Generative Artificial Intelligence in the Context of Military Academic-Scientific Production: ethical and regulatory implications

Rafael Roesler
Academia Militar das Agulhas Negras - AMAN,
Resende, RJ, Brazil
Email: editorchefe.ran@aman.eb.mil.br
ORCID: https://orcid.org/0000-0002-0733-6389

Arlindo José de Barros Junior
Academia Militar das Agulhas Negras - AMAN,
Resende, RJ, Brazil.
Email: ran.editor@aman.eb.mil.br
ORCID: https://orcid.org/0000-0003-0625-6835

Generative Artificial Intelligence (AI) tools are redefining the paradigms of academic-scientific production globally, encompassing, inclusively, the military academic domain. This scenario raises crucial questions regarding the ethics, integrity, and regulation of these technologies. This editorial does not propose to analyze or debate the manner in which Generative AI may reshape academic trajectories, but rather to incite readers' reflection on the potential influence of AI on the academic-scientific production of future military leaders.

Current Scenario: rise of generative ai and its impacts on the military academic environment

It is widely recognized that the integration of AI into the academic environment is an ineluctable and irreversible reality. Generative AI tools assist academic users in writing, editing, and translating texts, thereby impacting knowledge dissemination and military critical thinking (Barros Junior *et al*., 2025? in press). However, this convenience also raises concerns related to content superficiality and the inherent risks of plagiarism.

Spinak (2023) argues that any attempt to prohibit the use of AI tools is ineffective, since researchers will continue to employ them and develop methods to produce content that eludes AI detection systems, thus avoiding their classification as "co-authors." Conversely, AI may constitute a valuable mechanism for overcoming linguistic barriers, assisting academics in writing in the global lingua franca – an aspect particularly relevant in the Brazilian context.

We acknowledge the ongoing transformations regarding the employment of Generative AI. Nevertheless, we consider it imperative that academic users apply critical thinking when utilizing such tools, avoiding excessive dependence that may compromise the capacity for autonomous content production and ensuring human authorship and responsibility for potential errors or biases (Barros Junior *et al.*, 2025? in press).

Ethical Boundaries and the Imperative of Regulation

The ethical discussion is of vital importance!

In general terms, principles such as the "GREAT PLEA" - acronym for Governability, Reliability, Equity, Accountability, Traceability, Privacy, Lawfulness, Empathy, and Autonomy - evidence the complexity of ethical integration in AI usage (Oniani *et al.*, 2023). The necessity for human oversight, bias mitigation, privacy protection, and clear definition of responsibilities demands the continuous elaboration of regulatory frameworks.

In this regard, the Brazilian Army (EB) has taken a significant step by approving the document "Strategic Artificial Intelligence Directive for the Brazilian Army / *Diretriz Estratégica de Inteligência Artificial para o Exército Brasileiro*," which aims to regulate AI usage in both academic and operational environments (Brasil, 2024). This regulation seeks, furthermore, to ensure the maintenance of the institution's ethical and moral principles and the preservation of human control under all circumstances (Brasil, 2024).

Another essential element resides in the training of military personnel in computational skills and conscious AI usage, including critical analysis and ethical understanding (Barros Junior *et al.*, 2025? in press). We believe these competencies are crucial to ensure that materials produced with AI assistance are in conformity with institutional guidelines and are elaborated responsibly, identifying biases, ensuring content quality, and maintaining academic and institutional integrity.

Within the scope of the military academic-scientific domain, we understand and affirm that it is imperative to promote a research and development environment free from biases – thus guaranteeing equitable and transparent solutions for the education of new researchers and the training of future military leaders.

Final Considerations

Generative AI tools are now intrinsically incorporated into the military academic-scientific environment and possess the potential to redefine academic production, offering – in equal measure

– unprecedented opportunities and challenges. Notable advantages include task automation and research time optimization. However, ethical reflection, integrity, and regulation remain indispensable.

The Brazilian Army has already adopted a proactive stance, issuing clear guidelines and offering AI training at various levels. In other words, human oversight, bias mitigation, privacy, and accountability are fundamental to ensuring that AI becomes a catalyst for knowledge rather than a threat.

In this context, the *Revista Agulhas Negras* (RAN) has adopted the policy of not accepting manuscripts that list AI tools as "co-authors." According to its submission guidelines: "no part of the text has been written by generative AI, such as ChatGPT, Gemini, among others." We understand that, given the inevitability of AI usage in academia, success depends on establishing a balance between innovation and ethical values.

Finally, we, the editors of RAN, reaffirm our invitation to the academic and professional communities for the dissemination of their research in our Journal. High-quality scientific production and dissemination (of human authorship) remain of paramount importance in the formation of future researchers.

References

BARROS JUNIOR, A. J.; SANTOS, R. F.; BATISTA, W, J. Military Academic-Scientific Production in Times of Generative AI: **e**thical boundaries and challenges for strategic stability. **Journal of Peace, Conflict, and Security Studies (JPCSS)**. v. 1, n. 1, 2025? (in press).

BRASIL. Exército Brasileiro. **Diretriz Estratégica de Inteligência Artificial para o Exército Brasileiro. EB20-D-02.031**. Brasília, 2024.

ONIANI, D.; HILSMAN, J.; PENG, Y.; POROPATICH, R. K.; PAMPLIN, J. C.; LEGAULT, G. L.; WANG, Y. Adopting and expanding ethical principles for generative artificial intelligence from military to healthcare. **NPJ Digital Medicine**, v. 6, n. 1, p. 225, 2023. Available at: https://doi.org/10.1038/s41746-023-00965-x. Access on: 1 July 2025.