

## Cognitive Assessment Report

### Overview

This report presents a cognitive assessment based on several tasks and speech/sentiment analysis. The assessment aims to provide insights into various cognitive domains, including memory, executive function, and language. The analysis incorporates quantitative data from cognitive games and qualitative data from speech patterns and sentiment.

### Metrics Explanation

- \* Stroop Colour: Measures executive function, specifically the ability to inhibit cognitive interference. A lower score generally indicates difficulty with cognitive control. In our case the score is zero since the game hasn't been played.
- \* Memory Game: Assesses short-term and working memory. A higher score reflects better memory performance.
- \* Image Recall: Tests visual memory and recall abilities. A lower score may indicate difficulty encoding or retrieving visual information. In our case the score is zero since the game hasn't been played.
- \* Speech Metrics: Quantify aspects of speech, including pause time, filler word usage, lexical diversity, and speech fluency. These metrics can provide clues about cognitive processing speed, language skills, and potential difficulties in verbal expression.
- \* Sentiment Analysis: Evaluates the emotional tone and content of speech, providing insights into mood and emotional state.

### Memory Game Analysis

The memory game score is 1. This indicates some level of short-term memory function. Further context of whether this is out of 2, 5, 10, or 100 correct items would give more information about the users memory function.

### Image Recall

The image recall score is 0. Without further information, it's difficult to interpret this score beyond indicating a potential area of concern for visual memory. It is possible that the task was not attempted, resulting in a score of zero.

### Stroop Colour

The Stroop Colour test score is 0, which makes interpretations challenging. A score of zero most likely signifies that the game was not attempted.

### Speech Analysis



The speech metrics indicate the following:

- \* Total Time: 1.3 seconds
- \* Total Pause Time: 0.0 seconds
- \* Pause Density: 0.0%
- \* Repeated Words: 0.0
- \* Filler Words: 1.0
- \* Filler Frequency: 100.0%
- \* Unique Words: 1.0
- \* Lexical Diversity: 100.0%
- \* Speech Fluency: 40.0 words/second

The short duration of the sample (1.3 seconds) limits the interpretability of these metrics. The high filler frequency (100%) and only 1 unique word, "So..." suggests hesitant or minimal verbal output. While the speech fluency appears high at 40 words/second, it is based on a single word, making this metric unreliable. A longer speech sample would provide a more accurate representation of speech patterns.

## Sentiment Analysis

The sentiment analysis indicates a neutral sentiment.

- \* Label: Neutral
- \* Probabilities: [0.0656, 0.1021, 0.4446, 0.1860, 0.2017]
- \* Weighted Score: 67.119

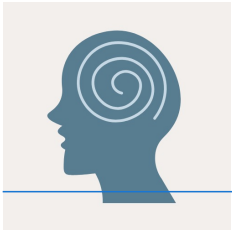
The neutral sentiment suggests that the speech sample does not convey strong positive or negative emotions. This could be normal but should be considered in context.

## Heuristic Cognitive Risk Assessment

Based on the available data, which is limited by the single word given as well as many zero scores, a comprehensive cognitive risk assessment is challenging. The low scores on Stroop Colour and Image Recall (likely due to non-completion of the tasks), combined with the speech metrics (limited sample, high filler frequency), warrant further investigation.

## Integrated Interpretation

The overall picture painted by these results is difficult to interpret definitively due to the limited data. The single word provided for speech indicates a need to repeat this test. The zero values for Stroop and Image recall indicate these tasks either failed to execute, or were not completed. The memory game score of 1, may indicate some degree of cognitive recall but is insufficient without knowing the total number of items that could be recalled.



## Early Spark

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### Recommendations

1. Repeat Assessment: Retake the cognitive assessment, ensuring all tasks are completed.
2. Provide Longer Speech Sample: When prompted, give a longer speech sample to give more data.
3. Consult Healthcare Provider: Share this report with a healthcare provider for further evaluation. Discuss any concerns about cognitive function, memory, or speech patterns. A comprehensive neurological examination and neuropsychological testing may be recommended.
4. Monitor Cognitive Function: Pay attention to any changes in memory, thinking, language, or behavior. Keep a record of any concerning symptoms to share with a healthcare provider.
5. Healthy Lifestyle: Maintain a healthy lifestyle by exercising regularly, eating a balanced diet, getting enough sleep, and managing stress. These factors can positively influence cognitive health.

It is a test done by AI; if the score is too high it is suggested to consult a doctor immediately, if not then also it is better to meet a doctor.

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### IMPORTANT DISCLAIMER

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