



Editorial

Using Generative AI in Research

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A colleague asked me whether the Philippine Journal of Allied Health Sciences permits the use of Artificial Intelligence (AI) among the manuscripts that we review. The default answer is general prohibition. In fact, previously, PJAHS made a stand forbidding AI (i.e., ChatGPT) as an author of the articles we handle and publish.¹ Since then, other Generative AI (Gen-AI) has been proliferated, further challenging the status quo on the use of Gen-AI in research and how publishing science approaches this issue.

Looking back at my answer to my colleague, I find myself reflecting on how relevant my response was. It needs to be clarified that AI may take different forms. The most ubiquitous may likely be Traditional AI (Trad-AI), which has already infiltrated our daily lives, and has been valuable assistance to researchers, authors, reviewers, journal editors, and publishers. From digital voice assistants, search, and recommendation engines, writing assistants, and decision trees, to name a few, Trad-AI has undoubtedly supported the scholastic field immensely. However, with the emergence of Gen-AI in the past few years, along with the issues surrounding it, a whole new black hole of uncertainty and possibility has opened.

The advanced technology behind Gen-AI's capability of using large language models to create human-like conversations and responses presents opportunities that confront the basic tenets of good research practice. Building on

basic prompts, Gen-AI can create new data in the form of texts, images, speech, images, etc., but is marred by hallucinations and ethical problems. Where reality meets fabrication will need critical thinking for evidence to be distinguished as authentic.

Nonetheless, as agents of scientific queries, researchers and scientists will need to approach Gen-AI with an open mind. Responsible and ethical experimentation on how it can support research and publication science will be at the forefront of academic inquiry for the next few years before definitive guidelines can be developed. Considerations on information security and data privacy, compliance, copyright, and academic integrity should be included when imagining how Gen-AI (or how much of it) can be allowed.

There is a plethora of Gen-AI tools available out there, both freeware and paywall-protected. The default setting is commonly not protected with privacy filters; hence, we need to review whether such is available and configure this accordingly. Your data may likewise be compromised when you access such tools, leading to phishing emails that can be used for "deepfakes." Software detecting these issues will eventually be essential at all levels. It is not surprising that with the emergence of Gen-AI tools, alongside is a swarm of AI detection tools. It's a race against how these detection tools can be a step ahead to

prevent illegal, misinformed, fabricated, and unethical AI-generated content.

Recently, I have been preparing for the research courses that I will be teaching this term. A good part of my preparation involves mapping the extent of how Gen-AI can be used. There are quite extensive resources out there, hopefully not Gen-AI generated, that can be used as inspiration for determining such. Particularly, the guidelines set by higher academic institutions can be used to reflect on this matter.²⁻⁴ Herein, I list some possible use of Gen-AI in research:

- Gen-AI should not be used for writing research papers due to issues related to authorship, copyright, and plagiarism.
- As feedback on the grammar and mechanics of writing, especially for non-native English speakers.
- Evidence can be summarized at an individual paper level or even across studies.
- Translating your research into various languages, text formats, or media.
- It can serve as a "brainstorming partner" or aid you in a "think tank" in generating novel ideas, perspectives, opinions, or hypotheses, which is essential in the earlier stages of research.
- Generating codes, syntax, or commands typically used in different data analytic software.
- Data visualization and exploration.
- Gen-AI should not be used as a substitute for human participants.
- Testing the utility and performance of survey instruments, questionnaires, or questions.
- Streamline the process of coding, labelling, and categorizing data.

These are just a few possible scenarios where Gen-AI can assist researchers. I invite you to reflect and create more ways on how we can responsibly and ethically harness the possibilities of Gen-AI.

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