tired man with 18 years of education. Thirty-nine days before his death, the subject received an extensive battery of cognitive tests and completed questionnaires evaluating his mood, his activity level, and his own impressions of his memory functioning. Daily functioning was assessed retrospectively 2 months after his death by interviewing the subject’s spouse. The subject died of a heart attack at age 81. His medical history was significant for a previous heart attack 8 years before and manic depression, which was managed with Paxil and Lithium.

Upon autopsy, thioflavin-S stains revealed both diffuse and neuritic plaques in the frontal, temporal, and parietal lobes and in the hippocampus, in densities great enough to meet criteria for Alzheimer’s disease according to the NIA and the CERAD. Sparse neurofibrillary tangles were identified (Braak stage I), specifically in the hippocampus and entorhinal cortex. On neuropsychological testing, the subject performed at or above the norm for his age and education on nearly every measure. Global mental status measures were in the normal range (Dementia Rating Scale = 143/144; MMSE = 30). Notably, only performance on clock drawing at command was greater than one SD below normal. Assessment with questionnaires revealed normal mood (Geriatric Depression Scale = 2), above average activity level, and mild concern about memory decline. No difficulty with daily tasks was reported by his spouse, and he continued to participate in challenging cognitive activities, such as playing bridge and organizing political meetings, up until his death.

Because this subject did not exhibit evidence of cognitive impairment or functional decline in spite of neuropathologic changes consistent with AD, he may have been in a preclinical stage of AD. However, dense neocortical plaques in the absence of impairment have been identified in many studies, particularly in individuals over 80, raising the possibility that the deposition of plaques is a consequence of progressing age rather than a specific disease process. In the present case, extensive clinical data was collected shortly before the subject’s death, further emphasizing a lack of relationship between neocortical plaques and functional capacity.

**GERIATRIC NEUROPSYCHOLOGY II**

**McBride, T., Moberg, P. J., Mahr, R., Arnold, S. E., & Gur, R. E.**

*Neuropsychological Functioning in Elderly Patients with Schizophrenia and Alzheimer’s Disease.*

Cognitive functioning was compared in elderly patients with schizophrenia, elderly patients with probable Alzheimer’s disease (AD), and matched normal controls using a brief neuropsychological battery. Both schizophrenia and AD patients demonstrated marked impairment as compared to controls, with the profile of neuropsychological deficits in both disorders appearing remarkably similar. Only word list learning, verbal delayed recall and rate of forgetting (i.e., savings score) significantly differentiated between the two groups, with AD patients showing poorer overall recall and more rapid-forgetting of verbal information over delay. In order to assess the relationship of clinical symptomatology and cognitive performance, a subset of schizophrenia patients were administered the Scale of the Assessment of Negative Symptoms (SANS) and the Scale for the Assessment of Positive Symptoms (SAPS). Animal naming, word list learning, delayed recall and constructional praxis scores showed an inverse relationship with negative symptoms. Affective flattening, alogia, and avolition-apathy subscales of the SANS correlated most strongly with these cognitive variables. Only word list delay scores correlated significantly with positive symptoms. The positive thought disorder subscale of
the SAPS correlated most strongly with word list delay scores. Recent neuropathological studies have indicated abnormalities in specific subfields of the hippocampal formation in schizophrenia that are also severely affected in AD. Though the specific histopathology of the two disorders differs, abnormalities in the common sites may underlie the common neuropsychological profile.

McQuillen, A. D., Donahoe, C. P., & Holliday, S. L.

*Geriatric Screening with Cognistat and the DRS: Two Cases with Similar Profiles and Widely Differing Outcomes.*

The Neurobehavioral Cognitive Status Examination (Cognistat) and Mattis Dementia Rating Scale (DRS) are widely used cognitive screening instruments in geriatric settings. Results from these measures frequently provide the basis for important treatment and life-altering placement recommendations. This case study compares two geriatric rehabilitation patients with nearly identical Cognistat and DRS scores, but with very different levels of functional impairment and care requirements. On MRI, both patients showed evidence of cerebral atrophy and periventricular white matter ischemic changes. On cognitive screening, both patients exhibited mild to moderate deficits in orientation and more severe deficits in memory and visuospatial construction. Yet, one patient was able to be discharged to home with minimal supervision, while the other required residential placement and 24-hour supervision. An examination of qualitative differences in test performance provided important clues to these functional differences. Further, the administration of a clock drawing task provided the most striking contrast in test performance between the two patients. Results of this comparison argue for close attention to process details and inclusion of measures of executive functioning to improve diagnostic accuracy and utility when screening for cognitive impairment.

Moore, S., Sandman, C. A., & Kesslak, J. P.

*Memory Retraining with Patients with Dementia.*

Patients with dementia, such as Alzheimer’s Disease (AD) and Vascular Dementia (VD), can benefit from cognitive rehabilitation. However, strategies to improve memory in dementia may be limited due to difficulty employing visual imagery, a frequently used mnemonic technique. Our approach to improve cognitive function is to promote an increase in interest, effort and arousal for the information to be remembered. In this study we employ a multi-week training program to replicate our previous findings and extend the procedures to include new techniques, such as motor memory, to improve memory.

Names and faces are frequently difficult for demented persons to remember. AD and VD patients, and age-matched controls, were given pictures of group members and discussed personal information such as hobbies, interests, family, etc., to facilitate “deeper processing.” Rote memory and associational material significantly improved recall for names and faces, that was maintained for at least 1 month post training (ANOVA; p < .05). The addition of a novel motor component in the recall, pantomiming personal characteristics or interests also improved recall of names and personal information (p < .05). Increased involvement was examined by having participants view a 30-minute video and generate questions on the program. Recall, measured during sessions 2–5 on free recall and recognition tests, and after priming. Both the controls and demented groups improved, with dementia patients improving more than controls (p < .05). Thus, an increase in effortful processing, with the motor component, and increased involvement and interest can significantly improve memory for names and faces, personal information and episodic memory.