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## Disorder of movement preparation in schizophrenia

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The beforehand preparation of movement is a highly important process, which increases the efficiency of movement execution. The disorder of movement preparation in schizophrenia patients was previously detected only with the help of electroencephalographic parameters, but not with the assessing of movement speed used in behavioral studies. It was recently found that appropriate preparation not only speeds up the movement, but also increases movement stability, which is measured with the intra-individual reaction time variability. Some studies also revealed that assessing of movement stability could detect the dysfunction of schizophrenia better than classical behavioral parameters. Hence, the main goal of this study was to verify if the parameter of movement stability could detect the impairment of movement preparation in schizophrenia patients. In order to achieve the main purpose, we carried out a study with 14 schizophrenia patients and 14 control group subjects. We used precueing task in our research, in which participants had to employ information about movement probability for its proper preparation. The main results showed that the impairment of movement preparation in schizophrenia patients was detected only with the movement stability measurement, although the movement speed failed to do so. Therefore, it was found that movement stability parameter has an appropriate sensitivity for detecting impaired movement preparation and could be employed in clinical studies.

### Biography

Denisas Dankinas is a PhD student of Neurobiology and Biophysics Department of Vilnius University, Vilnius, Lithuania. He had participated in the number of international scientific conferences and had published 3 proceedings and 2 in a peer reviewed journal. At this moment he has 1 paper under review in reputed journal and one paper is also prepared for the publishing.

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