**Title**: [Title of your research article]

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## Abstract

**Objective**: Briefly state the primary aim(s) of your research investigation.

**Material and methods**: Briefly describe the overall research design, participants/samples, procedures, and data analysis methods.

**Results**: Summarize the key findings of your study, including relevant data and statistical results.

**Conclusion**: State the main conclusions drawn from your research and their significance.

**Keywords**: List 3-5 keywords relevant to your research topic.

# Introduction

* **Background (Context):** Establish the general context of the study area. Provide a broad overview of the field, define key concepts, and present essential background information. Discuss the prevalence, incidence, or impact of the health problem you’re addressing (with statistics and references). Briefly mention existing treatments or interventions. Use clear and accessible language.
* **Problem (Knowledge Gap):** Define the specific research problem you’re investigating. Identify a gap in current scientific knowledge, describe a controversy or debate in the literature, and explain why this gap or controversy is important. Be specific about the unanswered question or the aspect requiring further exploration. Cite previous studies that demonstrate the existence of the knowledge gap.
* **Relevance (Justification):** Explain the importance of addressing the research problem. Justify the need for the research by describing the potential impact of the results. Explain how your research could advance scientific knowledge, improve clinical practice, or influence health policies. Consider both short-term and long-term implications.
* **Objectives (Purposes):** State the specific objectives of your research. Formulate clear and concise research questions using measurable action verbs (e.g., “determine,” “evaluate,” “compare,” “investigate,” “analyze”). Be specific about the variables and outcomes you intend to measure. Ensure the objectives are realistic and achievable within the scope of your study.
* **Hypothesis (Predictions):** If applicable, formulate a clear and concise hypothesis. Base your hypothesis on previous literature and scientific reasoning. It should be falsifiable (i.e., open to being disproven by the data). If your study is exploratory, formulate research questions instead of hypotheses.

# Material and methods

## Study design

* Describe the general design of your study (e.g., experimental, observational, clinical trial, cohort study, cross-sectional study, case-control study).
* Explain the specific structure of the study (e.g., randomized, placebo-controlled, blind, longitudinal, cross-sectional).
* Justify your choice of study design.
* Consider including a flowchart to illustrate the study design visually (optional but recommended).

## Participants

* Describe the inclusion and exclusion criteria for your study participants or samples.
* Explain the methods used for recruitment or sample acquisition.
* Specify the sample size and provide justification for your chosen sample size (e.g., power analysis).
* Describe relevant demographic characteristics of your participants (age, sex, ethnicity, etc.).
* Address any ethical considerations, including ethics committee approval, informed consent procedures, and animal welfare practices (if applicable).

## Procedures

* Provide a detailed description of the experimental protocols, treatments, interventions, measurements, and any other procedures involved in your research.
* Ensure sufficient detail is provided to allow other researchers to replicate your study.
* Include details on dosage, duration, frequency, measurement instruments, controls, and any relevant standardization procedures.

## Assessments

* Break down the procedures into specific assessments used in your study.
* For each assessment:
  + Describe the specific variable(s) being measured.
  + Explain the instruments or techniques used for data collection.
  + Detail the quality control procedures implemented to ensure data accuracy and reliability.
  + If applicable, mention the validation of the instruments.

### [Assessment 1]

[Detailed description of the first assessment].

### [Assessment 2]

[Detailed description of the second assessment].

### [Assessment 3]

[Detailed description of the third assessment].

## Statistical analysis

* Describe the statistical methods used to analyze the data.
* Indicate the specific statistical tests applied (e.g., Student’s t-test, ANOVA, linear regression, etc.).
* Specify the statistical software used (e.g., SPSS, R, SAS, GraphPad Prism).
* Indicate the statistical significance level (e.g., p < 0.05).
* Describe the methods used to control for confounding variables or factors that could influence the results.
* Mention any data transformations performed.

[Example wording:] Data were analyzed using Student’s t-tests to compare differences between two groups and two-way ANOVA to assess the effect of two independent variables and their interaction on the dependent variable. A significance level of p < 0.05 was used. Analyses were performed using [Software Name] statistical software, using the *R* programming language for statistical computing, (1).

# Results

* Present the results in a clear, concise, and logical manner.
* Use tables and figures to effectively visualize the data. Ensure tables and figures are numbered and have descriptive captions.
* Report relevant statistical results, including p-values, effect sizes, and confidence intervals.
* Present the main findings first, followed by secondary findings.
* Avoid repeating data in the text that is already presented in tables or figures, but highlight the most important trends and findings.

# Discussion

* **Summary of Findings:** Briefly summarize the main findings of your study.
* **Interpretation of Results:** Interpret the results in the context of existing scientific literature. Compare your findings with those of previous studies, explaining similarities and differences. Propose explanations for your findings, considering potential study limitations and existing theories.
* **Implications:** Discuss the theoretical and practical implications of your findings. How do your results contribute to scientific knowledge? What are the implications for clinical practice, future research, or health policies?
* **Limitations:** Acknowledge the limitations of your study. Identify potential biases, limitations in the study design, sample size, data collection methods, or any other factors that may have influenced the results. Explain how these limitations could affect the interpretation and generalizability of the results.
* **Future Directions:** Suggest directions for future research. Propose unanswered questions and suggest additional studies that could confirm, expand, or refine your findings.

# Conclusion

* Summarize the main conclusions of your study clearly and concisely.
* Emphasize the importance and significance of your findings.
* Avoid introducing new information or repeating details already discussed in the Results or Discussion sections.

# References

1. R Core Team. R: A language and environment for statistical computing [Internet]. Vienna, Austria: R Foundation for Statistical Computing; 2021. Available from: <https://www.R-project.org/>

# Author Contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication. Specify the contribution of each author (e.g., Conceptualization, Methodology, Data curation, Writing - original draft, Writing - review & editing, etc.).

# Funding

Disclose any funding sources that supported your research. Include grant numbers, funding agencies, or other relevant details. If no funding was received, state “This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.”

# Institutional Review Board Statement

Include the statement regarding the Institutional Review Board (IRB) approval (or equivalent ethics committee) for your study. Include the name of the IRB, the approval number/ID, and the date of approval. If IRB approval was not required, explain why.

# Informed Consent Statement

State whether informed consent was obtained from the participants involved in the study. Explain the procedures used to obtain consent. If informed consent was not applicable (e.g., for studies using publicly available data), explain why.

# Data availability statement

State where the data supporting the conclusions of your article can be found. If the data is publicly available, provide a link to the repository. If the data is available upon request, state “The raw data supporting the conclusions of this article will be made available by the authors without undue reservation.” If data cannot be shared, explain why.

# Conflicts of interests

Declare any conflicts of interest that could have influenced the research or the interpretation of the results. If no conflicts of interest exist, state “The authors declare that the research was conducted without any commercial or financial relationships construed as as a potential conflict of interest.