Do people with schizophrenia have a tendency to mimic others

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Imitation is highly important sort of social behavior that helps us to learn actions and understand the intentions of others. Studies in this field became very popular particularly after the discovery of mirror neurons, which are related to the imitative process. However, in some cases, imitation became a morbid process; a person loses the control of imitation. Such inappropriate copying of other person’s actions is one of deficits in schizophrenia disorder. Nevertheless, directly observable pathological imitation is detected only in rare cases of this disease. Therefore, our goal was to study a latent improper imitative tendency in schizophrenia patients. In our study, 14 schizophrenia patients and 15 healthy subjects were employed in a two-condition experiment: (1) In imitative condition subjects had to copy the hand action seen on the screen; (2) In non-imitative condition they had to make a different movement (this employs a suppression of imitative action that is impaired in case of pathological imitative tendency). Imitative tendency was assessed by interference score; a difference in response time and accuracy between non-imitative and imitative conditions. Additionally, we have assessed the response preparation in both groups. Our results revealed that schizophrenia patients were able to make appropriate preparation for not only imitative, but also non-imitative responses. Nevertheless, we obtained the presence of pathological imitative tendencies in schizophrenia patients. This group had reliably higher interference score. Therefore, our findings can help in diagnostic purposes in the detection of mild pathological imitation that cannot be revealed by direct observation in schizophrenia patients.

Biography
Denisas Dankinas is currently a PhD student of Neurobiology and Biophysics at Vilnius University, Lithuania. He has participated in 4 scientific conferences and published in 3 proceedings. He has submitted 3 papers and are under review in reputed journals.

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