Quantifying autobiographical memory

Overview

What kinds of details get included in memories about our own lives? How do the quality and contents of these memories change as time passes?

This in-class assignment is based on methods from the following study:

Gardner, R. S., Vogel, A. T., Mainetti, M., & Ascoli, G. A. (2012). Quantitative Measurements of Autobiographical Memory Content. PLOS ONE, 7(9), e44809. https://doi.org/10.1371/journal.pone.0044809

Instructions given to students

Results

Students viewed memory prompts (lists of randomly selected words) and recalled 16 memories about their lives. After recall, students rated the memories according to how many details (“elements”) were present from each of 8 different categories. Students also rated whether the memories evoked positive or negative emotions, and how intense the emotions were during recall.

These results summarize the responses of 46 students, most of whom were 21 years old.

Error bars in graphs represent the standard error of the mean.

Frequency of memories by age at which events occurred

Number and type of elements in the memories

There was a significant dip in the amount of detail present in memories from around the age of 12.

This graph combines elements across all 8 categories:

Memories included more details about people than anything else. (Note that the category “details” stands for “other details.”)

Gender effects

Correlations among the types of elements retrieved

Lower mean correlations indicate that a type of element was retrieved independently of other element types.

Valence and intensity of emotion elicited by memories

Gender effects

From:
https://wiki.anthonycate.org/ - **Visual Cognitive Neuroscience**

Permanent link:
https://wiki.anthonycate.org/doku.php?id=teaching:autobiographical:autobiographical_assignment&rev=1570469137

Last update: **2019/10/07 17:25**