An investigation of the neuronal signature of word order effects in Russian

Jeffrey Jack Green  
*Brigham Young University, jjgreen@byu.edu*

Anastasia Stoops  
*University of Illinois at Urbana-Champaign*

Follow this and additional works at: [https://scholarsarchive.byu.edu/facpub](https://scholarsarchive.byu.edu/facpub)

Part of the Arts and Humanities Commons

**BYU ScholarsArchive Citation**

Green, Jeffrey Jack and Stoops, Anastasia, "An investigation of the neuronal signature of word order effects in Russian" (2021). *Faculty Publications*. 6152.  
[https://scholarsarchive.byu.edu/facpub/6152](https://scholarsarchive.byu.edu/facpub/6152)

This Poster is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Faculty Publications by an authorized administrator of BYU ScholarsArchive. For more information, please contact ellen_amatangelo@byu.edu.
An investigation of the neuronal signature of word order effects in Russian
Anastasia Stoops (stoonsa2@illinois.edu) and Jeffrey J Green

BACKGROUND
Language comprehension processes identify individual word features and aggregate ERP signal pulls on different frequency bands (ERSP) delta power is sensitive to the processing of linguistic information at a level higher than individual lexical item. To examine neuronal brain responses evoked by violations of word order and case inflections as reflected in the ERP components P600 and delta oscillations.

METHOD

Participants: 12 native Russian speakers (6 males; ages: 18–25 y)

Stimuli: Target words:

Experimental Paradigm:

Methods:

Inflected target word: e.g., a word order that violates the standard word order in Russian: an expected subject (frontal P600 only for SVS–OVO – see section 7.1).

RESULTS

Event-Related Potentials (ERP) – P600

Event-Related Spectral Perturbation (ERSP) – Delta (2-3 Hz)

Key Findings:

Conclusion:

REFERENCES