Original Article

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Title *(maximum of 250 characters)*

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1 Affiliation 1

2 Affiliation 2

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**Abstract:** A single paragraph of about 250 words maximum. For research articles, abstracts should give a pertinent overview of the work. We strongly encourage authors to use the following style of structured abstracts, but without headings: (1) Background: Place the question addressed in a broad context and highlight the purpose of the study; (2) Methods: briefly describe the main methods or treatments applied; (3) Results: summarize the article’s main findings; (4) Conclusions: indicate the main conclusions or interpretations. The abstract should be an objective representation of the article and it must not contain results that are not presented and substantiated in the main text and should not exaggerate the main conclusions.

**Keywords:** keyword 1; keyword 2; keyword 3 (List three to ten pertinent keywords specific to the article yet reasonably common within the subject discipline.)

0. How to Use This Template

The template details the sections that can be used in a manuscript. Sections that are not mandatory are listed as such. In preparation of a manuscript, formatting guidelines are also available in the **Author Guidelines**. Remove this paragraph and start section numbering with 1. For any questions, please contact the editorial office of the journal or phsujournal@psm.edu.

1. Introduction

The introduction establishes the context and significance of the study *(500-800 words)*. Begin by presenting the background of the field and identifying gaps or unresolved questions. Clearly state the research problem or question and emphasize its relevance. Define the purpose and objectives of the study, specifying any hypotheses if applicable. Provide a brief review of relevant literature, showcasing how your research contributes to or diverges from existing knowledge. If applicable, introduce the theoretical or conceptual framework guiding your study. Outline the chosen methodology and justify its suitability. Clearly define the scope of your research. Conclude the introduction by summarizing the organizational structure of the paper. References should be numbered in order of appearance and indicated by a numeral or numerals in square brackets—e.g., [1] or [2,3], or [4–6]. See the end of the document for further details on references.

2. Methodology

The methods section should offer a comprehensive and transparent account of the study's design, procedures, and data analysis *(700-1200 words*). Clearly outline the data collection process and explicitly discuss the statistical or analytical methods employed for data analysis. This section should be detailed enough to allow for replication of the study and should enhance the reader's understanding of the study's rigor and validity. Please disclose at the submission stage any restrictions on the availability of materials or information. New methods and protocols should be described in detail while well-established methods can be briefly described and appropriately cited.

Any studies involving animals or humans, and other studies that require ethical approval, must list the authority that provided approval and the corresponding ethical approval code. For any questions, please contact the Institutional Review Board of Ponce Research Institute (https://www.ponceresearch.com/regulatory-compliance/irb/) or jmtorres@psm.edu.

3. Results

This section may be divided by subheadings. It should succinctly present the findings of the study without interpretation or discussion *(500-800 words)*. The results section should be structured to facilitate understanding and interpretation, laying the foundation for the subsequent discussion and conclusion sections of the research article.

3.1. Subsection

3.1.1. Subsubsection

Bulleted lists look like this:

* First bullet;
* Second bullet;
* Third bullet.

Numbered lists can be added as follows:

1. First item;
2. Second item;
3. Third item.

The text continues here.

3.2. Figures, Tables and Schemes

All figures and tables should be cited in the main text as Figure 1, Table 1, etc *(maximum of 8)*.

****

**Figure 1.** This is a figure. Schemes follow the same formatting.

**Table 1.** This is a table. Tables should be placed in the main text near to the first time they are cited.

|  |  |  |
| --- | --- | --- |
| Title 1 | Title 2 | Title 3 |
| Entry 1 | Data | Data |
| Entry 2 | Data | Data1 |

1 Tables may have a footer.

The text continues here (Figure 2 and Table 2).

|  |  |
| --- | --- |
| Bar chart outline | Scatterplot outline |
| (**a**) | (**b**) |

**Figure 2.** This is a figure. Schemes follow another format. If there are multiple panels, they should be listed as: (**a**) Description of what is contained in the first panel; (**b**) Description of what is contained in the second panel. Figures should be placed in the main text near to the first time they are cited.

**Table 2.** This is a table. Tables should be placed in the main text near to the first time they are cited.

|  |  |  |  |
| --- | --- | --- | --- |
| Title 1 | Title 2 | Title 3 | Title 4 |
| entry 1 \* | data | data | data |
| data | data | data |
| data | data | data |
| entry 2 | data | data | data |
| data | data | data |
| entry 3 | data | data | data |
| data | data | data |
| data | data | data |
| data | data | data |
| entry 4 | data | data | data |
| data | data | data |

\* Tables may have a footer.

3.3. Formatting of Mathematical Components

This is example 1 of an equation:

|  |  |
| --- | --- |
| a = 1, | (1) |

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

This is example 2 of an equation:

|  |  |
| --- | --- |
| a = b + c + d + e + f + g + h + i + j + k + l + m + n + o + p | (2) |

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

Theorem-type environments (including propositions, lemmas, corollaries etc.) can be formatted as follows:

**Theorem 1.** Example text of a theorem. Theorems, propositions, lemmas, etc. should be numbered sequentially (i.e., Proposition 2 follows Theorem 1). Examples or Remarks use the same formatting, but should be numbered separately, so a document may contain Theorem 1, Remark 1 and Example 1.

The text continues here. Proofs must be formatted as follows:

**Proof of Theorem 1.** Text of the proof. Note that the phrase “of Theorem 1” is optional if it is clear which theorem is being referred to. Always finish a proof with the following symbol. □

The text continues here.

4. Discussion

Authors should use this section to interpret and contextualize the results, comparing them with existing literature and addressing the study's implications *(800-1500 words)*. Address the limitations of the study, acknowledging potential biases or constraints that may impact the interpretation of results. This section should provide a well-rounded interpretation of the results while maintaining a balanced and evidence-based discussion.

5. Conclusions

The conclusion of an original research article should offer a concise summary of the study's key findings, reiterating their significance and relevance *(150-300 words)*. The conclusion should leave the reader with a lasting understanding of the study's significance and the potential for further exploration in the subject area.

6. Patents

This section is not mandatory but may be added if there are patents resulting from the work reported in this manuscript.

**Supplementary Materials: M**ay include additional figures, tables, datasets, or multimedia files that support the findings of the manuscript but are not essential to the main text. These will be published online alongside the article.

**Appendix A**

The appendix is an optional section that can contain details and data supplemental to the main text—for example, explanations of experimental details that would disrupt the flow of the main text but nonetheless remain crucial to understanding and reproducing the research shown; figures of replicates for experiments of which representative data is shown in the main text can be added here if brief, or as Supplementary data. Mathematical proofs of results not central to the paper can be added as an appendix.

**Appendix B**

All appendix sections must be cited in the main text. In the appendices, Figures, Tables, etc. should be labeled starting with “A”—e.g., Figure A1, Figure A2, etc.

**Author Contributions:** For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used “Conceptualization, X.X. and Y.Y.; methodology, X.X.; software, X.X.; validation, X.X., Y.Y. and Z.Z.; formal analysis, X.X.; investigation, X.X.; resources, X.X.; data curation, X.X.; writing—original draft preparation, X.X.; writing—review and editing, X.X.; visualization, X.X.; supervision, X.X.; project administration, X.X.; funding acquisition, Y.Y. All authors have read and agreed to the published version of the manuscript.” Please turn to the [CRediT taxonomy](https://img.mdpi.org/data/contributor-role-instruction.pdf) for the term explanation. Authorship must be limited to those who have contributed substantially to the work reported.

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Citations and references in the Supplementary Materials are permitted provided that they also appear in the reference list here.

**Manuscripts should follow reference formatting according to the Author Guidelines, including at least 30 references for an original article.**

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2. Author 1, A.; Author 2, B. Title of the chapter. In *Book Title*, 2nd ed.; Editor 1, A., Editor 2, B., Eds.; Publisher: Publisher Location, Country, 2007; Volume 3, pp. 154–196.
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