

How to Write a Methods Section

The following rhetorical moves are based on the examination of 288 Methods sections published in data-driven papers in different fields (Peacock, 2011).

The moves might not appear in the given order in your field.

Rhetorical Move	Example
A summary of the research method . Name the method + research questions, goals, or hypothesis .	<p>“This paper used survey research design to gather information from tertiary level in universities in Manila, Philippines to examine their use and perceptions of AI tools in academic writing” (Junio et.al., 2023).</p> <p>“To address the inquiry regarding professionals’ willingness to integrate AI writing tools into their careers, this study adopted a quantitative methodological approach” (Papakonstantinidis et al., 2024).</p>
Describe the subjects and/or materials + location (if applicable).	<p>“A commercial sample of sulfanilamide (Cymit, m.p. 165 1C) was used without any further purification” (Mato et.al., 2022).</p> <p>“Participants in this research study included a total of 255 undergraduate students from various academic programs of three universities in the Philippines” (Junio et.al., 2023).</p>
Procedure/ data collection: Explain how you obtained the data.	<p>“A solid rod was prepared by pressing the compound’s fine powder mixed with a small amount of commercial binder (Peoval). We kept it at vacuum for at least two weeks to allow it to dry...” (Mato et.al., 2022).</p> <p>“Online survey questionnaires were disseminated via Google Forms to gather data from student respondents. The first version of the questionnaire was drawn from the previous similar studies and existing questionnaires” (Junio et.al., 2023).</p>

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Limitations: List the shortcomings of the method and provide an explanation why the shortcomings are not that grim.	“Additionally, it’s important to note that the survey was only given in English language, which could further limit the diversity and representation of the participant pool. Despite these limitations, when employed judiciously and in conjunction with other sampling techniques, snowball sampling can provide valuable insights and access to unique participant groups that might otherwise remain elusive” (Papakonstantinidis et al., 2024).
Explain how you analyzed the data.	“Descriptive analysis was utilized to analyze the quantitative data to answer the research objectives and acquire insights into students' perceptions on the use of AI in academic writing” (Junio et.al., 2023).

References

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- Mato, S., Aguado, R., Mata, S., Alonso, J. L., & León, I. (2022a). A solvent-mediated conformational switch in sulfanilamide. *Physical Chemistry Chemical Physics*, 24(39), 24032–24038. <https://doi.org/10.1039/d2cp03367d>
- Papakonstantinidis, S., Kwiatek, P., & Spathopoulou, F. (2024). Embrace or resist? drivers of artificial intelligence writing software adoption in academic and non-academic contexts. *Contemporary Educational Technology*, 16(2). <https://doi.org/10.30935/cedtech/14250>
- Peacock, M. (2011). The structure of the methods section in research articles across eight disciplines. *The Asian ESP Journal*, 7(2), 99-124.

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