

## **Can highly superior autobiographic memory enhance creativity?**

September 13 2022



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Researchers from universities in Italy and the U.S. studied the relationship between memory and creativity to assess whether those who remember the smallest details of their lives (highly superior



autobiographical memory) may have a greater propensity for creative thinking. The results showed no relation.

There is still much to discover about the relationship between memory and creativity, but it is thought that creative ideas can result from the flexible recombination of concepts from memory. Several behavioral and neuroscientific studies support this assumption by proving a link between <u>episodic memory</u> and divergent thinking, which is the basis for the emergence of <u>creative ideas</u>.

Researchers Sarah Daviddi, William Orwig, Massimiliano Palmiero, Patrizia Campolongo, Daniel L. Schacter and Valerio Santangelo, from the Universities of Perugia, Aquila, Sapienza Rome (Italy) and Harvard (U.S.), came together to analyze the potential contributions of autobiographical memory for creative ideation, a relationship still little studied.

In the paper "Individuals with highly superior autobiographical memory do not show enhanced <u>creative thinking</u>," published in the scientific journal *Memory* in July 2022, the authors explain that they assessed measures of divergent and convergent creative thinking in a cohort of 14 rare individuals showing Highly Superior Autobiographical Memory (HSAM), having been compared with a <u>control group</u> composed of a cohort of 28 other subjects who showed a normal-memory.

The HSAM group completed several memory tasks and a battery of creativity measures, such as Alternative Uses Task, Consequences Task and Remote Associates Task. Statistical analyses were then performed to assess the existence of relevant differences between the HSAM group and the control group regarding these measures.

The results revealed that, although participants in the HSAM group were superior in recalling autobiographical events compared to the control



group, no overall differences were observed between the groups with regard to creativity measures.

The multidisciplinary team of researchers then concluded that constructive episodic processes relevant to creative thinking are not enhanced in individuals with highly superior autobiographical <u>memory</u> performance. A possible justification could be that they are compulsively and narrowly focused on the consolidation and recovery of autobiographical events.

**More information:** Sarah Daviddi et al, Individuals with highly superior autobiographical memory do not show enhanced creative thinking, *Memory* (2022). DOI: 10.1080/09658211.2022.2094416

## Provided by BIAL Foundation

Citation: Can highly superior autobiographic memory enhance creativity? (2022, September 13) retrieved 7 May 2024 from https://medicalxpress.com/news/2022-09-highly-superior-autobiographic-memorycreativity.html

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