Pergamon

Validation of a New Technique to Detect Malingering of Cognitive Symptoms: The b Test

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We administered the b Test, a new measure to identify malingering requiring recognition of overlearned information, to 34 suspected malingerers and to 161 subjects in various clinical groups (moderate to severe head injury, elderly depressed, learning disability, schizophrenia, right and left CVA, and elderly normals). Comparisons of groups revealed more commission

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and omission errors in the suspected malingerers relative to all groups except the right stroke patients. In addition, suspected malingerers took longer to complete the task than all groups except right and left stroke patients and normal elderly. A cutoff of >2 commission errors produced a sensitivity of 76.5% and specificity for all comparison groups combined of 82.6%. Lower sensitivity rates were documented for omissions (58.8 using cutoff of >40) and time (57.6% using cutoff of >12 minutes), but specificity remained high at 85.1% and 83.9%, respectively. Thus, the b Test shows considerable potential as a malingering detection tool. © 2000 National Academy of Neuropsychology. Published by Elsevier Science Ltd

Within the past 10 years, numerous publications have emerged on the issue of the detection of malingered cognitive symptoms. This research has focused both on the identification of "malingering" patterns on standard cognitive measures, such as the Warrington Recognition Memory Test (Iverson & Franzen, 1994; Millis, 1992), Rey Auditory Verbal Learning Test (Barrash, Suhr, & Manzel, 1998; Bernard, Houston, & Natoli, 1993; Chouinard & Rouleau, 1997; Greiffenstein, Baker, & Gola, 1994; Suhr, Tranel, Wefel, & Barrash, 1997), Wechsler Memory Scale-Revised (Bernard, McGrath, & Houston, 1993; Iverson & Franzen, 1996; Martin, Franzen, & Orey, 1998; Mittenberg, Azrin, Millsaps, & Heilbronner, 1993), Wisconsin Card Sorting Test (Bernard, McGrath, & Houston, 1996), Stroop Test (Osimani, Alon, Berger, & Abarbanel, 1997), Digit Span (Binder & Willis, 1991; Greiffenstein, et al., 1994; Heaton, Smith, Lehman, & Vogt, 1978; Iverson & Franzen, 1994, 1996; Martin, Hayes, & Gouvier, 1996; Mittenberg, Theroux-Fichera, Zielinski, & Heilbronner, 1995; Suhr et al., 1997; Trueblood, 1994; Trueblood & Schmidt, 1993; Youngjohn, Burrows, & Erdal, 1995), Bender Gestalt (Schretlen, Wilkins, Van Gorp, & Bobholz, 1992), Ravens Standard Progressive Matrices (Gudjonsson & Schackleton, 1986), K-ABC hand movements (Bowen & Littell, 1997), Seashore Rhythm Test (Gfeller & Cradock, 1998), and finger tapping, grip strength, and grooved pegboard (Greiffenstein, Baker, & Gola, 1996), and also on development of tests specifically designed to detect faking, such as the Rey 15-item Memorization Test (Lezak, 1995), Rey Word Recognition Test (Lezak, 1983), Rey Dot Counting Test (Lezak, 1995), Portland Digit Recognition Test (PDRT; Binder, 1993), Hiscock Digit Memory Test (Hiscock & Hiscock, 1989), and Test of Memory Malingering (Rees, Tombaugh, Gansler, & Moczynski, 1998).

These two approaches to the detection of malingering (Iverson & Franzen, 1996) have relied on the fact that the lay public as a group holds many inaccurate beliefs regarding the neuropsychological consequences of head injury (Gouvier, Prestholdt, & Warner, 1988; Willer, Johnson, Rempel, & Linn, 1993). In particular, the general population seems to assume that brain injury causes losses in recognition memory, basic attention span, overlearned information, and motor strength and dexterity, when in actuality, these domains are relatively preserved in all but the most severely brain injured patients (Baddeley & Warrington, 1970; Black, 1986; Heaton et al., 1978; Mittenberg, Rotholc, Russell, & Heilbronner, 1996; Rawling & Brooks, 1990; Rubinsky & Brandt, 1986; Wiggins & Brandt, 1988). This faulty knowledge base causes the malingerer to respond to tests measuring these skills in a manner at variance with that displayed by cooperative brain-injured patients; specifically, malingerers overplay deficits in these areas.

The tests specifically designed to identify faking of cognitive symptoms have primarily focused on documenting feigned impairments in short term memory (e.g., PDRT, Hiscock Digit Memory Test, 15-item Memorization Test, Rey Word Recognition Test), although some tests have been developed to capture other feigned cognitive symptoms, such as malingered losses in mental speed/calculation ability (Dot Counting Test). One understudied area ripe for the development of malingering tests involves measurement