

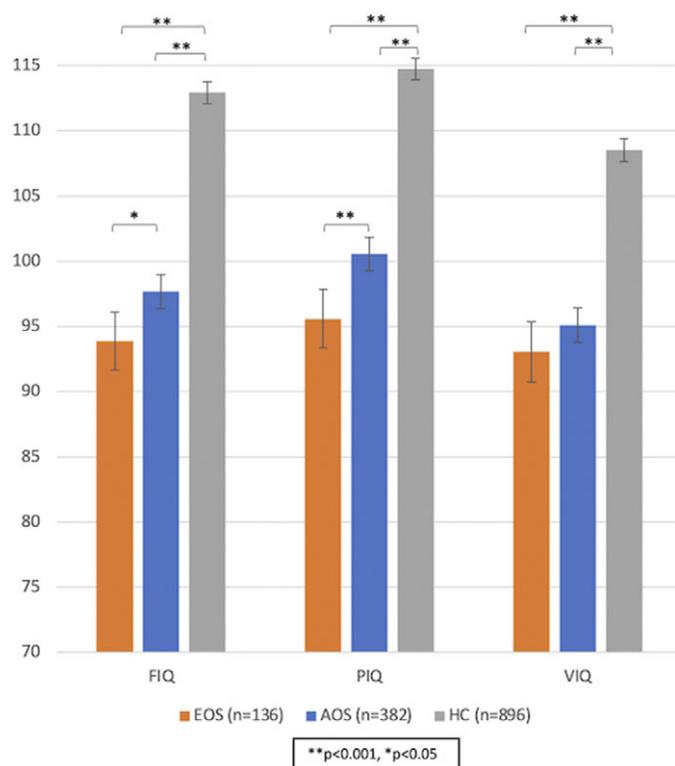
disorder and may reflect underlying neurodevelopmental disturbances. Some but not all previous studies show that the magnitude of cognitive deficits, including intelligence quotient (IQ), in patients with schizophrenia is dependent on the age of onset.

**Objectives:** We aimed to assess IQ in adult patients with EOS and AOS, and healthy controls. We hypothesized that patients with EOS would show lower IQ than those with AOS, and both patient groups lower IQ than HC.

**Methods:** We included 136 adult patients with EOS (mean age: 24.7 (7.7) years, mean duration of illness: 9.3 (8.5) years, 50% women), 382 patients with AOS (mean age: 32.4 (9.5) years, mean duration of illness: 5.7 (6.6) years, 40.1% women) and 896 adult healthy controls (mean age: 33.2 (9.2) years, 47.1% women). We assessed current IQ with the Wechsler Abbreviated Scale of Intelligence (WASI) which yielded verbal (VIQ), performance (PIQ) and full-scale IQ (FIQ) scores. In a post-hoc analysis, we estimated premorbid IQ using the National Adult Reading Test (NART). We applied analyses of covariance (ANCOVAs) to investigate the putative differences in IQ scores and IQ change between patients with EOS, patients with AOS and healthy controls.

**Results:** In sex-, and age-adjusted models, FIQ and PIQ, but not VIQ, were significantly lower in EOS than in AOS ( $p=0.03$ ,  $p<0.001$  and  $p=0.428$ , respectively) (Image). Patients with EOS had fewer years of education than patients with AOS ( $p<0.001$ ); the PIQ but not the FIQ difference between EOS and AOS remained significant after adjustment for education years ( $p=0.016$  and  $p=0.333$ , respectively). Both patient groups had significantly lower IQ scores than healthy controls (Image). Further, patients with EOS and patients with AOS did not significantly differ in estimated premorbid IQ (109 and 110 units, respectively,  $p=0.092$ ), whereas patients with EOS had a significantly larger estimated IQ decline after the disease onset compared to patients with AOS (12 and 9 units decline, respectively,  $p=0.015$ ).

**Image:**



**Conclusions:** Our findings show that adult patients with EOS have significantly lower PIQ and FIQ scores, and significantly larger IQ decline after the disease onset, but not lower premorbid IQ, compared to patients with AOS. The adolescent onset of psychotic symptoms is linked, as expected, to fewer total years of education, which appears to explain the lower FIQ but only partially the lower PIQ in EOS, which may thereby be linked to the disorder per se.

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## EPP0762

### The effect of wearable technology on psychomotor agitation in patients with diagnostic patients with schizophrenia expansion and psychosis

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**Introduction:** Due to the exacerbation of psychotic processes in acute psychiatric services, patients may exhibit risky behaviors for themselves and others. Especially, psycho-motor agitation seen in schizophrenia may result in some harmful behaviors towards him/her self or other individuals in patient. Physical restraint, or chemical restraint with psychotropic drugs can be used for ensuring the safety of the patient with a tendency toward violent behavior and to prevent harm to himself and others. These restraint methods are usually applied when they showed aggressive or violent behaviors, that is after the observed warning signs or real violent behaviors. There is no system that can evaluate and notice agitation or tendency of violence before the obvious behaviors. By using a wearable sensor system to be able to measure some biological change and to evaluate of the sensors' ability to obtain quantitative and objective data may help the health professionals to prevent the damage in advance.

**Objectives:** The aim of this pilot study was to evaluate the changes in measurements of the four wearable sensors which applied to persons with schizophrenia.

**Methods:** Ten patients who restrained in the observation room, selected for this pilot study. On the first day (13:00), which meets the criteria for inclusion in the study and the end of the insulation process (the COVID test result is negative), the first measurement was before the noon treatment. The patients' second measurements were taken on the day they switched from parenteral to oral treatment. For measurement, the sensor circuits developed at the Physiological Analysis and Wearable Systems Research Laboratory of Koç University were connected to various parts of the body to collect the non-invasive data detailed below. In addition, including the clinical status of the patient in the experimentation process, and

a positive-negative syndrome scale was also used. The data from the patient was obtained under the supervision of the clinical chief nurse for 10 minutes. Sensors were electrocardiogram (ECG) photoplethysmogram (PPG), seismocardiography (SCG), body temperature.

**Results:** Since some recording errors observed in two patients' records, the data of eight patients were evaluated. Aside from one of the eight patients evaluated, the signal deviation and strength of other patients' data increased in general. This result imply that signal deviations and strengths may be reduced during the psychomotor agitation. These deviations may suggest that this sensor system is capable to evaluate some biological changes in patients.

**Conclusions:** Considering the results of the pilot study, it is planned to carry out future studies with a larger sample size and longer records. With these studies, it is thought that psychomotor agitation in patients can be determined in an objective and measurable way without risk.

**Disclosure of Interest:** None Declared

## Schizophrenia and other psychotic disorders 08

### EPP0763

#### Peripersonal space plasticity, Self-disorders and intersubjectivity in patients with early-onset and adult-onset schizophrenia

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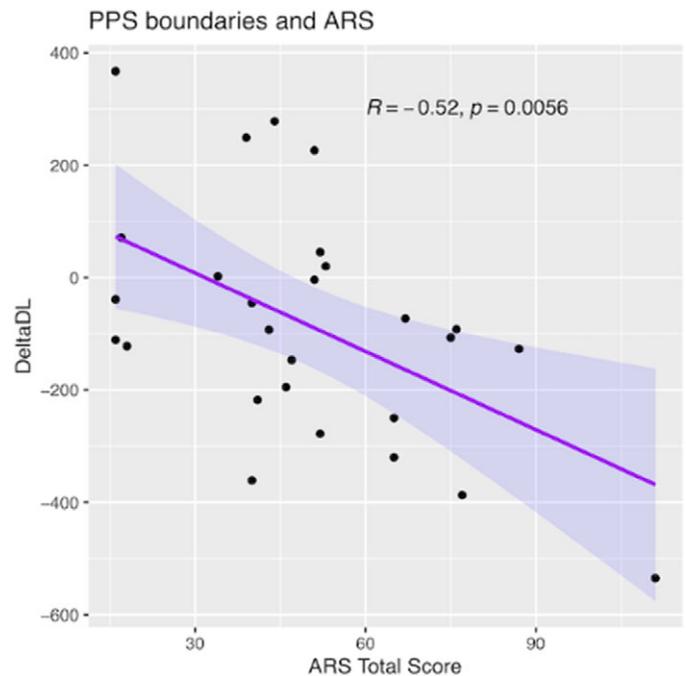
**Introduction:** In schizophrenia, there is evidence for anomalies in the extension and plasticity of the peripersonal space (PPS), the portion of space surrounding our body, plastically shaped through motor experiences. An impaired multisensory integration at the PPS level would underpin the disembodiment, a core feature of the disorder linked to subjective perturbations of the sense of self ("Self-disorders") and of the intersubjective dimension ("schizophrenic autism").

**Objectives:** The present study was aimed at: 1) exploring possible associations between PPS data, psychopathological dimensions, and subjective experiences in schizophrenia; 2) identifying a specific PPS profile in patients with early-onset schizophrenia.

**Methods:** A motor training with a tool was used to assess the PPS size and boundaries demarcation in twenty-seven schizophrenia outpatients. Moreover, they underwent a thorough psychopathological evaluation with the Positive And Negative Syndrome Scale (PANSS), the Examination of Anomalous Self Experience scale (EASE) and the Autism Rating Scale (ARS). Subsequently, the sample was divided into early (EOS) and adult-onset (AOS) subgroups, that were compared with respect to their PPS and psychopathological profiles.

**Results:** PPS features (size and boundaries demarcation) were associated with PANSS negative score, subjective experiences of existential reorientation (EASE Domain 5 scores) and traits of schizophrenic autism (ARS scores; Fig. 1). PPS parameters (Fig. 2) and ARS scores, but not PANSS and EASE differentiated between early and adult-onset subgroups.

**Image:**



**Image 2:**

