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R. CHAN. Dimensionality of the Chinese Version of the Cognitive Failures Questionnaire.

This study aimed to examine the measurement properties of the Chinese version of Cognitive Failures Questionnaire (CFQ) using the Rasch model analysis. This model allows us to construct linear measures from ordinal scale. In this technique, one first transforms different performance raw response scores to a "logit" metric. Then, each raw performance score is transformed to a linear logit scale of "difficulty" along which different levels of difficulty can be directly compared with one another. A total sample of 262 subjects (102 patients with traumatic brain injury (TBI) and 160 normal controls) were recruited. Equal interval measures of CFQ were developed that exhibited good reliability and validity. The item and subject separation were found to be 3.29 (similar to Cronbach alpha of 0.92) and 5.57 (Cronbach alpha of 0.97). Principal component analysis of correlations among standardized residuals showed that all 25 items cohered to define a single construct of general cognitive failure. A common metric on the individual item scores was also established to discriminate patients from the normal controls. In conclusion, these findings indicate that Rasch Model analysis can offer us an alternate method to determine the measurement properties of the CFQ as well as to set up an efficient profile measure of everyday life cognitive failures to discriminate patients from normal controls.

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A. ISOMURA & A. WISNIEWSKI. Spatial Explicit Memory Performance Among Japanese Americans and European Americans: Gender and Ethnic Differences.

This study investigated gender and ethnic differences in spatial explicit memory performances among Japanese Americans and European Americans. It was hypothesized that (1) males perform better than females on spatial memory tasks and (2) Japanese Americans perform better than European Americans on spatial memory tasks. Thirty Japanese Americans (15 males; 15 females) and thirty European Americans (15 males; 15 females), age 18 to 35 years, were administered the Rey-Osterrieth Complex Figure (ROCFT). Immediate and Long Delayed Recall Trials of the ROCFT were administered. In addition, Japanese American participants were administered the Suinn-Lew Self-Identity Acculturation Scale (SL-ASIA) and information on generation in the United States was collected. The data partially supported that hypothesis that males perform better than females on the ROCFT. More precisely, male participants performed significantly better than female participants on the ROCFT Delayed Recall. However, additional analyses revealed that gender differences on the ROCFT Delayed Recall was significant only for European Americans and not for Japanese Americans. Further, the data supported the hypothesis that Japanese Americans perform better than European Americans on the ROCFT. Additional analyses indicated that ethnic group differences on the delayed recall of the ROCFT was significant only for females but not for males. These findings provide support of the need for separate norms for gender and ethnic groups. Limitations of the study, particularly with respect to generalizability, and future directions are also addressed.

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A. SALEEM, D. KENDALL, L.J.G. ROTH, & L.M. MAHER. The Effects of Written Language Directionality on Thematic Role Assignment.

Purpose: To explain a sentence production deficit in aphasia, language-specific directionality of writing has been proposed to influence thematic role assignment. Testing this hypothesis, we report comparisons of thematic role assignment in English (rightward) vs. Arabic (leftward) writers. *Methods:* Groups (20 each) of monolingual Arabic or English males participated. Stimuli included reversible, unidirectional (action away from agent), picturable action verbs. Subjects were to draw stick figures showing actions of verbs presented. Drawings were scored for relationships between figures performing the unidirectional action. *Results:* The inter-

action between languages and thematic roles in the position of drawn figures was not significant ($p = .07$). Arabic subjects drew agents significantly more to the right ($M = 15.60$ cm, $SD = 4.52$) than where they drew patients ($M = 14.9$ cm, $SD = 4.40$; $p < .001$), and more to the right than where English-speaking subjects drew agents ($M = 13.32$ cm, $SD = 3.28$) or patients ($M = 12.01$ cm, $SD = 3.31$). Furthermore, English-speaking subjects drew agents significantly more ($p < .001$) to the right than they drew patients. *Discussion:* These results do not confirm a written language directionality effect upon thematic role assignment. Additionally, the results of the English speaking group suggests variability in spatial processing of thematic roles that cannot be accounted for by directionality of written language, and suggests the need for further investigation.

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F. CONSTANTINIDOU, M. SARAP, & N. PELTIER. Native Language and Cognitive Performance: A Comparison Between Greek and English Speakers.

Research suggests that the linguistic structure of a given language may influence memory performance. This study compared verbal and non-verbal memory patterns in English and Greek speakers. An English battery and an equivalent battery adapted in Greek were used. Thirty-four native Greek speakers (ages 16–46, $M = 26.53$, $SD = 7.58$) and 47 native English speakers (ages 16–50, $M = 25.62$, $SD = 5.8$) participated. The groups were matched in age, gender, and education. *T*-test analyses ($\alpha = .01$) indicated that English speakers recalled a significantly greater number of digits during the Digits Forward ($p < .0001$) and Backward ($p = .0001$) of the WMS-III. There were no group differences on nonverbal tasks such as the visual span forward and backward of the WMS-III ($p = .154$ and $p = .045$ respectively). There was no difference on the Rey Complex Figure recall ($p = .943$). Greek subjects were significantly slower on Trailmaking A ($p < .0001$) and B ($p < .0001$). A MANOVA compared the subjects on the Rey AVLT versions. There was no significant difference between the two groups on the total number of words learned across the 5 learning trials ($\alpha = .05$, $p = .687$). Learning patterns were similar and the interaction effect was not significant ($p = .260$). The group differences in auditory span tasks and Trailmaking tasks may be due to linguistic differences. Specifically, English numbers (the ones used for the digit span) and letters are typically monosyllabic while all Greek numbers and letters are multisyllabic. Greek speakers may require more processing time, which in turn could affect performance. The monosyllabic advantage was absent on the AVLT due to the task demands on working memory, and because the English and Greek AVLT incorporate bisyllabic words.

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HEMISPHERIC ASYMMETRIES

R. PROPPER, K.A. PHANEUF, M. LAMENDOLA, J. RIVELLI, J. COTTER, A. COREY, & J. PHANEUF. Superior Autobiographical Memory in Mixed- Versus Strong-Handers.

Increased interhemispheric interaction has been associated with superior episodic memory ability on tests of recall and recognition for word lists, as well as for real-world experiences of autobiographical events. There is evidence that the cerebral organization of mixed- and strong-handers differ, with mixed-handers having greater interhemispheric interaction, and therefore increased reliance on episodic memory on standard laboratory tasks. The present research was designed to investigate handedness differences in memory for real-world autobiographical events. *Method:* 23 mixed- and 22 strong-handers [established via the Edinburgh Handedness Inventory (EHI), mixed EHI $\leq +80$ and ≥ -80 ; Strong EHI $\geq +85$] recorded 10 unusual life events, as soon as possible after an event occurred, over the course of 6 days. Unusual events could be insignificant (i.e., stubbing