MEMORY PERFORMANCE AS A FUNCTION OF ANXIETY FOR INDIVIDUALS WITH MILD HEAD INJURY

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BACKGROUND

Little research has been conducted to examine the chronicity of cognitive and emotional sequelae following mild head injury (MHI) which can be much less subtle and involve alterations in consciousness without extensive neural loss1.

Furthermore, it has been suggested that individuals with moderate to severe neurological compromise are particularly vulnerable to the adverse effects of stress and flattened affect/arousal. Yet, for some, these difficulties may not be transient.

GENERAL RESEARCH QUESTIONS

• Do individuals with MHI have differential arousal from individuals without MHI?
• Do individuals with self-reported MHI have differential cognitive performance that interacts with arousal state (via self-report or manipulated stress or relaxation)?

METHOD

STUDY 1

Participants

University students (N = 50); 30% reported history of MHI

Measures and Procedure

• Standardized neuropsychological tests (memory, abstract reasoning, and standard intelligence); indices of arousal/anxiety
• Neurocognitive measures of immediate and delayed recall performance of individuals with and without MHI
• Recall ability for thematic material for individuals with MHI and without MHI

RESULTS: STUDY 1

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Delays, F(1, 48) = 6.61, p = 0.013, narrative recall performance of individuals with and without MHI differed as a function of state anxiety, F(1, 48) = 3.93, p = 0.054.

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Delays, F(1, 48) = 4.02, p = 0.040.

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Delays, F(1, 48) = 3.85, p = 0.056, and delayed recall, F(1, 48) = 3.93, p = 0.054.

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Delays, F(1, 48) = 4.71, p = 0.045.

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Delays, F(1, 48) = 5.228, p = 0.026, (i.e. underaroused).

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