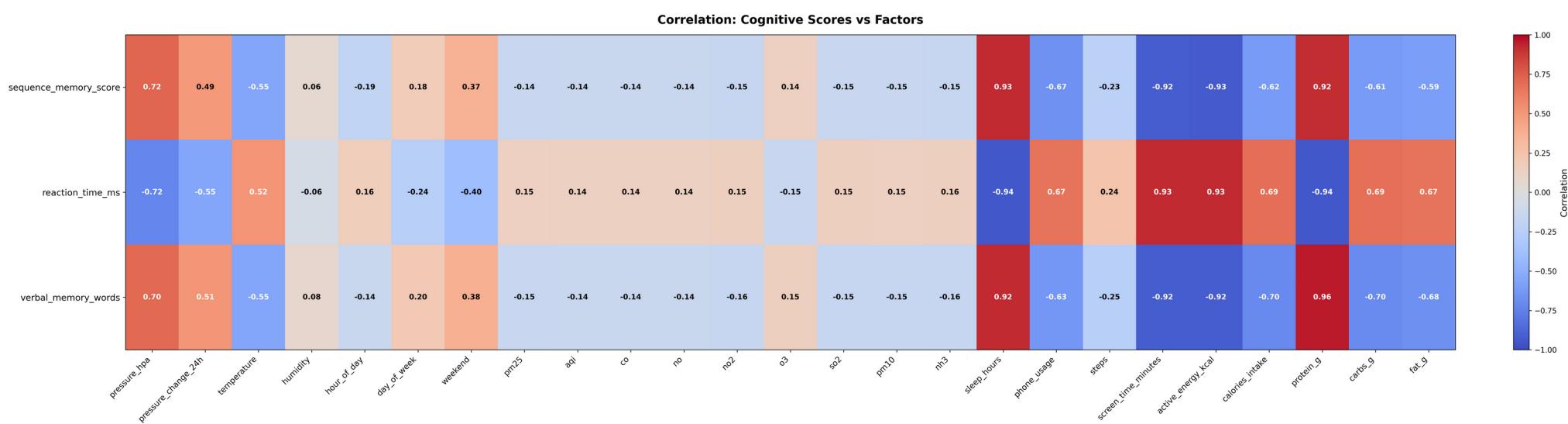


# Cognitive Performance Analysis Report

Generated: December 10, 2025 • Total Records: 168



Color Guide: Red = Positive correlation ( $X \uparrow \rightarrow Y \uparrow$ ) • Blue = Negative correlation ( $X \uparrow \rightarrow Y \downarrow$ ) • White = Weak/no correlation

# AI Analysis Summary

Automated insights generated from correlation data

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## KEY FINDINGS

- Higher protein intake is strongly associated with improved verbal memory and reaction times.
- Increased sleep hours correlate positively with better reaction times and memory scores.
- Higher active energy expenditure is linked to enhanced sequence memory and reaction times.

## STRONGEST CORRELATIONS

- Protein\_g: 0.9578 with verbal\_memory\_words - indicates a very strong positive relationship.
- Protein\_g: 0.9428 with reaction\_time\_ms - suggests that higher protein intake may lead to faster reaction times.

## LIMITATIONS

- The dataset consists of 168 records, which may limit the generalizability of the findings.