Posters

Anxiety and personality structure among Malay students

Y Asgari[1], SM Noah[2]

[1]Deakin University, Melbourne, Australia; and [2]University Putra Malaysia, Malaysia

The purpose of this study was to investigate the relationship between personality traits and anxiety among Malay students. As culture and personality are related, the effect of culture in relation to anxiety and personality traits was also considered. Eysenck Personality Questionnaire (1983) was used to assess personality traits and State-Trait Anxiety Inventory (form Y) (1983) was used to assess anxiety trait and state. A total of 263 undergraduate students (120 women and 143 men) at University Putra Malaysia were administered Malay version of the State-Trait Anxiety Inventory and the Eysenck Personality Questionnaire. Two separate multiple regression analyses were used to explore the relationship between personality traits and test anxiety. The study results suggested that personality traits neuroticism and, to a lesser extent, extraversion were instrumental in explaining the variance in test anxiety. The most consistent finding was the relationship between neuroticism and test anxiety, suggesting that students with higher levels of this personality trait are more vulnerable to anxiety.

Investigation of the Repeatable Battery for the Assessment of Neuropsychological Status scores in an Australian community sample of brain donors with schizophrenia

L Azizi[1], C Harper[2], T Garrick[1,2]

[1]Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD); and
[2]Discipline of Pathology, The University of Sydney, Australia

Aim: The following study investigated cognitive functioning, using the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS), in a community-based sample of people with schizophrenia, who are prepared to donate their brain to medical research. Index and total scale scores were examined for prototypical patterns of cognitive dysfunction.
Background: Existing neuropsychological research shows pervasive cognitive deficits in schizophrenia

(Fioravanti et al. Neuropsychology Review 2005; 15:73–95), but there is limited research in Australian community samples that investigates performance on the RBANS: a concise cognitive battery comprising immediate and delayed memory, visuospatial ability, attention and language domains.
Methods: Forty participants with a history of schizophrenia from the Neuroscience Institute of Schizophrenia and Allied Disorders 'Gift of Hope' Brain Donor Program were included in the study. The RBANS was completed as part of the initial enrollment process into the program. Scores were compared with normative data from the RBANS manual for people with schizophrenia and healthy controls.
Results: Preliminary results indicated that group performance across the various cognitive domains was better in the current sample, than in the schizophrenia sample represented in the RBANS manual. Analysis showed higher scores in areas of memory and attention. In fact, all index scores appeared within normal limits for this community sample, compared with the established RBANS normative reference group.
Conclusions: Cognitive performance on the RBANS may not indicate significant impairment in this community sample of people with schizophrenia. Further analyses will be conducted, comparing performance with an Australian sample without mental illness, matched for age and education.

Elucidating semantic disorganization from word comprehension: do patients with schizophrenia and bipolar disorder show differential processing of nouns, verbs and adjectives?

R Batty, S Rossell

Mental Health Research Institute (MHRI), Melbourne, Australia

Background: One of the primary cognitive abnormalities in schizophrenia is a semantic memory deficit, which is predicted to underpin disturbances in language processing. Similarly, memory deficits have been acknowledged as a consequence of mood extremes, such as in depression and bipolar disorder. The precise impact of semantic memory deficits on word comprehension, particularly in terms of processing across grammatical categories, has not been adequately investigated. Furthermore, previous semantic assessments have predominantly been designed in a way that most healthy controls perform at ceiling, questioning the accuracy of observed differences between patient and control groups.

Methods: A new word definition task was designed to overcome the ceiling effect. It was developed for elucidating semantic disorganization in word comprehension across grammatical categories (ie nouns, verbs and adjectives) and administered to 32 patients with schizophrenia, 28 patients with bipolar disorder and 32 matched healthy controls.

Results: A $3 \times 2 \times 3 \times 2$ repeated-measures ANOVA indicated that while both patient groups illustrated semantic processing deficits when compared with healthy controls, word comprehension across grammatical categories was comparable despite diagnosis, as was the influence of word frequency. All subject groups were better at defining adjectives compared with nouns and verbs, and comprehension increased for high-frequency words.

Conclusions: Despite the semantic processing deficits illustrated by both patient groups, processing of grammatical categories was not differentiated by the presence of psychosis. Additional research into the role of encoding, word organization, and specific basis for variation in the processing of adjectives warrants further research.

The response to sulpiride in major depression before and after cognitive behavioural therapy: D2 receptor function

CJ Bell, S Bhikka, R Porter, C Frampton, J Carter, PR Joyce

Department of Psychological Medicine, Christchurch School of Medicine and Health Sciences, Christchurch, New Zealand

Background: Previous studies of D2 receptor function in depressed patients have shown mixed results, with some (but not all) reporting increased sensitivity/upregulation of D2 receptors in untreated depression, while others report that effective treatment results in increased sensitivity/upregulation.

Methods: D2 receptor function was assessed in 24 patients with major depression before and 16 patients after 16 weeks of treatment with cognitive behavioural therapy (CBT) using a challenge with a selective D2 antagonist, sulpiride. Four hundred milligrams of sulpiride was administered orally on two test days and response measured in two different dopaminergic pathways: the change in prolactin secretion (tuberoinfundibular pathway) and changes in self-rating scale measures of mood (VAS, POMS), anxiety (STAI) and pleasure (SHPS) (mesocorticolimbic pathway).

Results: There was no significant difference in the prolactin response to sulpiride before and after treatment ($z = -1.4$, $P = 0.156$). On both test days, sulpiride led to an improvement in mood (VAS and POMS scales). After CBT, this effect was significantly reduced as measured by the POMS scale ($t = -2.3$, $P = 0.038$) but unchanged on the VAS scale. Although patients exhibited significant clinical improvement after treatment (as measured by percentage improvement in HDRS score), there was no correlation between response to CBT and changes in response to sulpiride in either pathway.

Conclusions: No change in tuberoinfundibular D2 receptor function was detected following CBT. A change in mesocorticolimbic D2 receptor function was detected; however, no relationship between changes in D2 receptor sensitivity and clinical response to CBT was evident in this group of depressed patients.

The Clinical Global Impressions Scale Modified for Substance Use (CGI-SU) in patients with bipolar disorder

M Bernardo[1], M Berk[1], S Dodd[1], K Lu[2], O Dean[1], I Schapkaitz[2], S Jeavons[2]

[1]The University of Melbourne, Melbourne, Australia; and [2]Mental Health Research Institute, Melbourne, Australia

Background: Bipolar disorder is a chronic illness that is commonly associated with comorbid substance use. The development of the Clinical Global Impressions Scale Modified for Substance Use (CGI-SU) was to produce a simple, quick and easy-to-administer assessment tool. It was used in a randomized placebo-controlled trial of N-acetylcysteine (NAC) in bipolar disorder. It was hypothesized that NAC would improve the outcomes in bipolar disorder and ultimately in comorbid substance use.

Methods: The study focused on the CGI-SU, which is a newly developed assessment tool based on the original CGI for improvements. The new scale is intended for use in routine clinical practice to monitor improvements in a patient's comorbid substance use. It was administered to participants ($n = 75$) in the NAC in bipolar disorder trial. The CGI-SU scale investigates changes in six items, including ethanol, caffeine, nicotine, delta-9-tetrahydrocannabinol and two additional items depending on the participants' use of substances.

Results: About 78.7% were using ethanol, 92% caffeine, 45.3% nicotine and 7.9% delta-9-tetrahydrocannabinol. These participants' use of substances permitted us to monitor the improvements of their substance use over the trial period.

Conclusions: The simplicity and brevity of the CGI-SU make it a valuable outcome measure. It enables the monitoring of the improvements or lack of improvements made by patients with bipolar disorder and