

Mind-body interactions in writing (M-BW): Psychophysiological and linguistic synchronous correlates of expressive writing

ABSTRACT:

Background

The bodily manifestations of the mind while writing have barely been studied. Expressive writing is a particular form of writing in which a person narrates a personal, deeply charged emotional event. Expressive writing is associated with a considerable number of health benefits. Despite these benefits, the mechanisms through which expressive writing operates is still poorly understood.

Aims

In M-BW we sought to explore the writing, linguistic and psychophysiological, and emotion regulation correlates of expressive writing.

Method

We conducted two studies in which participants were randomly assigned to one of two groups, the expressive writing group (traumatic event) or the control group (daily routine). During writing we recorded writing in real-time, EDA and ECG. In the first study, participants wrote using first person singular, and in the second study, the third person pronoun.

Results

Results from both studies suggest that the expressive writing paradigm has specific writing, linguistic and psychophysiological correlates. In the first study the expressive group showed longer pauses, different function words' usage and higher sympathovagal balance, as opposed to control. In the second study, the expressive group showed again different usage of function words and higher heart rate, as compared to control.

Conclusions

Results from both studies suggest that different expressive writing instructions lead to specific writing, linguistic and psychophysiological correlates. These findings are a step forward in the study of expressive writing as a useful exercise for improving physical and psychological well-being, specifically as an opportunity for emotion regulation.

Keywords

Expressive writing, Handwriting, Electrodermal activity, Heart rate variability, Emotional regulation

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Published Work:

Jacques, T., Alves, A. A., Fadaei, S., & Barbosa, F. (accepted). Real-time physiological and writing correlates of expressive writing. *Experimental Psychology*.

Alves, R. A., Leal, J. P., & Limpo, T. (2019). Using HandSpy to study writing in real time: A comparison between low- and high-quality texts in grade 2. In E. Lindgren & K. P. H. Sullivan (Eds.), *Insights from Keystroke Logging and Handwriting* (pp. 50-70). Leiden, the Netherlands: Brill.

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