

IN THIS ISSUE

This issue contains two review articles, sets of papers examining various aspects of schizophrenia, dementia and cognitive impairment and eating disorders, and individual articles examining verbal intelligence and therapy outcomes.

Schizophrenia

In one of the two reviews in this issue, Potvin *et al.* (pp. 431–440) complete a meta-analysis of the literature on the negative symptoms of schizophrenia in dually diagnosed patients – that is patients with both schizophrenia and drug abuse. They find that schizophrenic patients with a substance-use disorder experience fewer negative symptoms than those who are abstinent. These results are consistent with two possible conclusions: either substance use reduces negative symptoms in schizophrenia or schizophrenics with few negative symptoms are more prone to substance abuse.

Five articles in this issue examine different aspects of schizophrenia. In the first of these, Waters *et al.* (pp. 455–464) show that faulty inhibitory mechanisms of selective attention for negative information are not a typical feature of schizophrenia. Instead, they appear to relate to depressed mood. They conclude that we need to further study the exact nature of affective dysfunction in schizophrenia and the cognitive processes involved therein.

In the second article, Johns and colleagues (pp. 465–474) evaluated a cognitive model that auditory hallucinations arise through defects in self-monitoring where ‘inner speech’ is perceived as coming from outside the individual. They found evidence for difficulty with source monitoring in hallucinating patients but noted that it was a state phenomenon (related to current hallucinations) rather than trait-like, since it was not seen in patients with only a history of hallucinations.

The third article by Stirling *et al.* (pp. 475–484) discusses the origins of formal thought disorder in schizophrenia. Their study suggests that the origins of thought disorder are more closely linked to deficits in executive functioning and semantic processing than to impairments in other language functions or general cognition.

In the fourth of these papers, Harris *et al.* (pp. 485–494) complete a longitudinal study of antisaccades in antipsychotic-naïve first-episode schizophrenics. They found that deficits in the voluntary control of spatial attention are exaggerated during acute episodes of illness, but remain an enduring aspect of prefrontal dysfunction in schizophrenia even after treatment. Interestingly, improvement in task performance in their study lagged behind symptom reduction.

In the final study of this grouping, Bellgrove *et al.* (pp. 495–505) examine response inhibition in adolescents with early onset of schizophrenia and matched controls using a stop-signal task. Their results indicate a specific lateralized impairment of response inhibition in patients with undifferentiated early-onset schizophrenia. This defect was not seen in those early-onset patients with paranoid schizophrenia.

Dementia and cognitive impairment

In this issue’s second review, Valenzuela & Sachdev (pp. 441–454) perform a systematic review specifically aiming to quantitatively examine the evidence for the effect of brain reserve on incident dementia. Their review of cohort studies finds that higher brain reserve – as indexed by variables such as education, occupation, premorbid IQ and degree of mental activity – was associated with a substantially lowered risk for incident dementia. They suggest that randomized controlled trials based on these principles are now needed.

In Alladi *et al.*’s paper (pp. 507–515), the authors explore the applicability of the research criteria for mild cognitive impairment. Studying subjects from a memory clinic, they examined the nature

of the cognitive function in mild cognitive impairment. They found that the definition of mild cognitive impairment varies considerably and is dependent upon the tests used for case definition.

Eating disorders

Three articles in this issue examine various aspects of eating disorders. Fowler *et al.* (pp. 517–527) examine impairments of neurocognitive performance in female in-patients with anorexia nervosa. Their findings suggest subtle impairments in neurocognition in virtually all cases of anorexia nervosa with a substantial minority having more severe impairment in at least one major area.

Holliday and colleagues (pp. 529–538) set out to examine the nature and utility of personality-based groupings for women with anorexia nervosa. Specifically, they examine if these groups are associated with either clinical symptoms or aetiological variables. They identify three personality-based clusters defined by broad, avoidant, and compulsive types of personality pathology and these are similar to those previously identified in prior eating-disordered samples. These clusters did not correspond overall to clinical symptoms but their validity is supported by other etiologically oriented analyses.

Our third paper on eating disorders, by Klump *et al.* (pp. 539–546) reports on their preliminary evidence that gonadal hormones organize and activate disordered eating. Their twin study of 113 adult female twins examined these effects by looking at the relationships between eating-disorder symptoms, prenatal testosterone exposure as reflected in finger-length ratios, and adult levels of estrogen. Their results were consistent with the hypothesis that lower levels of prenatal testosterone exposure and higher adult levels of estradiol are associated with increased eating-disordered symptoms in women.

Other topics

This issue concludes with papers examining two different topics. Guo *et al.* (pp. 547–554) explore the relationship between striatal dopamine D₂/D₃ receptor availability and verbal intelligence quotient using single photon emission computed tomography. They found a relationship between left striatal D₂/D₃ receptor availability and verbal intelligence, which varies, predominantly in males.

To gain more insight into psychotherapy equivalence paradox (that quite different treatments tend to produce similar outcomes), Stiles and colleagues (pp. 555–566) compared the effects of three contrasting treatment approaches in routine patient care. Their findings were generally consistent with previous findings that theoretically quite divergent approaches tend to have equivalent outcomes.