

# AI Policies in Academic Publishing: New Approaches to Transparency, Ethics, and Accountability

BOBCATSSS 2025

21-23 January 2025 | Istanbul, Türkiye

Artificial Intelligence in Library and Information Science: Exploring the Intersection

Alicia Fátima GÓMEZ SÁNCHEZ. IE University, Spain

Güssün GÜNEŞ. Marmara University, Türkiye

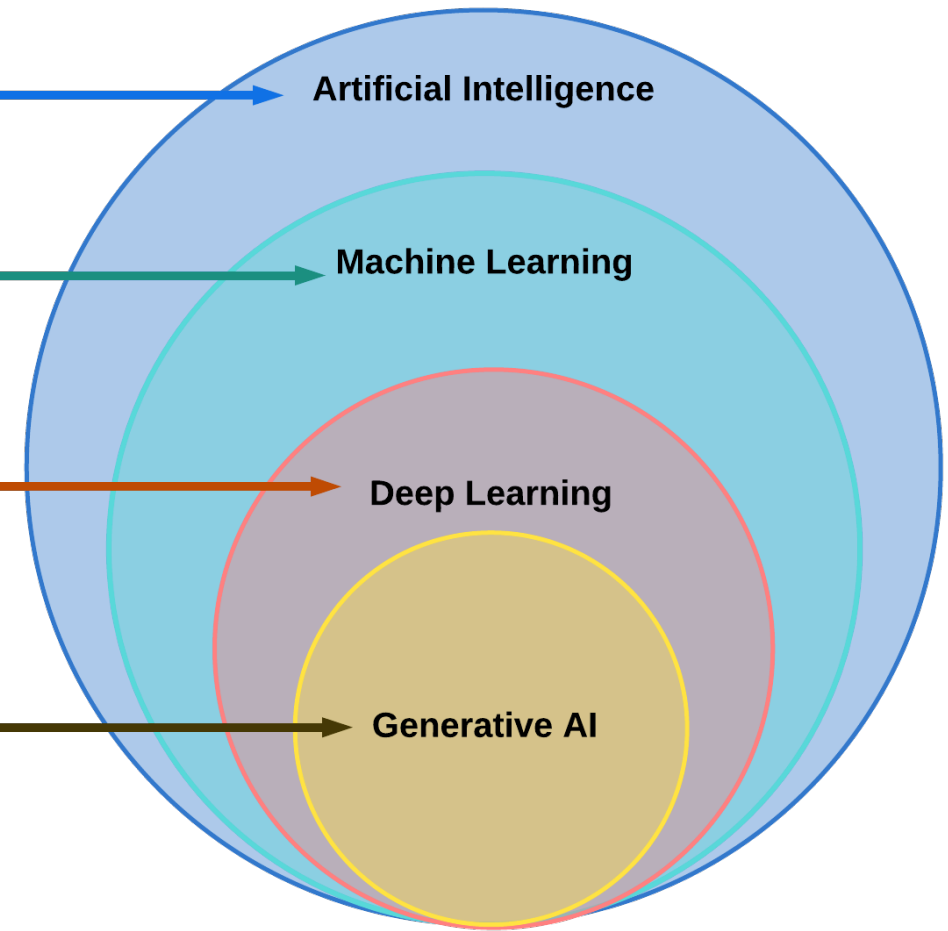
# Introduction

**Artificial Intelligence**  
AI involves techniques that equip computers to emulate human behavior, enabling them to learn, make decisions, recognize patterns, and solve complex problems in a manner akin to human intelligence.

**Machine Learning**  
ML is a subset of AI, uses advanced algorithms to detect patterns in large data sets, allowing machines to learn and adapt. ML algorithms use supervised or unsupervised learning methods.

**Deep Learning**  
DL is a subset of ML which uses neural networks for in-depth data processing and analytical tasks. DL leverages multiple layers of artificial neural networks to extract high-level features from raw input data, simulating the way human brains perceive and understand the world.

**Generative AI**  
Generative AI is a subset of DL models that generates content like text, images, or code based on provided input. Trained on vast data sets, these models detect patterns and create outputs without explicit instruction, using a mix of supervised and unsupervised learning.



Unraveling AI Complexity - A Comparative View of AI, Machine Learning, Deep Learning, and Generative AI.  
(Created by Dr. Lily Popova Zhuhadar, 07, 29, 2023)

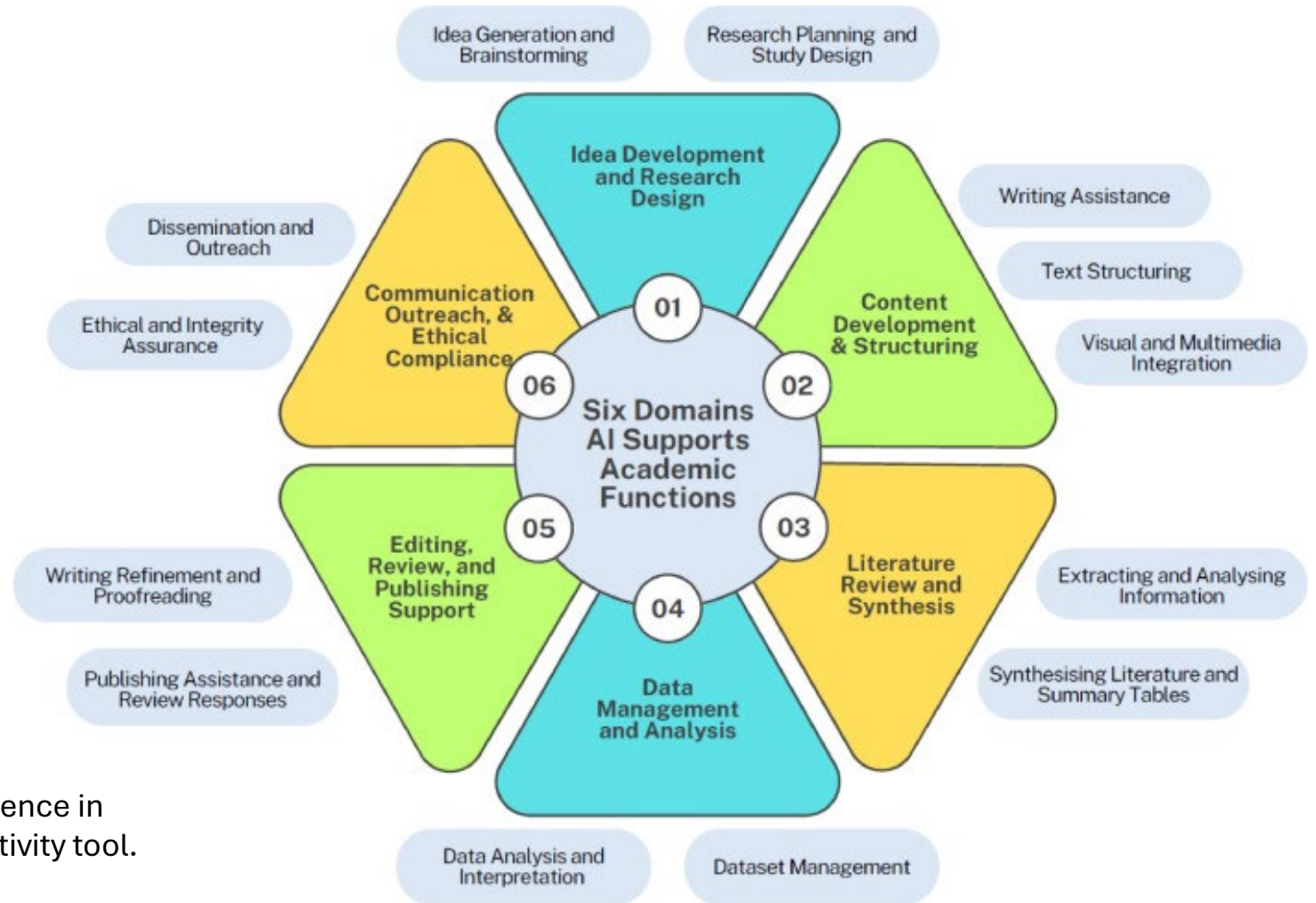
Artificial Intelligence (AI) refers to systems or machines that simulate human intelligence to perform tasks, often leveraging large datasets, algorithms, and computational power.

## Why AI Matters in Research

- Accelerates discovery and innovation.
- Enhances data analysis capabilities.
- Automates repetitive tasks, allowing researchers to focus on creativity and interpretation.

# AI and research

AI is revolutionizing the research landscape, offering powerful tools to enhance efficiency and productivity across various stages of the research process.



Khalifa M, Albadawy M. (2024) Using artificial intelligence in academic writing and research: An essential productivity tool. *Comput Methods Programs Biomed.* Vol 5. 100145, <https://doi.org/10.1016/j.cmpbup.2024.100145>

# AI and research publishing

- Literature Review and Navigation
  - AI helps researchers quickly summarize existing work.
  - Identifies gaps, trends, and emerging themes efficiently.
  - Uses Natural Language Processing to analyze content.
- Data Analysis and Computation
  - Accelerates analysis of large datasets.
  - Handles complex computations previously impractical for researchers.
  - Applies sophisticated machine learning models to unstructured data.
- Article Writing and Editing
  - Assists in drafting initial versions of research papers.
  - Provides suggestions for improving clarity and structure.
  - Helps with grammar, style, and formatting consistency.
- Peer Review Process
  - Automates initial stages of peer review.
  - Increases efficiency in manuscript evaluation.
  - Accelerates the dissemination of groundbreaking research.

Arangüena, I (2024) Research to Action: AI in Research: Its Uses and Limitations.

<https://www.researchtoaction.org/2024/04/ai-in-research-its-uses-and-limitations/>

# Challenges and concerns

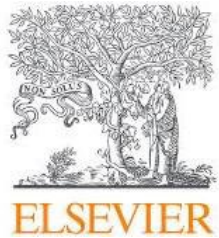
- **Data Privacy and Security.** Risks of unauthorized access to sensitive research data.
- **Lack of transparency.** Research need to be reproducible, and many any AI models, especially deep learning, give results that are often unclear or difficult to explain.
- **Bias and discrimination:** AI tools can unintentionally perpetuate bias and discrimination in data, posing challenges, especially in areas like medical diagnostics and social sciences.
- **Misinformation and plagiarism:** The ease of generating content with AI models has led to concerns about misinformation and plagiarism, with safeguards proving difficult to put in place.

# Research questions:

**How do main publishers go around AI?**

**In what ways do AI policies shape transparency, ethical responsibility, and accountability in the context of academic publishing?**

**How do these policies guide ethical AI use and maintain research integrity?**



**SPRINGER**  
**NATURE**

**WILEY**



Taylor & Francis  
Taylor & Francis Group

# Methods

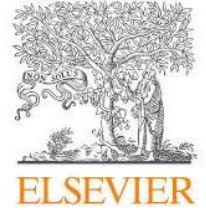
- To **conduct a comparative policy analysis**, examining documents and guidelines provided by key academic publishers: Elsevier, Springer Nature, Wiley, Taylor & Francis.

Policies were evaluated for directives on AI use across three primary areas: **authorship, manuscript preparation, and peer review processes.**

We analyzed to assess criteria such as transparency, author accountability, ethical standards, confidentiality, and intellectual property considerations.

- To identify **emerging trends** in how publishers navigate AI's evolving role within academic publishing.

# Results



## For Authors

### 1. Permitted Use of AI:

1. Authors may use generative AI tools to improve language and readability but must maintain human oversight.
2. AI-generated outputs should be reviewed for accuracy, completeness, and potential bias.
3. The use of AI must be disclosed in the manuscript, and a statement will appear in the published work to ensure transparency.

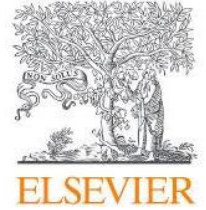
### 2. AI Restrictions:

1. AI tools cannot be listed as authors or co-authors.
2. Authorship requires human accountability for originality, accuracy, and compliance with publishing ethics.
3. Generative AI cannot be used to create or alter images or artwork, except when integral to the research design.

### 3. Accountability:

1. Authors are responsible for accuracy, originality, and compliance with publishing ethics. AI use in cover art may be allowed with prior editorial permission, provided copyright and attribution requirements are met.

# Results



## For Reviewers

### 1. Confidentiality:

1. Reviewers must not upload manuscripts or review reports to generative AI tools to maintain confidentiality and respect proprietary rights.

### 2. AI Restrictions in Peer Review:

1. AI tools must not be used for critical analysis or peer review, as these tasks require human judgment and originality.
2. Reviewers are accountable for the integrity and content of their reviews.

### 3. Disclosure:

1. Authors' use of AI will be disclosed in manuscripts, and reviewers should consider this when reviewing submissions.

### 4. Elsevier's AI Tools:

1. Elsevier employs proprietary AI technologies for tasks like plagiarism checks and reviewer identification, adhering to data privacy and ethical standards.

<https://www.elsevier.com/about/policies-and-standards/generative-ai-policies-for-journals>

# Results

## For Editors

### 1. Confidentiality:

1. Editors must not upload manuscripts or related communication into AI tools to protect confidentiality and proprietary rights.

### 2. AI Restrictions in Editorial Processes:

1. AI tools must not be used for evaluating or deciding on manuscripts, as editorial tasks require critical thinking and human judgment.

### 3. Accountability:

1. Editors are responsible for maintaining integrity in the editorial process and must report any suspected AI policy violations.

### 4. Elsevier's AI Technologies:

1. Proprietary tools are used for administrative tasks, ensuring compliance with RELX Responsible AI Principles and data privacy standards.

<https://www.elsevier.com/about/policies-and-standards/generative-ai-policies-for-journals>

## 1. Permitted Use:

- Responsible use of AI to benefit the research community, authors, editors, readers, and staff.
- Ethically-focused design, development, and deployment of AI-based solutions with human-centered values.

## 2. Restrictions:

- Authorship: AI cannot be attributed as an author of any work.
- Generative AI Images: The inclusion of generative AI-created images is not allowed in publications.
- Peer Review: Peer reviewers are prohibited from uploading manuscripts into generative AI tools to maintain confidentiality and integrity.

## 3. Accountability:

- Commitment to ethically mitigating societal and environmental impacts of AI use.
- Springer Nature regularly monitors developments in AI and updates policies to reflect ongoing advancements.

<https://www.springernature.com/gp/policies/editorial-policies>

# Results

1. **Human-Centered AI:** Springer Nature prioritizes human values and seeks to mitigate potential negative impacts of AI.
  2. **AI as a Tool, Not an Author:** AI cannot be listed as an author on publications.
  3. **Image Authenticity:** Generative AI-created images are not allowed in publications.
  4. **Peer Review Integrity:** Peer reviewers are discouraged from using AI tools on manuscripts to maintain confidentiality and objectivity.
- Springer Nature has specific full policies for the particular brands: [BMC](#); [Cureus](#); [Macmillan Education](#); [Nature Portfolio](#); [Palgrave Macmillan](#); [Springer](#); [Springer Open](#)

<https://www.springernature.com/gp/policies/editorial-policies>

# Results

## For Authors

### 1. Permitted Use of AI:

1. Responsible use of Generative AI for idea generation and exploration, language improvement, literature classification and coding assistance.
2. Enhanced interactive search using AI-enabled tools.
3. AI usage must be disclosed with details (tool name, version, purpose) in Methods, Acknowledgments, or preface.

### 2. AI Restrictions:

1. AI tools cannot be listed as authors or co-authors.
2. Generative AI cannot replace core researcher responsibilities (e.g., text/code generation without rigorous revision or synthetic data generation without robust methodology).
3. Generative AI cannot be used to create/manipulate images, figures, or original research data.

### 3. Accountability:

1. Authors are responsible for reviewing AI outputs for accuracy and ensuring compliance with publishing ethics.
2. Maintaining originality and ensuring data confidentiality, copyright, and intellectual property rights are respected.

**Misuse of AI that leads to inaccuracies, biased outputs, or incomplete work will be subject to editorial investigation.**

# Results

## For Reviewers

### 1. Permitted Use of AI:

1. Generative AI may assist in improving the language of review reports but only with human oversight.

### 2. AI Restrictions:

1. Peer reviewers must not:
  - Upload unpublished manuscripts, files, images, or project proposals into Generative AI tools
  - Use Generative AI for analysis or summarization of submitted content

### 3. Accountability:

1. Peer reviewers are accountable for ensuring the integrity and accuracy of their reviews.
2. They must ensure that all reviews meet confidentiality standards and ethical expectations.

# Results

## For Editors

### 1. Permitted Use of AI:

1. Editors must consult Taylor & Francis contacts before using Generative AI tools unless authorized.

### 2. AI Restrictions:

1. Editors must not:
  - Upload unpublished manuscripts, images, or associated data into Generative AI tools.
  - Use Generative AI tools for evaluating or summarizing submitted content.

### 3. Accountability:

1. Editors are responsible for maintaining submission confidentiality, ensuring compliance with proprietary rights, and upholding high editorial integrity.
2. Editorial oversight must include assessing AI's role in submitted work to ensure ethical standards and compliance with policies.

<https://taylorandfrancis.com/our-policies/ai-policy/>

## 1. Permitted Use of AI:

1. Improving Writing: GenAI tools can assist with grammar, spelling, and general editing.
2. Feedback Enhancement: Editors and peer reviewers may use GenAI to improve the quality of written feedback in peer review reports, but only with transparent disclosure.
3. Documentation: If GenAI is used in manuscript preparation, its use must be detailed in the Methods, Acknowledgements, or Disclosure sections.

## 2. AI Restrictions:

1. GenAI tools cannot independently initiate or design research, and must not create, alter, or manipulate original research data or results.
2. GenAI tools cannot be listed as authors, as they lack accountability, legal standing, and the ability to meet authorship requirements.
3. **Peer Review Confidentiality:** Manuscripts, figures, or tables must not be uploaded to GenAI tools due to risks of breaching confidentiality, privacy, and copyright.
4. Peer review and authorship responsibilities cannot be delegated to AI tools.

## 3. Accountability:

1. Authors are fully accountable for the accuracy of information and for proper referencing of supporting works.
2. Journal editors determine the appropriateness of GenAI use in submissions, in line with editorial policies.
3. Reviewers are responsible for ensuring that peer review remains a human-led process and for the integrity of their assessments.

# Key findings and general trends

## 1. Disclosure and Transparency

- Most publishers, such as Elsevier, Wiley, and Springer Nature, mandate that authors disclose any use of AI tools in their manuscripts. This transparency helps maintain trust in the research process and allows reviewers to assess the role of AI in the work.
- Some publishers, require detailed appendices about AI usage, while others suggest disclosing it in sections like the Methods or Acknowledgments.

## 2. Accountability and Integrity

- Authors are held accountable for the accuracy, originality, and integrity of AI-generated content. Publishers like Taylor & Francis, Sage, and Emerald underscore that authors, not AI tools, are responsible for any content produced.
- AI tools are not recognized as co-authors across the board. This is largely because AI lacks the capability for original thought and accountability, as reinforced by most publishers.

### 3. Confidentiality and Data Privacy

- Guidelines typically discourage using AI for peer review to maintain manuscript confidentiality and avoid data privacy issues. For instance, Springer Nature and Taylor & Francis discourage reviewers from processing confidential manuscripts using AI tools, which could compromise objectivity and confidentiality.
- Some publishers, like De Gruyter Brill, offer authors the choice to opt-out of their work being used for AI training, addressing privacy and control over personal research data.

## 4. Ethical Considerations and Intellectual Property

- Publishers emphasize the importance of using AI ethically to avoid issues like plagiarism, copyright infringement, and bias. PLOS, Cambridge University Press, and Wiley stress adherence to ethical standards to prevent AI misuse and uphold the credibility of published research.

## 5. Limitations on AI in Visuals and Data Manipulation

- AI-generated figures are often restricted due to authenticity concerns. Elsevier and Springer Nature prohibit AI-manipulated visuals. PLOS and Taylor & Francis, also prohibit use of AI tools for data generation or manipulation to ensure integrity and validity of research findings.

## 6. Future Adaptations and Ethical Framework Development

- Acknowledging rapid advancements in AI, several publishers indicate their policies may evolve.
- Suggestions from publishers like Sage and Emerald include involving all stakeholders in AI policy development to adapt guidelines that address future challenges while supporting the ethical integration of AI in research.

# Final Conclusions

- Academic publishers agree to promote responsible AI use. Policies reflect a commitment to preserving academic integrity, accuracy, and transparency in research, recognizing the benefits of AI while safeguarding against its potential risks.
- Publishers embraces responsible AI use for operational support while maintaining stringent ethical, privacy, and confidentiality standards.
- AI tools cannot be listed as authors on publications, and authors remain responsible for the accuracy and originality of their work.
- Disclosure and transparency in AI usage are prioritized to build trust among authors, reviewers, and editors.
- Publishers emphasize transparency, ethical responsibility, and human accountability in the use of Generative AI across all stages of scholarly publishing.

# Questions or comments?



**Thanks for your  
attention!**

**Dinlediđiniz iin  
teřekkür ederiz!**

**Alicia Fátima GÓMEZ SÁNCHEZ**

✉ [alicia.gomez@ie.edu](mailto:alicia.gomez@ie.edu)

in <http://es.linkedin.com/in/aliciafgomez>

id <https://orcid.org/0000-0003-4898-1680>

**Güssün GÜNEŐ**

✉ [gussun.gunes@marmara.edu.tr](mailto:gussun.gunes@marmara.edu.tr)

in <http://tr.linkedin.com/in/güssün-güneő-204b282>

id <https://orcid.org/0000-0002-1340-7366>

<https://hdl.handle.net/20.500.14417/3487>

