revealed significant inverse relationships between length of coma and VMI ($r = -.566$), Word Selective Reminding ($r = -.540$), Paired Recall ($r = -.455$), and Object Recall ($r = -.717$), while nonsignificant relationships were noted with NMI, CMI, and DMI. A significant positive relationship was noted between estimated GCS and Object Recall ($r = .480$). Overall, the strongest relationships with severity indices were with Object Recall. A multiple regression analysis indicated that twenty-two percent of the variance ($r^2 = .22$) in CMI scores can be explained by age at injury. Time post-injury and length of coma were nonsignificant in predicting CMI scores. The implications of the preceding findings as well as the efficacy of using the TOMAL with clinical populations will be discussed.

**Lam, M. N., Rohling, M. L., Ficek, S., Grimmell, D., & Bresler, S.**  
*The Relationship Between Caregivers Assessments and Neuropsychological Screening.*

The Neurobehavioral Cognitive Status Exam (NCSE; Northern California Behavioral Group, 1988) is a standardized screening instrument that differentially assesses cognitive functioning in five major abilities: language, constructions, memory, calculations, and reasoning (Kiernan et al., 1987). Another tool that assesses the level of cognitive functioning is the Nurses’ Observation Scale for Geriatric Patients (NOSGER; Spiegel et al., 1991). This instrument is intended to be used with psychogeriatric inpatients or outpatients reflecting a caregiver’s judgment of a patient’s current level of functioning. The authors identified six dimensions of behavior on the NOSGER: memory, IADL, ADL, mood, social, and disturbing behavior. Both the NOSGER and NCSE provide valid and reliable information in the overall assessment of geriatric patients; however, whether a caregiver’s opinion is associated with cognitive functioning as assessed by neuropsychological testing is in question. The purpose of the present study was to examine the relationships between the NOSGER and NCSE. To verify the dimensions suggested by the authors of the NOSGER, data from a sample of 287 geriatric inpatients living in a long-term care facility were assessed with the NOSGER. These data were factor analyzed to reveal five factors: positive social interest, neatness, negative social behavior, memory, and negative affect. Correlation analysis between Spiegel et al.’s (1991) factors and the present factors suggest that the initial “face valid” factors of the NOSGER are not as good of a predictor of a patient’s level of functioning. Our five factors were used for further analyses with NCSE scores. Data from a subset of 67 subjects from the original 287 subjects, assessed with the NCSE’s 10 subscale scores, were factor analyzed to reveal four factors: executive functioning, language, spatial skills, and memory. Factor scores were generated for all items and correlated. Caregiver’s opinions of patient’s functioning were not well-associated with results of neuropsychological testing. Our results are presented with caution due to a potential bias introduced by the small sample size used in the factor analysis of the NCSE. However, with ongoing data collection efforts, future analyses may substantiate the current findings. Clinicians should consider the lack of correspondence between neuropsychological test results and subjective assessments of functioning when evaluating the geriatric patient.

**Hampton, C. C., & Souheaver, G. T.**  
*Neuropsychological Deficits Associated With Prolonged Hypoglycemic Coma: A Case Study.*

Hypoglycemia can be a common but unintentional occurrence in the treatment of insulin dependent diabetes (IDDM). Hypoglycemic episodes are accompanied by physical, metabolic, and cognitive consequences. Reversible deficits on cognitive tests have been observed in IDDM patients and healthy control subjects when blood glucose levels approach 2.0 mMol/L. More long-term, disabling cortical deficits have been observed in
approximately 30% of patients who have frequent, severe hypoglycemic episodes. These long-standing cognitive sequelae include deficits in intellectual functioning, psychomotor speed, list learning, reaction time, and mental flexibility. Deficits in social interaction have also been noted. This study is of a 45-year-old college educated female who experienced a hypoglycemic coma lasting 9 days. The patient had a 12-year history of diabetes secondary to pancreatectomy. WAIS-R, WMS-R, and Halstead-Reitan Battery data are presented at 16 months post coma. Neuroimaging exams, EEG results, and blood glucose levels are also presented. Results of neuropsychological testing reflected generalized deficits in attention, learning and memory, intellectual functioning, and sensorimotor functioning. Implications for rehabilitation are discussed.

Lange, G., Johnson, S. K., DeLuca, J., & Ntelson, B. H.

Effects of Fatigue on Neuropsychological Performance in Patients With Fatiguing Illnesses. It is widely believed that fatigue significantly influences neuropsychological test performance. The present study investigated the effect of fatigue upon the repeated administration of the Paced Auditory Serial Addition Task (PASAT), a measure requiring efficient auditory processing skills as well as the ability to sustain attention. In addition to healthy controls (n = 15), subjects were chosen from three groups of patients with fatiguing illnesses: (a) Chronic Fatigue Syndrome (CFS, n = 15), (b) clinically definite Multiple Sclerosis (MS, n = 15), and (c) DSM-III-R diagnosed Major Depressive Disorder (MDD, n = 14). The PASAT was administered four times over a 3-hour testing period. Each PASAT presentation was preceded by a subjective fatigue level rating on a 5-point Likert-type scale and followed by 30 minutes of neuropsychological testing with standardized measures assessing various cognitive functions. It was hypothesized that due to fatigue, performance of subjects with fatiguing illnesses would deteriorate across the four administrations relative to healthy controls. Compared to controls, total PASAT scores were significantly reduced in all three clinical groups across all four PASAT administrations. However, there were no group differences among the three clinical groups. Importantly, despite higher levels of subjective fatigue in the three clinical groups, the degree of improvement on the PASAT did not differ from controls. To assess the effects of high versus low subjective fatigue levels on performance, fatiguing illness groups were split along the median fatigue total score. No significant differences were found in either absolute PASAT performance or in the practice effect across administration based on subjective fatigue. Results of this study suggest that while groups with fatiguing illnesses are impaired on the PASAT, this performance cannot be explained by intra-session fatigue alone.

Lavach, J. F.

Detection of Malingering in College Students Requesting Curricular Modification. Colleges and universities are becoming increasingly sensitive to the academic and curricular modifications requested by students under the provisions of federal legislation dealing with disability. While neuropsychological evaluation contributes in diagnosing strengths and weaknesses as well as assisting the institution to plan an integrated program of counseling, remediation, and curricular adjustment, there exists the potential for what is being viewed as academic malingering. Subjects in this study were 35 undergraduates requesting time extension, course substitution, or other consideration based on previously non-documented learning disability, attention/concentration problems, or concerns regarding memory, headache, fatigue, and depression. Each subject was administered the HRNB, WAIS-R, Stroop Color and Word Test, WMS, and Colorado Malingering Test. Analysis of test data for five subjects revealed a pattern consistent with that observed in subjects involved in civil litigation,