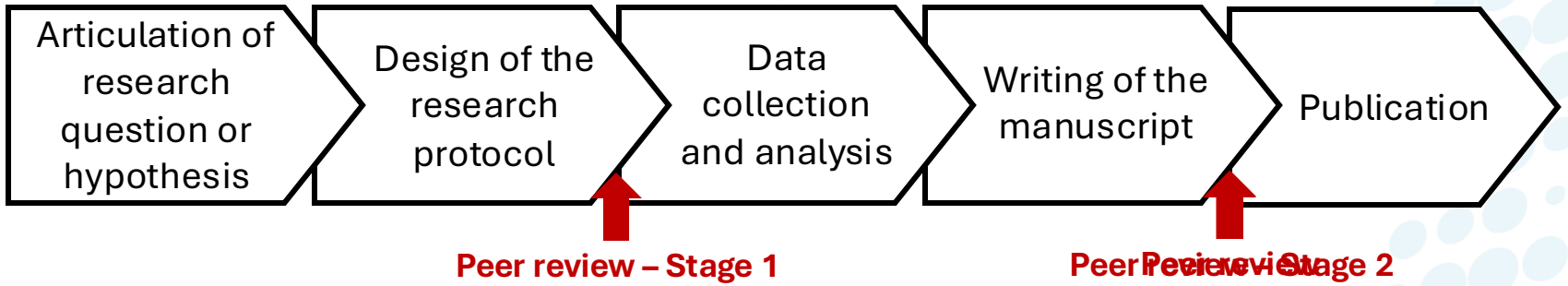
A synthesis with an example

Open methodologies

Openly share or (submit) the research hypothesis, methodology of a study **before** the conduct of the study.



The quality of a study should(?) be assessed by the robustness of its methodology – regardless of whether it confirms the original hypothesis or leads to impressive results.

Pre-registration & registered report

Commonalities

Open Science

Registered report is an Open Science practice.

Responsible research

It helps correct/enrich a study protocol when there is still time, without jeopardizing time and resources.

Research Integrity

It counteracts a series of biases (publication, outcome reporting, spin, citation) since researchers are not “obliged” to produce positive results.

Research Integrity

It counteracts HARKing, p-hacking, since there is no need for such practices.

Research Integrity

It relieves some of the pressure to publish.

Reproducibility

It promotes transparent reporting of the methods used, promoting replicability (facilitating organized skepticism).

How HEAL-Link promotes Open Science

And Research Integrity and reproducibility

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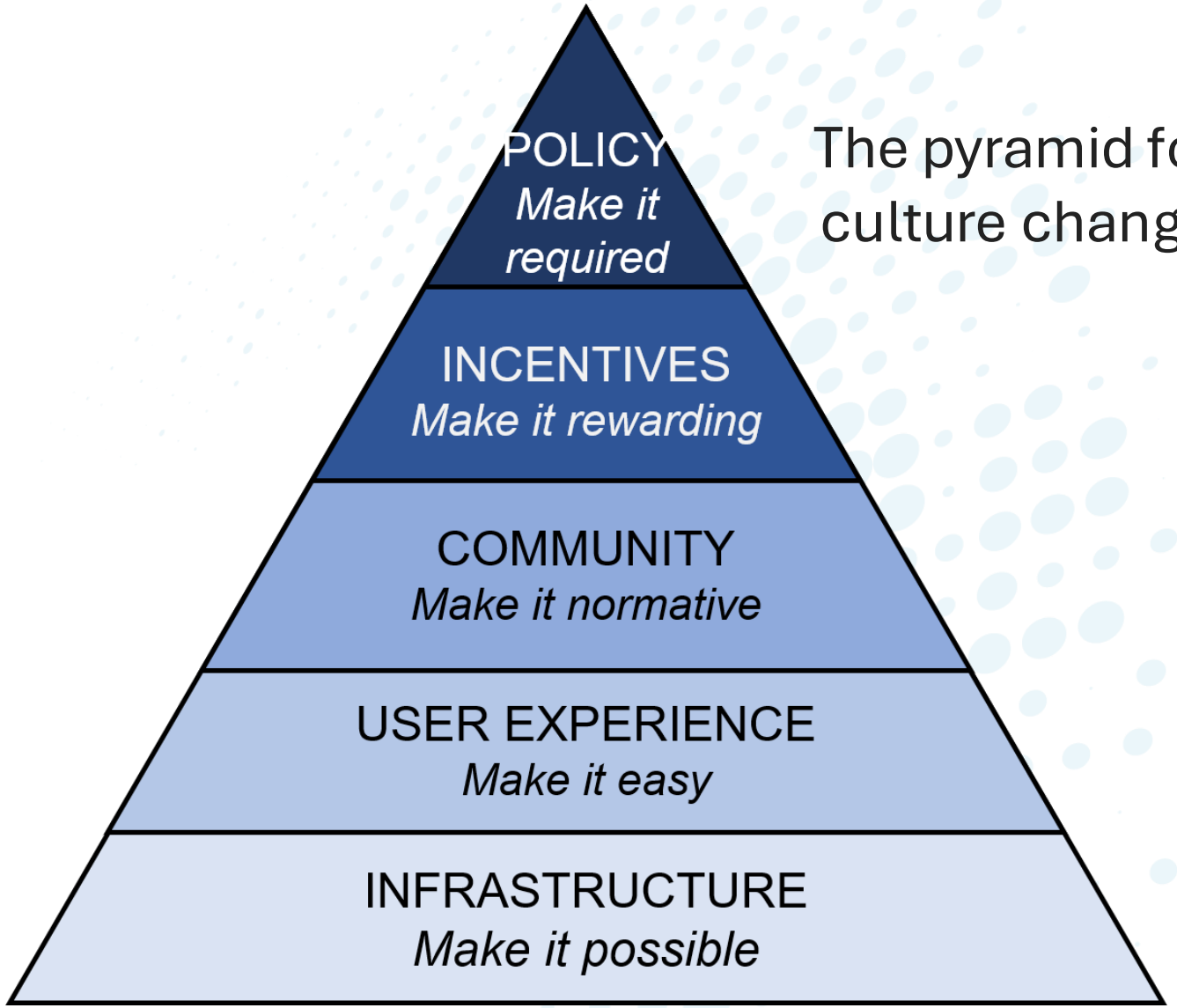
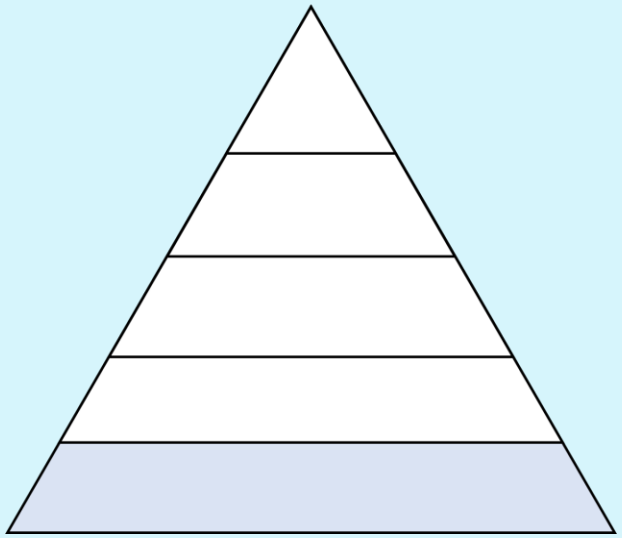
HEAL-Link services



The pyramid for culture change

INFRASTRUCTURES



1,030
διαθέσιμα συγγράμματα

3,500
επισκέψεις καθημερινά

Η Δράση ΚΑΛΛΙΠΟΣ

Η πρώτη ολοκληρωμένη προσπάθεια για την εισαγωγή του ακαδημαϊκού ηλεκτρονικού συγγράμματος στην Ανώτατη Εκπαίδευση με ανοικτές άδειες χρήσης.

ΚΑΛΛΙΠΟΣ ανοικτές εκδόσεις

Θεματικές Ενότητες


Μαθηματικά και Πληροφορική


Φυσικές Επιστήμες και Γεωπονικές Επιστήμες


Επιστήμες Μηχανικών και Τεχνολογία


Ιατρική και Επιστήμες Υγείας, Επιστήμες Ζωής, Βιολογικές Επιστήμες


Δίκαιο και Κοινωνικές Επιστήμες


Ανθρωπιστικές Επιστήμες και Τέχνες

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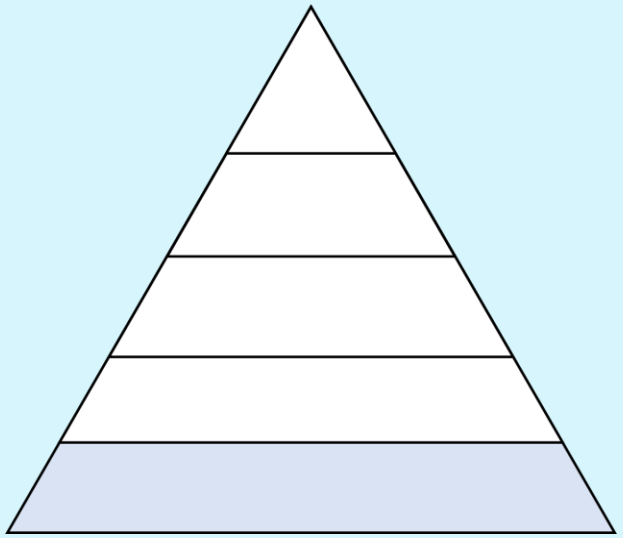
INFRASTRUCTURES



ABACUS

National infrastructure for monitoring research activity in Greece

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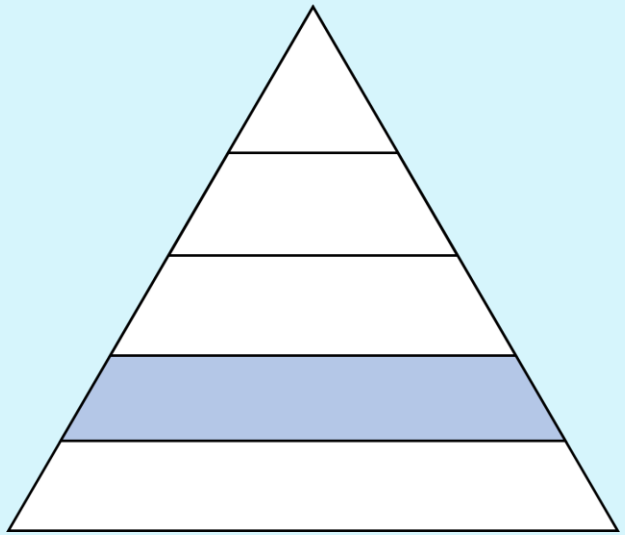
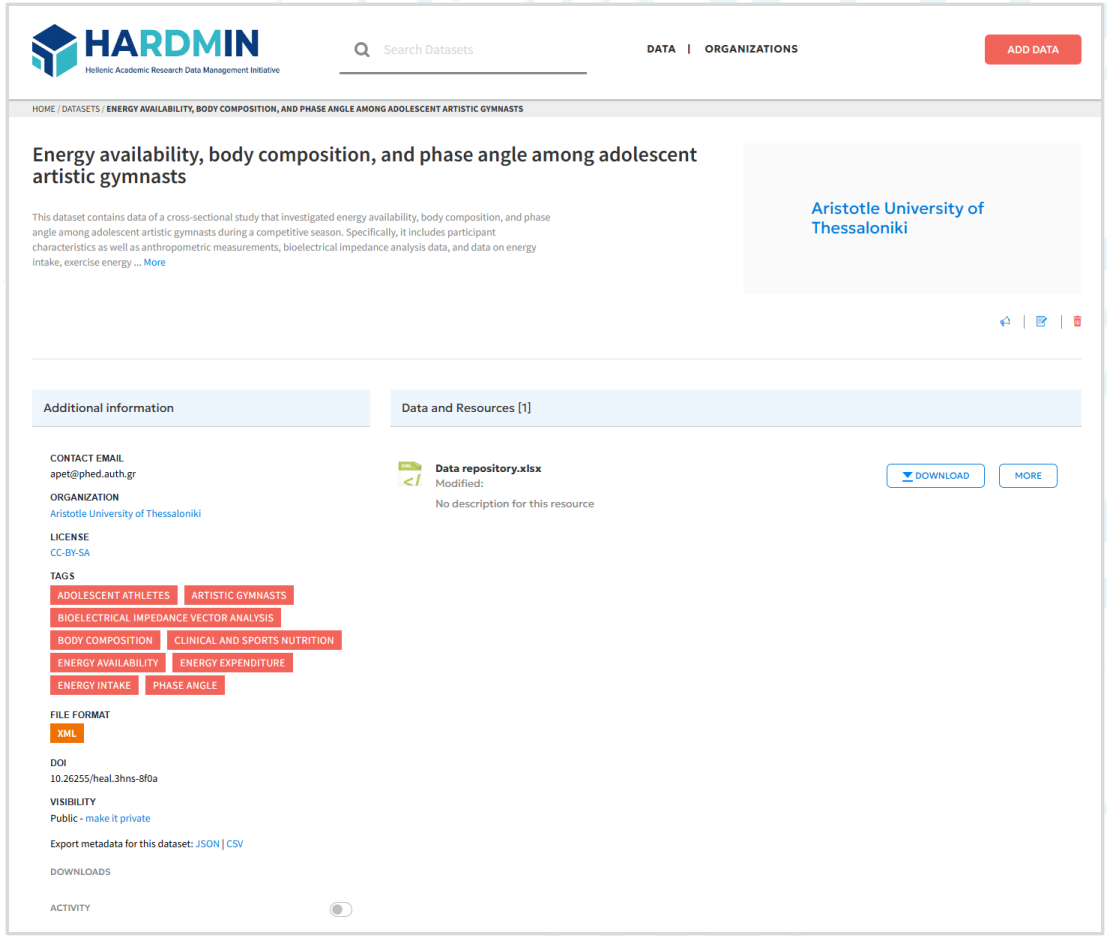
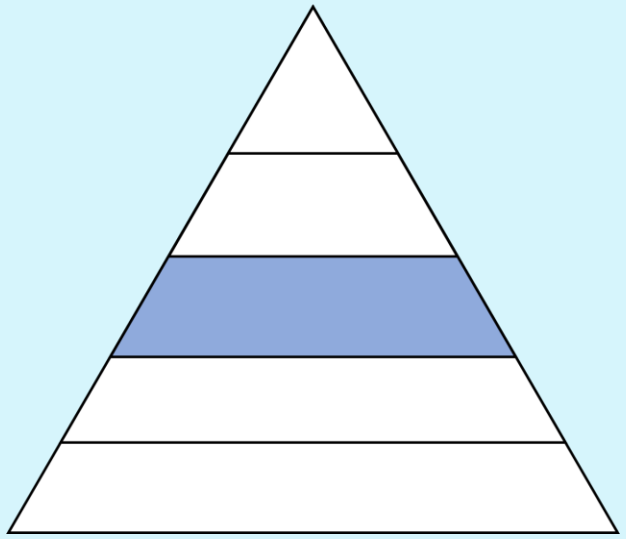
HARDMIN

USER EXPERIENCE





COMMUNITIES



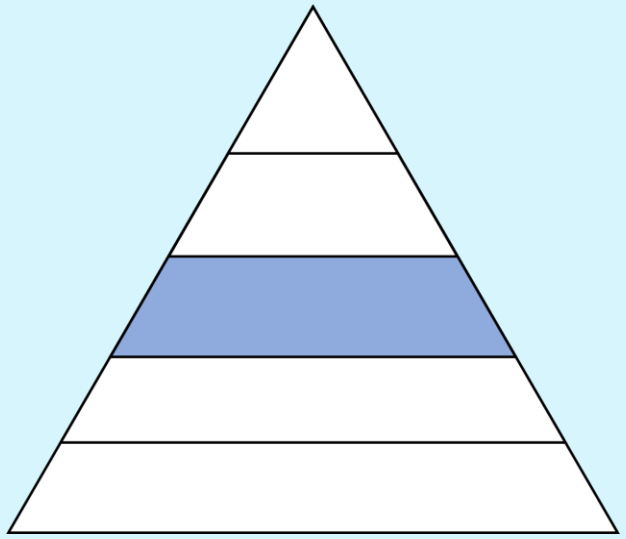
HEAL-Link is a network

Universities

Research centers

Organisations

COMMUNITIES



BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION

"Openness of information about the conduct and communication of research must be the new norm"

1. We will make openness the default for the research information we use and produce
2. We will work with services and systems that support and enable open research information
3. We will support the sustainability of infrastructures for open research information
4. We will support collective action to accelerate the transition to openness of research information

https://barcelona-declaration.org/signatories/

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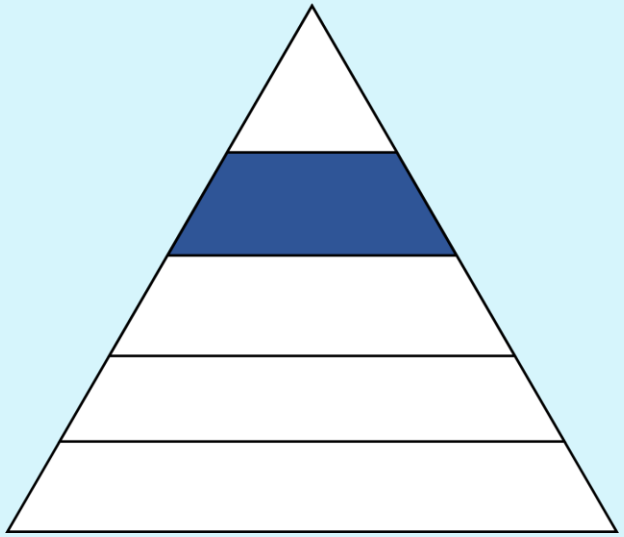
Open Access

INCENTIVES



OPEN ACCESS IN GREECE by HEAL-Link

A report with all publications, which were financially supported by HEAL-Link, the consortium of Greek academic libraries.

Year 2025

The report presents data from January to December 2025. All data have been obtained from the publishers and have been checked, normalized and enriched by the staff of the Scholarly Communication Unit. The indicators of the report take into account that the **corresponding author** belongs to a member of HEAL-Link. Some indicators may not be met in all types of support provided by HEAL-Link, i.e. membership indicators are calculated on an annual basis (see SCOAP3 publications). Quarterly reports can be generated by the dropdown menu below.

Quarter

Publications	Publishers	Types of support
2,970	16	3

https://scholarly.heal-link.gr/en/monitoring-open-access/2025-2/

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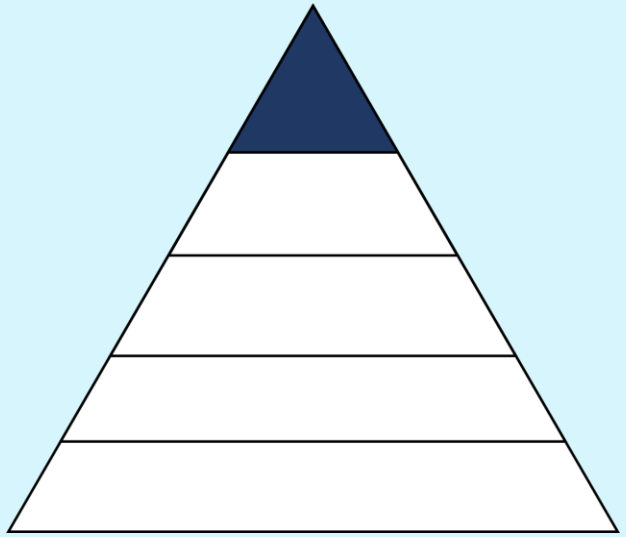
Use of generative AI for research purposes and for publication of research results

POLICIES



- These guidelines have been published two months ago (https://sl1nk.com/ki7v8rj) and they serve the purpose of providing a short exposition of acceptable and unacceptable uses of generative Artificial Intelligence for researchers at all career stages.
- They aim, as stated at the first page of the guidelines, to ensure research integrity, transparency, and credibility of the scientific ecosystem.

For drafting these guidelines HEAL-Link was based on the Artificial Intelligence Policy published by the Open Library of Humanities (https://www.openlibhums. org/site/ai-policy/)

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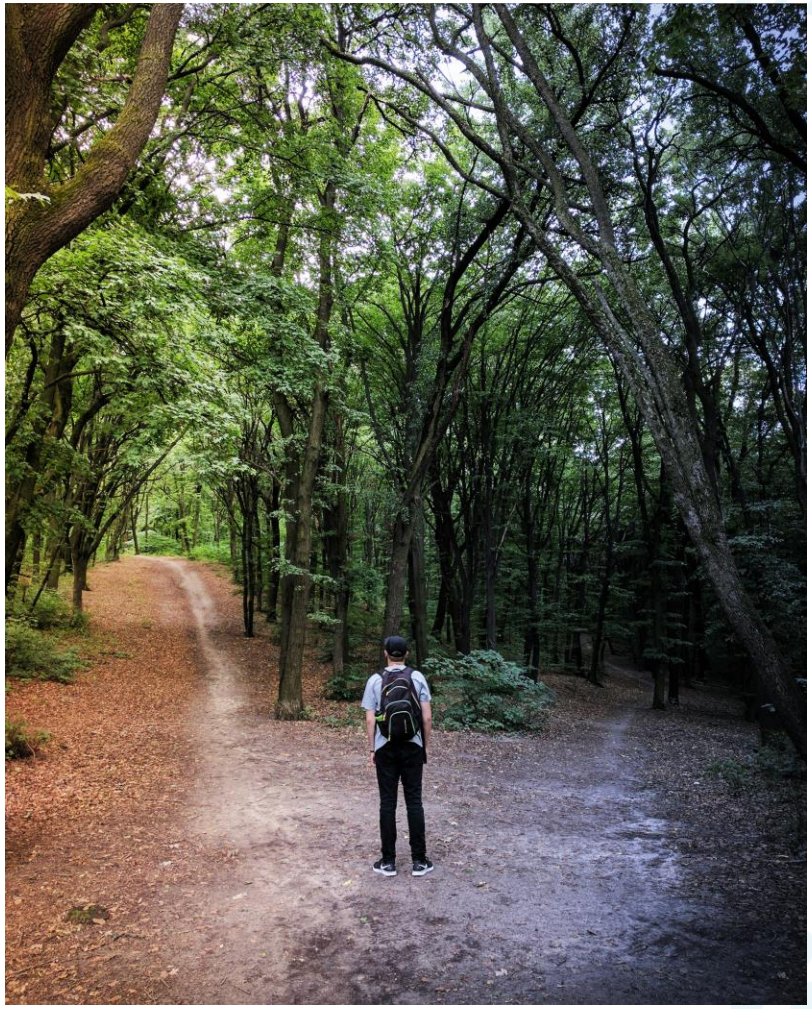
In lieu of an epilogue

The moral compass of a researcher

This is good for science and society



This is good for my career as a scientist

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DEMOCRATISING KNOWLEDGE
AMPLIFYING IMPACT

Thank you!

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