

P03-104

## LINGUISTIC PRODUCTION AND COMPREHENSION DEFICITS IN SCHIZOPHRENIA AND BIPOLAR DISORDER

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**Introduction:** Although language deficits have often been reported in schizophrenia, the specific relevance of single linguistic levels of processing is still under debate. Moreover, little is known about language disturbances in bipolar disorder.

**Objectives:** The aims of this study were to:

- 1) investigate micro-linguistic (lexicon, morphology, syntax) and macro-linguistic (discourse coherence, pragmatics) dimensions of speech production and
- 2) evaluate syntactic comprehension skills in both schizophrenia and, for the first time, bipolar disorder.

**Methods:** A story telling task and a computer-based test of syntactic comprehension were administered to 30 Italian speaking DSM-IV patients suffering from schizophrenia, 30 participants with bipolar disorder and 30 healthy controls, comparable for age and educational level ( $p > 0.05$ ). Analysis of variance with post-hoc correction was performed to compare linguistic performance between groups.

**Results:** In comparison to healthy participants, patients with schizophrenia had significantly impaired productivity, syntactic complexity and local/global discourse coherence and bipolar disorder subjects showed deficits in mean length of utterance ( $p < 0.05$ ). Also, both groups of patients collected more grammatical errors than controls ( $p < 0.05$ ), but they differed in regard to the grammatical type of construction they missed (passive-affirmative and active-negative, respectively).

**Conclusions:** Our results showed the presence of both micro and macro-linguistic deficits in linguistic production in schizophrenia, but not in bipolar disorder, suggesting that these abnormalities are specific for schizophrenia. On the contrary, syntactic construction comprehension was altered in both schizophrenia and bipolar disorder, potentially representing the target of innovative rehabilitation strategies.