

Poster #166**COMPARISON OF SEMANTIC MEMORY FUNCTION IN SCHIZOPHRENIA AND TWO ANALOGUES: SCHIZOTYPY AND KETAMINE**Erica Neill¹, Susan L. Rossell^{1,2}¹Monash University, Melbourne, VIC, Australia; ²Swinburne University, Melbourne, VIC, Australia

Background: Background: This study investigated semantic memory function in psychosis by comparing two analogue groups, ketamine and schizotypy, to a schizophrenia group. The purpose was to determine (1) whether these analogue groups are associated with semantic dysfunction and (2) whether the patterns produced by each of the analogues is similar to that reported in schizophrenia.

Methods: Methods: Semantic memory was examined both explicitly and implicitly using both direct and indirect stimulus pairs designed to evoke semantic priming. Four semantic tasks were administered: implicit/direct, implicit/indirect, explicit/direct and explicit/indirect. The related pairs in the direct task included association or category pairs (e.g. TIGER-STRIPES) the related condition in the indirect tasks included pairs related via a third concept (LION-STRIPES linked by TIGER). The implicit tasks were in a traditional semantic priming format where participants were given a distracter task and not explicitly told that some of the pairs were semantically related. The explicit tasks were designed so participants had more time to assess the pairs and they were explicitly told that they needed to classify pairs as related or unrelated based on their semantic relationship. Four groups were recruited: patients with schizophrenia, healthy controls administered an acute dose of ketamine, healthy controls scoring highly on a schizotypy questionnaire and healthy controls.

Results: Results: In terms of the implicit tasks, there were no significant group differences. Examination of performance on the explicit tasks showed that schizophrenia was associated with significantly more priming on the explicit indirect task ($M=403.23\pm 298.20$) than the Ketamine ($M=214.45\pm 247.69$), high schizotypy ($M=125.62\pm 199.15$) or control groups ($M=228.94\pm 195.34$). This reflected a need for more time to correctly classify unrelated pairs. Differences on the explicit direct task were characterized by a greater priming in the schizophrenia ($M=212.47\pm 237.18$) and Ketamine group ($M=268.79\pm 292.20$) compared to the control group ($M=123.07\pm 244.22$, $p=0.04$). Once again, this increase in priming reflected slowed performance in correctly classifying unrelated material. This pattern suggests that schizophrenia was associated with greater benefit from instruction and the presence of a relationship between pairs (an access deficit). Additionally, the Ketamine group demonstrated a similar deficit on the direct explicit task which was actually the more difficult than the indirect explicit task. This difficulty arose because in this task, related pairs include examples of fruit (APPLE-BANANA) and unrelated pairs included other food pairs deemed unrelated (ORANGE-TUNA) which introduced an extra difficulty in deciding at what level they were related, a difficulty that did not exist in the indirect task.

Discussion: Discussion: This pattern of results suggests an access difficulty in schizophrenia generally and a more subtle access difficulty in the Ketamine group that presents itself only on more difficult tasks. This suggests that Ketamine can induce semantic access deficits similar, albeit less severe, than those seen in schizophrenia. These findings also support the notion of an access difficulty in schizophrenia which can be reduced with the introduction of explicit instruction. These results have direct implications for cognitive remediation of semantic memory difficulties in schizophrenia.

Poster #167**DIFFERENCE IN SEXUAL DYSFUNCTION AMONG SCHIZOPHRENIC MALE PATIENTS ON COMMUNUTED THERAPY**Vladica Lj. Sibinovic¹, Violeta M. Slavkovic¹, Suzana M. Tosic-Golubovic^{1,2}, Goran R. Selimovic¹¹Psychiatry Clinic, CC Nis, Nis, Serbia, Serbia; ²Faculty of Medicine, University of Nis, Department of Psychiatry, Nis, Serbia, Serbia

Background: Aim of the study was to investigate improvement among schizophrenic male patients who are no responsive or only partially responsive to clozapine alone after augmentation on clozapine with valproate or risperidone.

Methods: Study group consisted of 39 male, aged 19 to 52 years inpatients and outpatients diagnosed with schizophrenia (DSM-IV criteria) and who have had fall to respond to two separate trials of antipsychotics before received a single clozapine for at least 6 weeks and with total score of at least 45 on the BPRS. Because no responsive or only partially responsive to clozapine, patients were treated with comminuted therapy clozapine and valproate (20 patients) or risperidone (19 patients). The Brief Psychiatric Rating Scale (BPRS), among others: CGI, SANS, ASEX, subscale on sexual function of the UKU Side Effects Rating Scale, were administered in at two-week intervals for 8 weeks. Study exclusion criteria: somatic conditions, Depressive/subdepressive symptoms, substance abuse; patients did not take medications to improve erectile dysfunction or other medications unless prescribed antipsychotic.

Results: Mean BPRS total and positive symptom subscale scores decreased significantly from baseline to week 4 and week 8 in BPRS total score on to baseline, as were reductions in SANS scores in both group. We find the highest ASEX score as a sign of presents of marked sexual dysfunction among patients with schizophrenia under therapy of clozapine. After 2 weeks on comminuted therapy clozapine and valproate, ASEX scores was decreased ($p=0, 01$). After 4 weeks on comminuted therapy clozapine and risperidone, ASEX scores was decreased ($p<0,05$) and after 8 weeks it was lower ($p=0, 01$). In patients under clozapine therapy, orgasmic, ejaculatory and erectile dysfunction is more common compared with comminuted therapy clozapine and valproate or clozapine and risperidone after 4 weeks ($p<0, 05$). Patients on comminuted therapy recorded increased in sexual desire compare to earlier results ($p<0, 05$) in both group.

Discussion: In patients with a suboptimal response to clozapine, the addition of valproate or risperidone improved overall and positive symptoms of schizophrenia and may provide additional benefit in sexual dysfunction.

Poster #168**ADDITIVE INTERACTION BETWEEN LIFETIME CANNABIS USE AND CHILDHOOD TRAUMA IN INCREASING THE RISK FOR PSYCHOSIS. A REPLICATION ANALYSIS ON A SAMPLE OF FIRST EPISODE OF PSYCHOSIS PATIENTS**Lucia Sideli¹, Marta Di Forti², Daniele La Barbera¹, Caterina La Cascia¹, Alice Mulè¹, Robin M. Murray²¹Dept. of Experimental Biomedicine and Clinical Neuroscience, University of Palermo, Palermo, Italy; ²Dept. of Psychosis Studies, Institute of Psychiatry, King's College London, London, United Kingdom

Background: Additive interaction between childhood trauma and cannabis use in increasing risk for psychotic disorders has been recently demonstrated in a prospective (Harley et al., 2009) and a cross sectional study (Konigs et al., 2011), although not replicated in another survey (Kuepper et al., 2011). This study aimed to analyse additive interaction between lifetime cannabis and severe child abuse in increasing the risk for psychosis in a sample of first episode psychosis patients and geographically matched controls. In addition, analyses were re-run separately for males and females in order to investigate whether the association was moderated by gender.

Methods: The sample consisted of 231 patients with psychosis at their first admission to the South London and Maudsley Mental Health NHS Foundation Trust, and 214 controls. Severe childhood trauma was assessed using the Childhood Experience of Care and Abuse Questionnaire (Bifulco et al., 2005) and it was defined as history of any physical abuse involving injuries or any sexual abuse involving intercourse which occurred before age of 17 years. Lifetime cannabis use was assessed using the Cannabis Experience Questionnaire modified version (Di Forti et al., 2010).

Results: Controlling for ethnicity, level of education, and psychiatric family history, both childhood abuse (Adj OR1.87, 95%CI 1.08-3.21) and lifetime cannabis use (Adj OR 1.89, 95%CI 1.18-3.00) were associated with an increased risk for psychosis. Moreover, the joint effect of early trauma and cannabis use (Adj OR 3.82, 95%CI 1.79-8.14) was higher than the effect of either variable alone, suggesting an additive interaction between them. Although cannabis \times trauma interaction was observed both in males and females, the effect appeared stronger in the latter group.

Discussion: Our findings support the previous literature about an additive interaction between childhood trauma and cannabis use in increasing risk for psychosis.