CALL FOR PAPERS

Special Issue: EEG Methods for Developmental Cognitive Neuroscientists: A Tutorial Approach

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Aims and scope of the Special Issue

EEG is one of the most efficient and relatively inexpensive methods to study brain function across development. The power of EEG as a neuroscience tool lies in the ability to utilize it with populations across the lifespan, its temporal precision, and relatively inexpensive hardware. However, most researchers continue to use a limited number of analysis approaches (event-related potentials, Fourier analysis) to analyze their EEG data. While such approaches are useful, there are innovative EEG analytic approaches that can expand the information derived from the EEG signal. This special issue in Developmental Cognitive Neuroscience will assemble a series of papers, with accompanying tutorials and code, focused on advanced EEG analysis approaches. Particular emphasis will be placed on promising methods that have not been widely adopted by developmental scientists. Our goal is to provide both novice and experienced researchers with a set of resources that will facilitate rapid application of these analytic methods. Thus, we seek papers that not only explain the theoretical and conceptual steps involved in novel EEG-analytic approaches, but also contain step-by-step tutorials on how to apply these methods to one's own data. Additionally, all submitted papers must include well-commented code that will be made publicly available.

All submissions should focus on methods, as opposed to the presentation of empirical research findings. In order to receive consideration, submitted manuscripts must include a discussion of the conceptual background for the chosen method, provide examples of how the method can be leveraged to answer questions of interest to developmental scientists, and also include a step-by-step tutorial of how to apply the method. At the time of submission, authors must also include executable code written for general purpose software (e.g., Matlab, Python), as well as include an example dataset. Described methods and code that are bound to specific commercially available software (e.g., BrainVision Analyzer) will not be considered for this special issue. For an example of the kind of papers that will be published in this special issue, please see: Debnath et al., 2020, Psychophysiology, 57(6), e13580, or Kievet et al., 2018, Dev. Cogn. Neurosci., 33, 99-117.

Submission instructions

Authors who plan to submit a manuscript for the special section are asked to submit a letter of intent by August 1st, 2020, that includes: 1) a tentative title; 2) contact information and corresponding author information; 3) the names and affiliations of anticipated authors; 4) a brief description of the proposed submission (500 words or less); 5) a brief description of the code and example dataset that will be submitted alongside the manuscript, as well as confirmation that these resources will be made publicly available, if accepted (2-3 sentences). These letters of intent will be reviewed for fit and selected to provide the broadest representation of high-quality papers. Letters of intent should be sent electronically as Word documents to gbuzzell@fiu.edu. In the accompanying email, please include in the subject line "DCN Special Section on EEG Methods". Following a review of received letters, potential contributors will be contacted by September 1, 2020, to submit full manuscripts. In the anticipation of multiple submissions focused on the same method, the editors may ask authors to consider a collaborative submission.

Developmental Cognitive Neuroscience's submission system (https://www.editorialmanager.com/dcn) will be open for invited submissions to our Special Issue from February 1st, 2021. When submitting your manuscript please select the article type "VSI: Dev. EEG Methods". Please submit your manuscript before May 1st, 2021.

All submissions deemed suitable to be sent for peer review will be reviewed by at least two independent reviewers. Once your manuscript is accepted, it will go into production, and will be simultaneously published in the current regular issue and pulled into the online Special Issue. Articles from this Special Issue will appear in different regular issues of the journal, though they will be clearly marked and branded as Special Issue articles. Please ensure you read the Guide for Authors before writing your manuscript. The Guide for Authors and link to submit your manuscript are available on the Journal's homepage at: https://www.editorialmanager.com/dcn.

Inquiries, including questions about appropriate topics, may be sent electronically to George Buzzell (gbuzzell@fiu.edu).