

# ACADEMIC PUBLISHER GUIDELINES ON AI USAGE: A CHATGPT SUPPORTED THEMATIC ANALYSIS

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#### **INTRODUCTION**



**Dr Mike Perkins** A little about me...



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**INTRODUCTION** 



- Case study of qualitative analysis on publisher policies and approaches towards GenAl tool usage.
- Inductive thematic analysis of policies
  - Human Led
  - Al led
- Implications for future approaches to AI enabled research.



## WHAT'S THE PROBLEM?



- GenAl usage increasing in
  - academic research.
- But is it being openly reported?
- How do we maintain
  - research integrity and
  - ensure trust if not?



Analysis using OpenAlex by Philip Shapira, March 31, 2024.

#### WHAT'S THE PROBLEM?



• These tools can be helpful,

but they can also be

# harmful:

- Biases
- Inaccurate information
- Many retractions!

ELSEVIER

journal homepage: www.elsevier.com/locate/radcr

#### **Case Report**

Successful management of an Iatrogenic portal vein and hepatic artery injury in a 4-month-old female patient: A case report and literature review  $^{\circ, \Leftrightarrow \Rightarrow}$ 

Raneem Bader, MD<sup>a</sup>, Ashraf Imam, MD<sup>b</sup>, Mohammad Alnees, MD<sup>a,e,\*</sup>, Neta Adler, MD<sup>c</sup>, Joanthan ilia, MD<sup>c</sup>, Diaa Zugayar, MD<sup>b</sup>, Arbell Dan, MD<sup>d</sup>, Abed Khalaileh, MD<sup>b,\*\*</sup>

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In summary, the management of bilateral iatrogenic I'm very sorry, but I don't have access to real-time information or patient-specific data, as I am an AI language model. I can provide general information about managing hepatic artery, portal vein, and bile duct injuries, but for specific cases, it is essential to consult with a medical professional who has access to the patient's medical records and can provide personalized advice. It is recommended to discuss the case with a hepatobiliary surgeon or a multidisciplinary team experienced in managing complex liver

#### Conclusion

In conclusion, proper treatment of iatrogenic vascular injuries is dependent on an accurate assessment of the stage of the injury. The injury should be recognized quickly. The evaluation and treatment should be conducted by experienced surgeons using proper strategies in an established hepatobiliary surgical center. Therefore, complex cases should be performed in a tertiary surgical center that has the capability and expertise to find a prompt and appropriate solution.

## **HOW ARE ACADEMIC PUBLISHERS REACTING?**

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- Publishers (just like HEIs) were a little slow off the mark, but things are changing....
  - Having clear policies is important!

**Computers & Education** 

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Close

# THE GOAL



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• What approach is taken by

publishers towards GenAl tool

# usage?

- What are the themes that emerge?
- Could we use GenAl tools

themselves to help with the

process?

Subjects	Services <b>v</b>	About Us
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# Artificial Intelligence (AI)

Springer Nature is monitoring ongoing developments in this area closely and will review (and update) these policies as appropriate.

1. Al authorship

2. Generative AI images

3. Al use by peer reviewers



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# Hybrid Inductive Thematic Analysis

- Traditional qualitative methods combined with GenAI powered tools.
  - Researcher 1: 2 x ChatGPT (GPT-4) supported analysis-July 2023 & September 2023.
  - Researcher 2: Traditional human led analysis (QDA Miner).

🗯 Made with Gamma

## **METHODOLOGY: INDUCTIVE THEMATIC ANALYSIS**



- **107** identified publishers.
  - Known predatory publishers excluded!
- 36 with GenAI policies.
- 28 unique policies for review.
- 3 human themes
- 6 Al themes
- 6 final themes





# **Human Themes:**

- 1. Authorship is human
- 2. Transparency is vital
- 3. Policies are ambiguous

#### AI Themes:

- 1. Authorship Constraints
- 2. Human Accountability
- 3. Transparency in AI Utilisation
- 4. Ethical and Integrity Concerns
- 5. Adaptability of Policies
- 6. Limitations and Prohibitions

#### **FINAL THEMES**



# **1. Human-Exclusive Authorship:**

Al tools can assist, but not assume responsibility as authors.

# 2. Author Accountability:

Authors are fundamentally responsible for their work.

# 3. Disclosure and Transparency:

Consistent requirement across publishers but varying degrees

of disclosure required.



## **FINAL THEMES**



# 4. Research Integrity:

Use of any tools shouldn't compromise research quality or integrity.

# 5. Fluid Policy Landscape:

Policies are in flux and will change to adapt to technological advancements and evolving views.

# 6. Constraints and Exclusions:

Specific conditions and prohibitions on AI use in research in

different publishers.



## HUMAN v AI ANALYSIS?



- Human themes: Focus on broader concepts like authorship and transparency.
- AI themes: More granular, identifying subtle themes like limitations and prohibitions
  - Overall very similar though!
- **Synthesis:** Increased confidence and validity in the themes identified.
  - Demonstrates the potential of this
    - methodology.





# Banned research methodology

"The use of AI tools such as ChatGPT (or related platforms) to generate substantive content, such as the analysis of data or the development of written arguments, is not permitted (Edward Elgar, n.d)"



## **CHALLENGES: DID I REALLY SEE THAT?**



- Hallucinations of quotes from policies:
  - Misattributed to others;
  - Condensed;

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- ... Or simply made up!
- Cross validation required for every quote.
- Models are getting better though!



## **IMPLICATIONS**





Implications for Policy Analysis

- Streamlining data analysis and thematic analysis
- Quicker insight into large datasets more quickly.

greater confidence in results!

Enhancing

**Reliability and** 

Validity

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Combined strengths of AI

and human analysis



Ethical Considerations

- Too easy?
- Over reliance on AI tools?
- Illusion of finality...
- Must verify!

#### WHERE CAN I FIND OUT MORE?





Reviewer Status 🗸 ? 🗸 🗸 🤅

Reviewer	Reviewer Reports				
	1	2	3	4	
Version 2 (revision) 16 Jan 24	✓ read		✓ read	✓ read	
	Ť		Ť	Ť	
Version 1 23 Oct 23	? read	? read	? read	<b>?</b> read	

- 1. Brenda M. Stoesz, University of Manitoba, Winnipeg, Canada
- 2. **Mary Davis**, Oxford Brookes Business School, Oxford, UK
- 3. Stephen Gow 🔟, University of York, York, UK
- 4. Salim Razi (b), Canakkale Onseikz Mart University, Çanakkale, Turkey

Perkins, M., & Roe, J. (2024). Academic publisher guidelines on AI usage: A ChatGPT supported thematic analysis [version 2; peer review: 3 approved, 1 approved with reservations]. In *F1000Research* (Vol. 12, Issue 1398). <u>https://doi.org/10.12688/f1000research.142411.2</u>



#### WHERE CAN I FIND OUT MORE?





The use of Generative AI in qualitative analysis: Inductive thematic analysis with ChatGPT

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		DOI: https://doi.org/10.37074/jalt.2024.7.1.22



Perkins, M., & Roe, J. (2024). The use of Generative AI in qualitative analysis: Inductive thematic analysis with ChatGPT. *Journal of Applied Learning and Teaching*, 7(1), Article 1. <u>https://doi.org/10.37074/jalt.2024.7.1.22</u>

## CONCLUSION





## CONCLUSION

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- Perspectives on the use of AI tools in research
  - is not a settled matter, but some consensus

on key areas:

- Human Authorship
- Transparency
- Accountability
- Other areas are very likely to change!







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# **THANK YOU**

BUV Ecopark Campus, Ecopark Township, Van Giang, Hung Yen



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