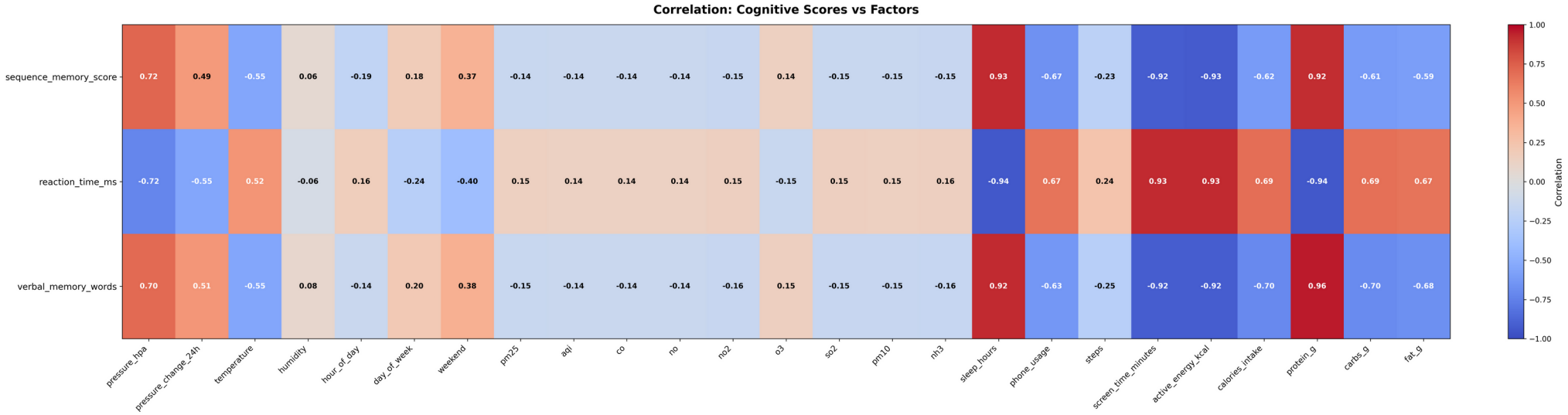
Cognitive Performance Analysis Report

Generated: December 09, 2025 • Total Records: 168



Color Guide: Red = Positive correlation (X ↑ → Y ↑) • Blue = Negative correlation (X ↑ → Y ↓) • White = Weak/no correlation

AI Analysis Summary

Automated insights generated from correlation data

KEY FINDINGS

• High protein intake is strongly associated with improved verbal memory and reaction times.
• Increased sleep hours correlate positively with both reaction times and memory scores.
• Higher active energy expenditure is linked to better performance in sequence and verbal memory tasks.

STRONGEST CORRELATIONS

• Protein_g: 0.9578 with verbal_memory_words - indicates a very strong relationship suggesting protein intake may enhance verbal memory.
• Sleep_hours: 0.9416 with reaction_time_ms - suggests that more sleep is associated with faster reaction times.

LIMITATIONS

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