

Neuropsychological Bases of Reality Monitoring Deficits in Patients with Schizophrenia.

Results:

Several tests of frontal lobes functions were administered: Wisconsin Card Sorting Test, Tower of London, visual working memory task, and verbal fluency. Other tests assumed to rely on temporal lobe function were administered as well: verbal paired-associates and visual recognition.

The measure of verbal reality-monitoring deficit was strongly associated with hallucinations. It was also correlated with measures of frontal deficit (wisconsin perseverative errors: $r = .32$, $p < .08$; perseverative errors in visual search: $.37$, $p < .05$; planning errors in the Tower of London: $r = .42$, $p < .025$). By contrast, the measure of verbal memory efficiency that did not involve any reality-monitoring function was not correlated with any of these frontal measures, which shows the specificity of the association with reality-monitoring deficit, rather than memory deficit. The measure of verbal reality-monitoring deficit was also associated with one measure of temporal lobe deficit (visual recognition: $-.43$, $p < .025$).

The measure of visual reality-monitoring deficit was associated with visual hallucinations. It was not correlated at all with any frontal measure. However, it was correlated with one measure of temporal lobe deficit (visual recognition: $r = -.39$, $p < .05$). By contrast, the measure of visual memory efficiency that did not involve any reality-monitoring function was not correlated with this temporal lobe measure. This suggests that it is actually the confusion between reality and imagination that is involved in this association with temporal dysfunction, rather than a mere deficit in visual memory.

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