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## **DATASET : Effects of organization and disorganization on pleasantness, calmness, and the frontal negativity in the event-related potential**

Sandra Langeslag

*University of Missouri-St. Louis*, [langeslags@umsl.edu](mailto:langeslags@umsl.edu)

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## Files

[Langeslag 2018 PLOS ONE.pdf](#) (4536 kB)

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[1-25bdf.zip](#) (589227 kB)

*EEG Files #1 to #25*

[minimal dataset PLOS ONE.zip](#) (593649 kB)

*All Files*

## Abstract

A preference for organization is associated with several disorders, but is widespread in the general population as well. It remains unclear whether organization and various degrees of disorganization elicit pleasant or unpleasant feelings (i.e., valence), calming or arousing feelings (i.e., arousal), and a frontal negativity in the event-related potential (ERP) related to cognitive control. This study tested how organization, slight disorganization, and total disorganization affect valence, arousal, and the frontal negativity. Participants passively viewed organized, slightly disorganized, totally disorganized, and control pictures while their electroencephalogram was recorded. They also rated the valence and arousal elicited by each picture and completed questionnaires assessing desire for order and organization behavior. Organized pictures made participants feel most pleasant, control pictures made participants feel less pleasant, slightly disorganized pictures made participants feel even less pleasant,

and totally disorganized pictures made participants feel least pleasant. There were no significant effects on arousal. Totally disorganized pictures elicited a frontal negativity in the ERP between 200±2000 ms after stimulus onset, which might reflect inhibition of rearranging behavior. Individual differences in desire for order and organization behavior did not correlate with valence, arousal, or the frontal negativity. The current study design and findings could be a starting point for examining the differences between adaptive and maladaptive preferences for organization and aversions to disorganization.

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