

Research Report

ERP correlates of the development of orthographical and phonological processing during Chinese sentence reading

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1. Introduction

2. Methods

2.1. Participants

2.2. Stimuli

2.3. Procedure

2.4. ERP data analysis

3. Results

3.1. Behavioral data

3.2. ERP data

3.3. ERP data analysis

4. Discussion

5. Conclusion

6. Acknowledgements

7. References

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Table 1 – Design and sample stimuli

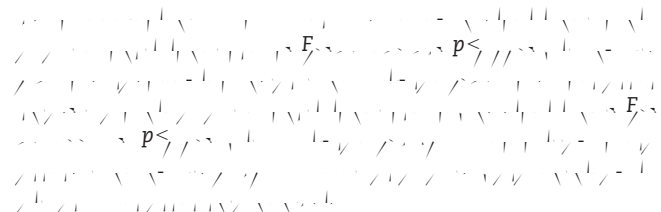
过新年, 孩子们都穿上漂亮的衣服 (衣服).
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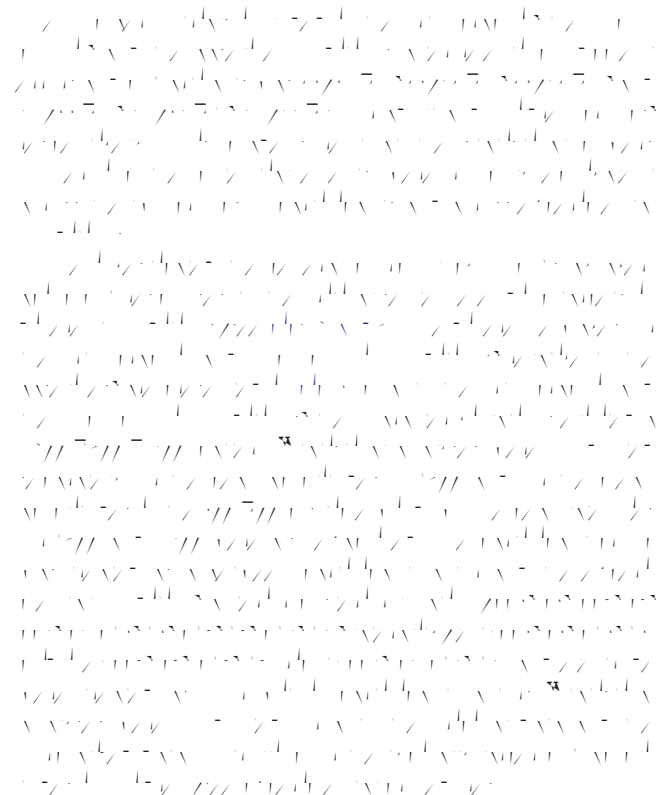
2. Results

2.1. Behavioral data

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2.2. ERP data



2.2.1. P200

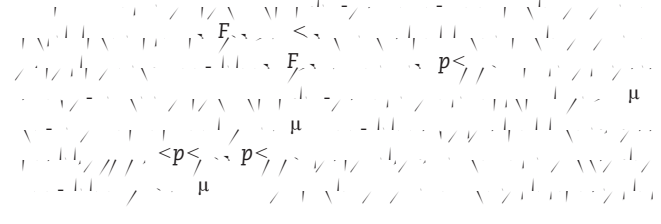


Table 2 – Mean of RTs (in milliseconds) and error percentages for the adult and child readers

	Adult	Child
Mean RT (ms)	215	245
Error (%)	1.5	2.5

Adults

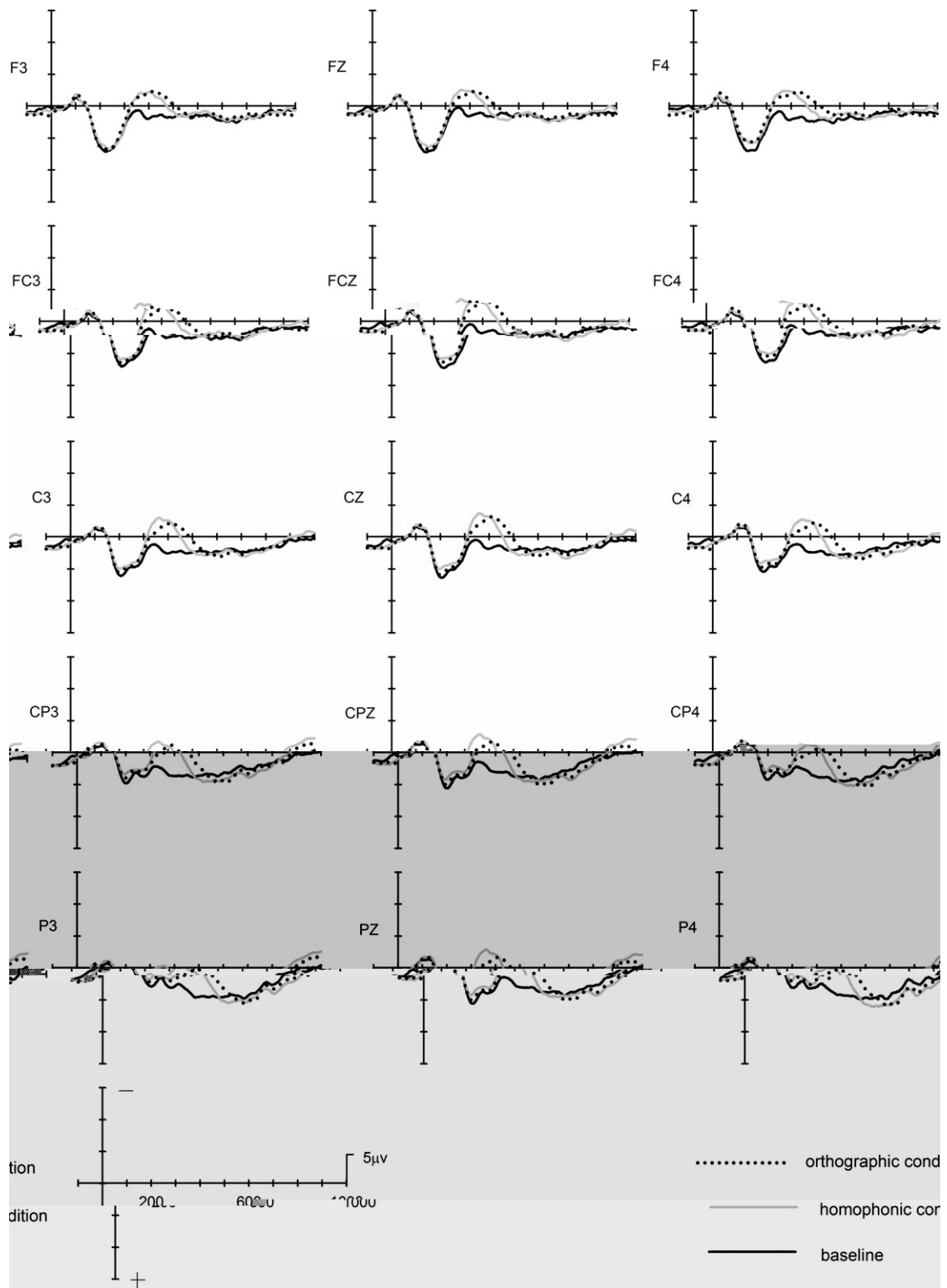
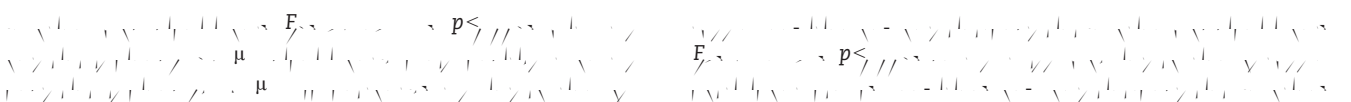


Fig. 1 – Grand average ERPs for the adult participants at 15 typical electrodes. The solid line was for the baseline condition, the dotted line for the orthographic condition, and the gray line for the homophonic condition.



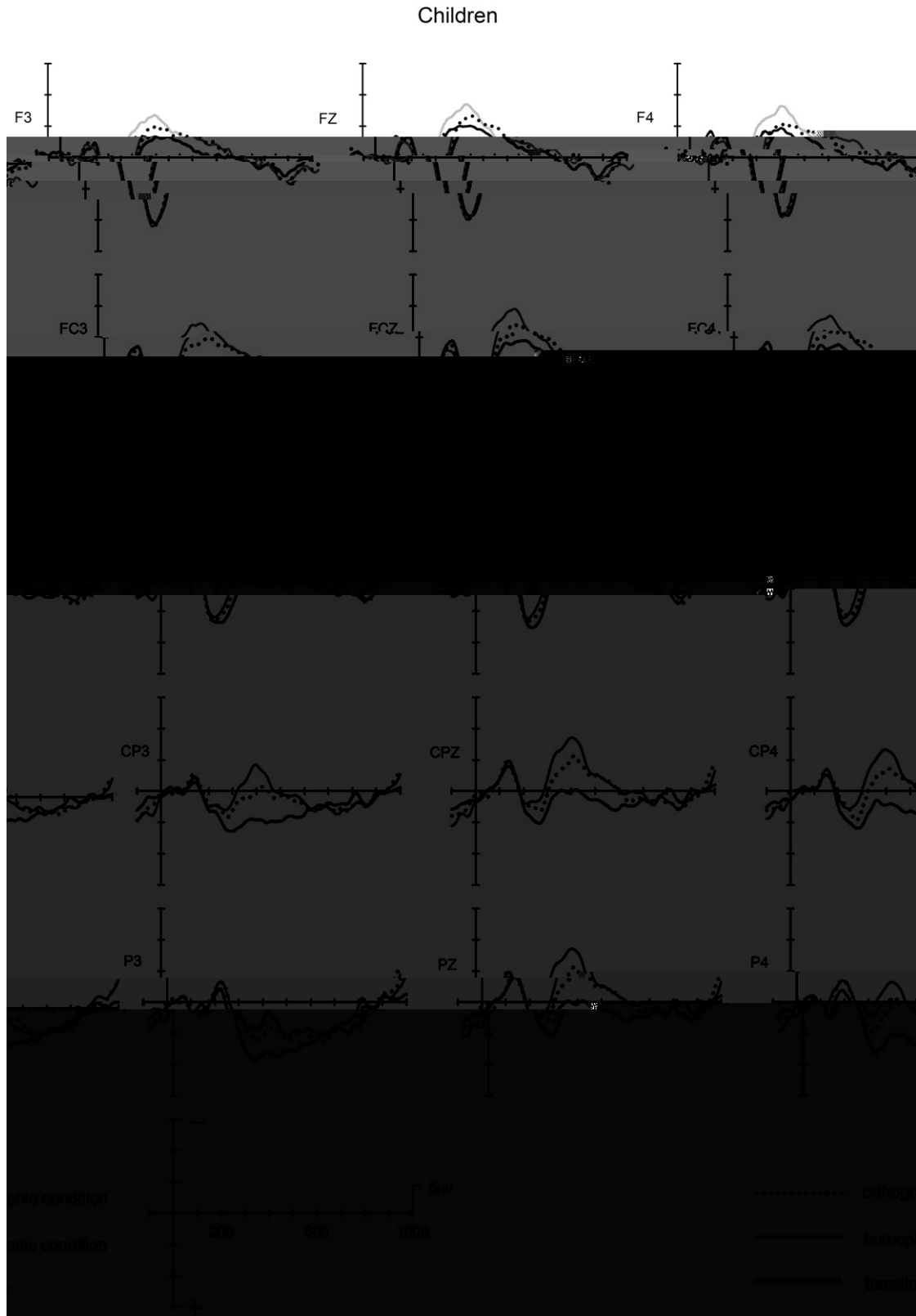


Fig. 2 – Grand average ERPs for the child participants at 15 typical electrodes. The solid line was for the baseline condition, the dotted line for the orthographic condition, and the gray line for the homophonic condition.

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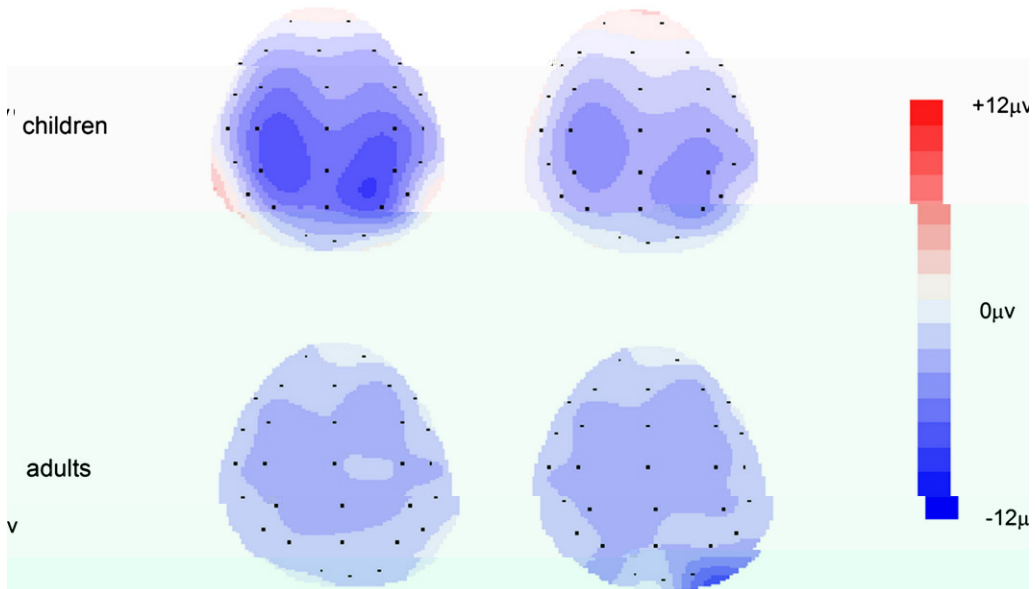
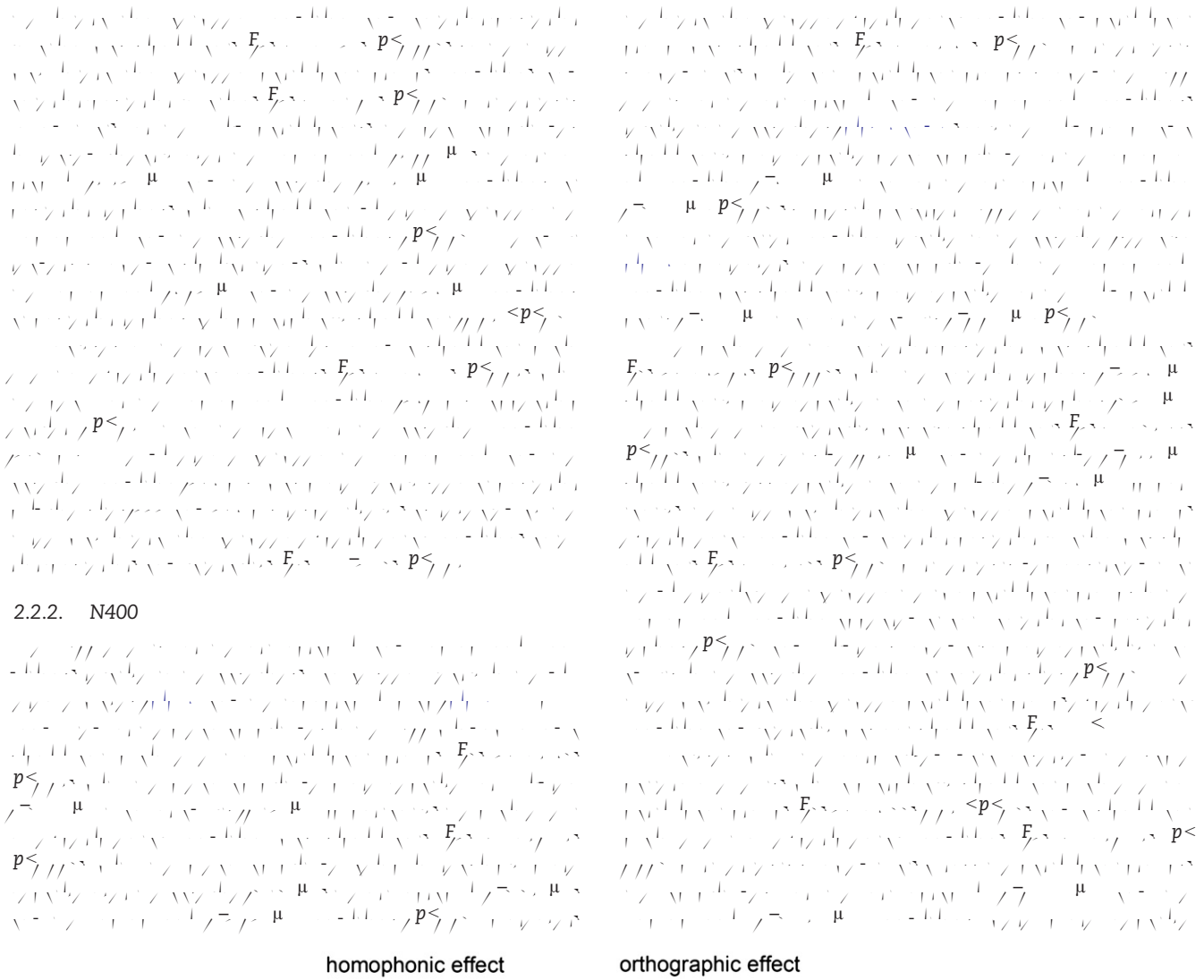


Fig. 4 – Topographic maps for the averaged N400 effects in the 300–500 ms time window for the child and adult participants, contrasting the homophonic or the orthographic condition with the baseline.

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1. Introduction
2. Methodology
3. Results
4. Discussion
5. Conclusion

The first part of the study focuses on the theoretical framework and the research objectives. It discusses the importance of understanding the underlying mechanisms of the phenomenon being studied and the need for a comprehensive approach to data analysis.

The methodology section describes the experimental design and the data collection process. It details the procedures used to ensure the reliability and validity of the results, including the selection of participants and the control of external variables.

The results section presents the findings of the study, including the statistical analysis and the interpretation of the data. It highlights the key observations and the differences between the experimental groups, providing a clear and concise summary of the outcomes.

The discussion section explores the implications of the findings and their relevance to the field of study. It compares the results with existing literature and discusses the potential limitations of the study, suggesting areas for future research.

The second part of the study focuses on the practical applications of the findings. It discusses the implications of the results for the development of new interventions and the improvement of existing ones, emphasizing the need for a multidisciplinary approach.

The conclusion section summarizes the main findings of the study and the overall contribution to the field. It reiterates the importance of the research and the need for continued exploration in this area, providing a clear and concise summary of the key points.

The final part of the study discusses the broader implications of the research and the need for a holistic approach to the study of human behavior. It emphasizes the importance of considering the social and cultural context in the analysis of individual actions and the role of the researcher in the process.

The overall findings of the study suggest that a comprehensive and multidisciplinary approach is essential for understanding the complex nature of human behavior. The results provide valuable insights into the underlying mechanisms of the phenomenon being studied and offer practical suggestions for the development of effective interventions.

The study concludes by highlighting the need for continued research in this area and the importance of a collaborative effort between different disciplines. It emphasizes the role of the researcher in the process of discovery and the potential for future breakthroughs in the field.

1. The first step is to identify the problem or objective of the study. This involves a clear definition of the research question and the scope of the investigation.

4.3. Procedure

The procedure section describes the methods used to collect and analyze data. It should be detailed enough to allow other researchers to replicate the study. This includes information on the study design, data collection methods, and the statistical or analytical techniques used to interpret the results.
