## P03-125

## BACKWARD MASKING PERFORMANCE IN SCHIZOPHRENIC PATIENTS AND THEIR HEALTHY RELATIVES

E. Chkonia<sup>1</sup>, M. Roynishvili<sup>2</sup>, A. Kezeli<sup>2</sup>, M.H. Herzog<sup>3</sup>, A. Brand<sup>4</sup>

<sup>1</sup>Neuromedicine, Psychiatry, Tbilisi State Medical University, <sup>2</sup>Laboratory of Vision Physiology, Georgian Academy of Sciences, I. Beritashvili Institute of Physiology, Tbilisi, Georgia, <sup>3</sup>Laboratory of Psychophysics, Brain Mind Institute, Ecole Polytechnique Federal de Lausanne (EPFL), Lausanne, Switzerland, <sup>4</sup>Centre for Psychiatry and Psychotherapy, Hospital Bremen-Ost, Bremen, Germany

Over the past years, studies of unaffected first-degree relatives of schizophrenic patients have reported cognitive deficits in the domains of executive functions, memory, and attention. However, these deficits may rely on lower level information processing deficits. Here, we investigated visual information processing with a visual backward masking task. A vernier target was followed by a grating mask. Observers had to indicate the offset direction of the vernier. We determined the SOA between the vernier and the grating onset for schizophrenic patients, their healthy first order relatives, and a healthy control group. Schizophrenic patients needed SOAs about three times longer than healthy controls to reach a predefined criterion level. Backward masking performance of unaffected relatives was significantly better than the one of patients but significantly worse than performance of controls. This result adds further evidence that low level deficits as determined by visual backward masking are endophenotypes of schizophrenia.