UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Same memory, different words: The Role of Language, Proficiency and Cognitive Load in Traumatic Autobiographical Memory Recall

Permalink

https://escholarship.org/uc/item/4qg3k9mz

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

Authors

Papadopoulou, Eleni
Balta, Eirini
Vatakis, Argiro
et al.

Publication Date

2025

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Same memory, different words: The Role of Language, Proficiency and Cognitive Load in Traumatic Autobiographical Memory Recall

Eleni Papadopoulou
Deree, American College of Greece, Athens, Greece

Eirini Balta
Panteion University of Social and Political Sciences, Athens, Greece

Argiro Vatakis
Panteion University of Social and Political Sciences, Athens, Greece

Eleni Orfanidou
Deree, The American College of Greece, Athens, Greece

Abstract

Literature indicates that lingua franca use in clinical settings impacts bilinguals communicating in their second language (L2)—but what drives these changes? This study examined how language, proficiency, and cognitive load influence emotionality during traumatic autobiographical memory (AM) retrieval. Building on evidence that L2 use diminishes emotional resonance, we hypothesized that proficiency would moderate this effect. Additionally, we expected lower emotionality in first-language (L1) recall under cognitively demanding conditions, mirroring second-language effects. Greek native speakers (N=107) recalled a traumatic AM in L1, L2 (English), or L1 under cognitive load (visuospatial working memory task) while undergoing physiological EDA assessment. Self-reported arousal, distress, and traumatic symptoms were measured. Notably, L2 alone did not lower emotional intensity—only lower L2 proficiency did, highlighting its key moderating role. Cognitive load during L1 retrieval significantly decreased emotionality, supporting resource-dependent emotional processing models. These findings reveal proficiency and cognitive demands' interplay in shaping bilingual emotional processing.

In D. Barner, N.R. Bramley, A. Ruggeri and C.M. Walker (Eds.), *Proceedings of the 47th Annual Conference of the Cognitive Science Society* ©2025 the author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).