

Attention deficits in schizophrenia

[Health & Medicine](#)



**ASSIGN
BUSTER**

They were instructed to perform a computer-based Stroop task in which they have to tell the color of the letters of different words while their brain activity was scanned by positron emission tomography. During the experiment answers of the participants and time taken to answers were recorded to the nearest millisecond. Three types of words randomly displayed on the computer screen. 1. Color-matched words (eg. " red" in red color), 2. Color un-matched words (eg. " red" in blue color) and neutral words (eg. " car" in blue color).

There was no significant difference between the schizophrenic and healthy groups in the time taken to answer. However, the error rate was significantly higher in schizophrenic patients than that of the healthy group (11. 1% Vs 1. 9%, $p < 0. 01$). Schizophrenic patients read the word irrespective of its color when color-unmatched words were displayed. Further, brain scans confirmed significantly lower anterior cingulate gyrus region brain activity in schizophrenic patients. The findings of this research supported the investigator's hypothesis, that schizophrenia patients fail to activate the anterior cingulate gyrus during selective attention performance.

Lab # 9

Article 1:

Tucker, L. A., and Kano, M. J. (1992). Dietary fat and body fat: a multivariate study of 205 adult females. *American Journal of Clinical Nutrition*, 56: 616-22.

Did the article imply causation? Yes

Summary:

Obesity increases the risk of mortality and morbidity chronic diseases such as diabetes and stroke. Although excess energy intake directly contributed
<https://assignbuster.com/attention-deficits-in-schizophrenia/>

to obesity some animal experiments have shown a relationship with diet composition. This cross-sectional study was carried out to find out the relationship between dietary fat intake and obesity.

For this study, 205 females were recruited and their food consumption details were obtained using a diet questionnaire. Dietary fat intake was estimated using a software program. Their body fat percentage was evaluated by skinfold-thickness measurements. The statistical analysis showed a significant positive correlation with dietary fat intake and body fat after adjusting to other compounding factors.

Article 2:

Lim, K. O., Ardekani, B. A., Nierenberg, J. M. D., Butler, P. D., Javitt, D. C., and Hoptman, M. J. (2006). Voxelwise Correlational Analyses of White Matter Integrity in Multiple Cognitive Domains in Schizophrenia. *American Journal of Psychiatry*, 163: 2008-2010.

Did the article imply causation? Yes

Summary:

Schizophrenia patients have impairments in cognitive functions. Some studies found a reduction in the white matter of the brain in schizophrenia patients. However, the correlation between white matter and impaired cognitive functions in schizophrenia patients was not clearly understood. Therefore this study was conducted to find out the possible correlation between the above variables.

Twenty-five (25) confirmed Schizophrenic patients were recruited from a psychiatric center. Their verbal declarative memory, attention, and executive function were measured using 3 neuropsychological tests. The amount of the white matter of the individuals was mapped by a magnetic brain scan.

<https://assignbuster.com/attention-deficits-in-schizophrenia/>

Voxelwise correlational analysis was performed and a significant positive correlation was found between the white matter and cognitive function scores supporting the hypothesis.