

Cognitive disability and malingering detection: a forced-choice recognition test for numbers.

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Objective: to investigate the effectiveness of a Forced-Choice Recognition Memory Test for Numbers to detect malingering or exaggeration of cognitive impairments in order to obtain compensation.

Subjects: Malingering was assessed in 2 groups of 50 normal subjects and in 3 groups of subjects with varying diseases: mild head trauma (30), initial Alzheimer's (20) and mild Alzheimer's Disease (20), and Mental Retardation (n 20).

Method: The Forced-choice Recognition Memory Test for Numbers requires subjects to identify which of the two five-digit numbers shown on a card was the same as the number previously seen for a short period. Two sets of 18 trials include delays of 5 and 10 sec, for a total of 36 trials.

Results: Normal subjects who were asked to answer in a random manner performed correctly in 47% of cases, whereas those following the standard procedure were classified at the highest levels. Performance of Alzheimer patients (AD), especially those with initial AD, was equivalent to that of normal subjects. Only a few impairments were found in the group of subjects with mental retardation. Both groups of subjects with varying diseases averaged 90% of correct responses, unlike the group of suspected malingerers TBI, whose correct responses averaged only 25%. Moreover, TBI showed an inconsistency between initial injury severity and the level of neuropsychological test performance.

Conclusions: The findings suggest that financial incentives and inconsistency in performance levels are important risk factors with regard to invalid performance during neuropsychological evaluations of subjects with head trauma. The Forced-Choice Recognition Memory Test for Numbers appears to offer a good support to detect this possible influence. This Test is a very short and quick procedure that doesn't require any complex attentive, perceptive and mnemonic processes. Even a few errors should raise the suspicion of poor motivation on such a simple test. In fact, administering this task to groups with mild Alzheimer's Disease and mental retardation showed that both groups almost always scored correctly. A substantial impairment that cannot be explained by clinical and historical evidence on its severity seems to be due to the attempt of amplifying the disorders malingered. This test is easier and quicker than the other clinical tests currently available, and results are useful in correctly classifying patients and malingerer. Therefore, it can be used in neuropsychological assessment, especially in insurance and litigation contexts.

However, malingering detection needs a thorough neuropsychological examination in conjunction with careful clinical studies and case-history investigation. Only this holistic approach will bring out performance discrepancies that are inconsistent with normal neuropsychological expectations, simultaneously avoiding underestimation of real cognitive dysfunctions.

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