## **Abstract**

**Background:** While laboratory studies showed that patients with bipolar disorder exhibit more positive emotions than healthy controls and patients with schizophrenia have a normal capacity to experience pleasure in social engagements, they do not display the same emotional pattern in the flow of real life. The current study aimed to evaluate the amount of real-life social engagement, as well as its relationship with moment-to-moment negative emotions, in patients with these two disorders.

**Methods:** A total of 147 participants were recruited to complete experience sampling (ESM) ratings of social engagement and emotions. ANOVA was performed on social engagement and emotions to examine any between-group differences. Analyses were also conducted on the moment-to-moment and day-to-day relationships between social engagement and emotions using multilevel regression modeling.

**Results:** Patients with schizophrenia had significantly fewer social engagements, lower positive emotions, and stronger negative emotions than healthy controls. They also felt low during social engagements but satisfied on the same day. Patients with bipolar disorder had lower positive emotions than healthy controls. With social engagements, they showed more positive emotions on the same day and at the moment but had a delayed sense of irritability in the next moment.

Conclusion: The paradoxical effect of social engagement on the emotions in schizophrenia is an indication of patients' desire to socialize but the lack of social skills to handle social situations.

The wide variety of positive emotions but the delayed irritability displayed in bipolar disorder during social engagement is an expression of patients' maladaptive emotion regulation and implicit low self-esteem.