

Depression Rating Scale (HAMD21), Clinical Global Impressions Scale (CGI-BP), SF-36, SLICE/Life Scale and the EuroQol. Participants were also asked about age at first major affective episode.

Results: Our data support the existence of three subgroups; early (AAO <20, mean = 15.47 ± 2.7) 46.5% of participants, intermediate (AAO 20–35, mean = 25.52 ± 4.4) 43.8% of participants and late (AAO >35, mean = 46.2 ± 10.1) 9.7% of participants. The groups differed significantly in the type of first episode experienced ($\chi^2 = 14.88$, $df = 1$, $P = 0.005$) such that the early subgroup were more likely to experience a depressive first episode, while the intermediate subgroup were more likely to experience a manic first episode. At enrollment, the early subgroup reported more severe depressive symptoms [HAM-D F(1, 153) = 10.20, $P = 0.007$]. When the early subgroup was compared with the typical subgroup (intermediate and late combined), the early subgroup tended to experience more clinically significant distress as a result of depression (CGI-BP; $\chi^2 = 3.73$, $df = 1$, $P = 0.053$), were less satisfied with their overall health (SF-36; $\chi^2 = 9.42$, $df = 4$, $P = 0.051$) and were less able to enjoy recreational activities (SLICE; $\chi^2 = 10.47$, $df = 4$, $P = 0.033$).

Conclusions: Several clinical and functional differences were found between the subgroups based on preliminary data. These differences are important as they can help guide clinical management of this debilitating disorder.

Neuropsychological function in social phobia

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Background: Studies of neuropsychological function in social phobia have focused on attentional processes, memory function, judgment and interpretation biases, but findings have been conflicting. Differences in clinical characteristics or variation in testing paradigms and tasks may account for the inconsistencies. This study aimed to assess several cognitive functions, including verbal declarative memory, working memory, verbal fluency and recognition memory for visuospatial information.

Methods: Thirty adults who met DSM-IV criteria for social phobia and 27 age- and gender-matched healthy controls aged between 18 and 65 years completed neuropsychological testing. Participants were recruited by means of newspaper advertisements. Severity of social phobia was rated using the Liebowitz Social Anxiety Scale. Participants completed a battery of neuropsychological tests including the Rey Auditory

Verbal Learning Test, spatial span, spatial recognition memory, spatial working memory, digit span, and verbal fluency and a verbal memory task comprising nonsense words. The National Adult Reading Test was used to estimate premorbid verbal IQ.

Results: There were no significant group differences on any domain of function, including verbal learning and memory, attention, working memory, verbal fluency, visuospatial functioning or psychomotor speed.

Conclusions: Social phobia was not associated with neuropsychological impairment, but clinical characteristics of the sample may account for this. Patients were high-functioning individuals with mild to moderate social phobia who had not specifically sought help for social phobia.

The multiscale hypothesis of bipolar disorder

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The brain is characterized by the presence of architectural structures – neurons, minicolumns, cortical columns – across a hierarchy of spatial scales. In addition, the activity of the brain is expressed – through action potentials, EEG oscillations, diurnal rhythms – across a multitude of temporal scales. We propose that bipolar disorder arises as a biological disturbance at a very fine spatial and temporal scale, within transmembrane dynamics, which then cascades across scales to be expressed at the slower scales of symptoms, episodes and ultimately the illness across the life span. This proposal is embedded within a hierarchical model of neocortical activity. Innovative data analysis methods, allowing the investigation of EEG and functional magnetic resonance imaging data from such a multiscale perspective, are presented. We hence propose a set of functional neuroscience experiments that would allow this ‘multiscale hypothesis’ of bipolar disorder to be tested.

Referential delusions of communication and self-monitoring deficits in psychosis

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Background: Although delusions of reference are one of the most frequently occurring symptoms of

psychosis, they have been the focus of little research. Only one theory has been advanced to explain them and this theory has not received consistent empirical support. Recent research has suggested there are two different kinds of delusion of reference: delusions of communication and delusions of observation, and only the latter is associated with hallucinations and persecutory ideation. Delusions of communication may derive from difficulties with self-monitoring, whereby what seems to be communicated concerns the self and originates from the self, although the origin is not recognized but attributed externally.

Methods: This theory was tested with people suffering an acute psychotic episode ($n = 63$) using a visual signal detection task. Participants were required to distinguish between video clips of gestures and nongestures under conditions of uncertainty (visual noise).

Results: The previous finding of two kinds of delusions of reference was replicated. A signal detection analysis showed that people with delusions of communication were no less sensitive to gestures than people with psychosis without these delusions but showed a significantly greater bias toward perceiving them. Whether people had auditory hallucinations or not made no difference to their sensitivity or bias.

Conclusions: It is suggested that bias to perceive gestures occurs because people misattribute self-generated events to an external source. However, this bias is not part of a general tendency to externalize one's own thoughts but may be specific to delusions of communication.

Reduced psychoacoustic sensitivity to auditory temporal stimulation in schizophrenia reflects cytoarchitecturally specific changes in auditory cortex

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Aims/Background: The aim of this study was to apply established psychoacoustic and functional magnetic resonance imaging (fMRI) techniques to examine the neuroanatomical basis of auditory temporal processing deficits in schizophrenia. Previously, we showed reduced sensitivity to auditory temporal stimulation using fMRI and psychoacoustic responses to variations in sinusoidally amplitude-modulated noise (SAM). The present study extends these previous findings by examining the extent to which reduced sensitivity to SAM stimulation reflects anatomically specific changes in auditory cortical activity.

Methods: Eighteen individuals meeting diagnostic criteria for schizophrenia and 18 controls participated in separate psychoacoustic and fMRI sessions. Region-of-interest analyses were conducted using cytoarchitecturally defined anatomical probability maps of primary and secondary auditory cortex. Parametric modulation of auditory BOLD responses was performed using each individual's psychoacoustic SAM detection thresholds for bandpass noise stimuli (0–6 kHz) for 7 SAM rates (4, 8, 16, 32, 64, 128 and 256 Hz).

Results: ROI-based analyses showed that BOLD responses to SAM stimulation were primarily confined to increased activity in transverse temporal gyrus and planum temporal. Analysis of individual sensitivity to SAM rate showed that BOLD responses in anterior-lateral auditory regions showed a significant quadratic function of SAM thresholds. Further, reduced BOLD activity in schizophrenia was evidenced as reduced auditory responses in the same anterior-lateral regions.

Conclusions: The results suggest that reductions in sensitivity to auditory temporal stimulation in schizophrenia may reflect changes in cytoarchitecturally distinct regions of primary auditory cortex (te1.2). These findings are discussed in terms of the possible neural mechanisms underlying auditory temporal processing deficits in schizophrenia.

Mental health problems within couples and marital disruption

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Background: There is growing attention to the social consequences of psychiatric disorders, including the extent to which psychiatric disorders are associated with subsequent divorce and relationship dissolution. The previous research has largely studied individuals and given only limited consideration to the broader context of marriage and the potential interplay between spouses' mental health. The current paper studies couples and examines the association between both spouses' mental health problems and subsequent marital dissolution.

Methods: Prospective analysis of secondary data from a longitudinal national household survey. About 3230 couples were followed over 36 months, with logistic and multilevel regression models used to determine whether mental health problems of spouses at wave 1 (assessed by the mental health scale of SF-36) predicted subsequent marital dissolution.

Results: Couples in which either men or women reported mental health problems had higher rates of marital disruption than couples in which neither spouse