

# EFFECT OF AGENESIS AND DAMAGE OF CORPUS CALLOSUM ON VISUAL MEMORY

Earlier studies suggested that damage to the right hemisphere leads to cognitive impairment in spatial working memory, but recent studies show that the right hemisphere is not required for visual priming as evaluated on fragment completion or stem completion tasks with a single potential completion.

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## KEYWORDS

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## RESULTS/FINDINGS

- Regarding the significance of the right hemisphere for visual implicit memory for verbal materials, previous research have produced inconsistent results.
- According to the current study, the inconsistencies were brought about by the various retrieval tasks that were employed.
- To be specific, tasks requiring stem or fragment completion, where there is just one possible outcome, do not require the right hemisphere for visual priming.
- However, injury to the right hemisphere does interfere with visual priming for word stems that have many completions.

## INTRODUCTION

- The lack of specialized emotional processing in the Left Hemisphere may explain why the influences of Right Hemisphere presentation on memory for visual specificity conversed with emotion but not the effects of Left Hemisphere presentation on memory for comprehension information.
- According to the current study, the discrepancies were influenced by different retrieval tasks used.
- Specifically, the right hemisphere isn't required for visual priming as analyzed by fragment completion or stem completion tasks with a single possible completion.
- Damage to the right hemisphere, on the other hand, disrupts visual priming for word stems with multiple completions.

## OBJECTIVE

To know that new findings are significant in that they demonstrate that the right hemisphere is not firmly where visual implicit memory is confined.

## ANALYSIS

- Despite the absence of the anterior sections of the corpus callosum, visual working memory remains coherent.
- This suggests that the frontal cortex is not where visual working memory is located, and/or that direct callosal connections between the frontal cortices are not the means by which visual working memory is united.
- The right hemisphere appears to have a somewhat higher capacity, which suggests that visual working memory is not a symmetrical skill.

## METHODOLOGY

This is a literature review that focuses on effect damage to the right hemisphere and its role in disruption of visual priming for word stems with multiple completions. These methods can include:

- Comparison studies
- Systematic reviews

## CONCLUSION

- In the absence of the anterior sections of the corpus callosum, visual working memory continues to remain unified. This indicates that visual working memory is not housed in the frontal cortex and/or is not unified via direct callosal connections between the frontal cortices.

