

## Ethical Issues Associated With the Assessment of Exaggeration, Poor Effort, and Malingering

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*The use of effort tests is standard practice in forensic neuropsychology. There is a tremendous amount of good information available in test manuals and the research literature regarding the proper and responsible use of these tests. However, it is clear that there are numerous ethical issues and considerations associated with the assessment of exaggeration, poor effort, and malingering. Many of these issues are discussed, and recommendations are provided.*

*Key words: malingering, ethics, symptom validity assessment, bias*

An overwhelming number of published studies relating to the detection of exaggerated symptoms, poor effort during neuropsychological testing, and malingering have been published in the past 15 years. It is daunting for a researcher in this area to keep up with the literature and virtually impossible for practitioners. Fortunately, there are many good reviews of this literature (e.g., Bianchini, Mathias, & Greve, 2001; Hayes, Hilsabeck, & Gouvier, 1999; Hom & Denney, 2003; Iverson, 2003; Iverson & Binder, 2000; Millis & Volinsky, 2001; Reynolds, 1998; Rogers, 1997; Sweet, 1999; Vickery, Berry, Inman, Harris, & Orey, 2001). Specific guidelines and recommendations for identifying malingering in a neuropsychological evaluation have been available for several years (Slick, Sherman, & Iverson, 1999) and have recently been published for pain-related disability evaluations (Bianchini, Greve, & Glynn, 2005). The key for practitioners is to (a) have a solid plan for how to conduct and interpret this aspect of the evaluation and (b) stay abreast of the literature relating to the specific tests used.

A position paper on symptom validity assessment has recently been published by the National Academy of Neuropsychology (Bush et al., 2005). The authors, in the introductory comment, noted that the develop-

ment of measures, indexes, and other strategies for assessing exaggerated symptoms and poor effort seems to have outpaced the development of professional guidelines that clarify their role in the evaluation process. I would certainly agree, based on our experience reviewing this literature over the past 15 years (Franzen & Iverson, 1995, 1997, 1998; Franzen, Iverson, & McCracken, 1990; Iverson, 2003; Iverson & Binder, 2000; Iverson & Lange, in press; Slick et al., 1999), although this outpacing seems to be less of a problem during the past 5 years.

The slow development of evidence-based professional guidelines for the use of specific neuropsychological tests and combinations of tests, to derive specific clinical inferences, is an ongoing struggle for the profession. Over the past several years, researchers have been encouraging the use of Bayesian methods (e.g., Mossman, 2000, 2003) for effort testing (e.g., Barrash, Suhr, & Manzel, 2004; Bianchini, Mathias, Greve, Houston, & Crouch, 2001; Etherton, Bianchini, Greve, & Heinly, 2005; Glassmire et al., 2003; Greve, Bianchini, Mathias, Houston, & Crouch, 2003; Lange, Sullivan, & Anderson, 2005; Millis & Volinsky, 2001; Slick, Hopp, Strauss, & Thompson, 1997). This encouragement is similar to other areas of professional neuropsychological research and practice (e.g., Barr & McCrea, 2001; Benedict et al., 2004; Benedict et al., 2003; Iverson, Mendrek, & Adams, 2004; Ivnik et al., 2001; Labarge, McCaffrey, & Brown, 2003; Rasquin, Lodder, Visser, Lousberg, & Verhey, 2005; Sawrie et al., 1998; Shapiro, Benedict, Schretlen, & Brandt, 1999; Tierney, Szalai, Dunn, Geslani, & McDowell, 2000; Woods, Weinborn, & Lovejoy,

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2003). Unfortunately, Bayesian methods and other interesting statistical methodologies (e.g., Crawford, Garthwaite, Howell, & Venneri, 2003; Godber, Anderson, & Bell, 2000), including odds and likelihood ratios (e.g., Bieliauskas, Fastenau, Lacy, & Roper, 1997; Dori & Chelune, 2004; Ivnik et al., 2001; Ivnik et al., 2000), are rarely used by clinicians. Bridging the gap between research and practice using innovative statistical and psychometric approaches is critical for the continued advancement of neuropsychological assessment in general and symptom validity assessment in particular. Clinicians should be encouraged to conceptualize poor effort, exaggeration, and malingering not in simple dichotomous terms but through probabilistic considerations.

It is clear that we are faced with numerous ethical issues and considerations associated with the assessment of exaggeration, poor effort, and malingering. Commercially available tests, well-written manuals, and dozens of research studies facilitate, but do not ensure, proper and responsible test use. Individual practitioners, clinical researchers, professional organizations, and regulatory bodies are all stakeholders in responsible test use, but the ultimate responsibility lies with the practitioner. The purpose of this article is to (a) identify and discuss several ethical issues and considerations and (b) promote and encourage more thoughtful, consistent, and responsible use of effort tests.

### DEFINITIONAL AND CONCEPTUAL CONSIDERATIONS

Malingering is the intentional production of false or greatly exaggerated symptoms for the purpose of attaining some identifiable external reward (American Psychiatric Association, 1994). Within the context of a psychological or neuropsychological evaluation, an individual who is malingering typically exaggerates subjective symptoms. The person may exaggerate depression, anxiety, pain, dizziness, sleep disturbance, memory problems, poor concentration, or personality change. During neuropsychological testing, a person who is malingering deliberately underperforms. A person may decide to malingering to (a) receive more money than they are entitled to in a personal injury lawsuit, (b) receive worker's compensation or disability benefits, (c) obtain prescription medications, (d) avoid prosecution for criminal activities (*vis-à-vis* a determination of incompetency to stand trial), or (e) avoid criminal responsibility (i.e., not guilty by reason of insanity).

Resnick (1997) described three types of malingering, labeled "pure malingering," "partial malingering," and "false imputation." Pure malingering is characterized by a complete fabrication of symptoms. Partial malingering is defined by exaggerating actual symptoms or by reporting past symptoms as if they are continuing. False imputation refers to the deliberate misattribution of actual symptoms to the compensable event. Appreciating these types is important because mental health and legal professionals might have a simplistic view of malingering (i.e., only pure malingering is considered malingering). It would be extraordinarily naïve, of course, to assume that a person with a psychiatric problem or the lingering effects of a traumatic brain injury could not malingering. That would be tantamount to concluding that people with these conditions are not capable of engaging in goal-directed behavior (e.g., exaggeration of symptoms to influence their litigation). Resnick's conceptualization deals with malingering in the context of a medical, psychiatric, or psychological evaluation insofar as it relates to the self-report of symptoms and problems. Neuropsychologists must, of course, estimate the extent to which a person appears to be putting forth his or her best effort during testing and then make an inference regarding underlying motivation to perform. Effort is not a binary phenomenon. It falls on a continuum from very poor to outstanding.

To render an opinion regarding malingering, the clinician must make an inference regarding a person's underlying motivation or reasons for presumed poor effort, exaggeration, and/or fabrication of symptoms and problems. Typically, we consider three underlying reasons for presumed deliberate exaggeration. First, the clinician might conclude that the plaintiff has exaggerated as a "cry for help." This euphemism implies that the person has serious psychological or psychiatric problems and is desperately seeking recognition of, and attention for, these problems. There is a long history of conceptualizing exaggeration as a cry for help in psychology and neuropsychology, whereas in psychiatry and general medicine clinicians are inclined to attribute exaggeration to "psychological factors," "psychiatric problems," or "nonorganic factors." Second, a person might deliberately exaggerate because he or she has a deep-seated psychological need to be perceived as sick and disabled. The motivation is not the litigation, *per se*, but to be seen and treated as a sick and disabled person. Under these circumstances, the person would be diagnosed with a factitious disorder. Finally, a person might deliberately exaggerate, underperform, or both during testing because he or she is trying to influence

the outcome of his or her evaluations to influence the outcome of the litigation. This latter behavior is what we consider malingering.

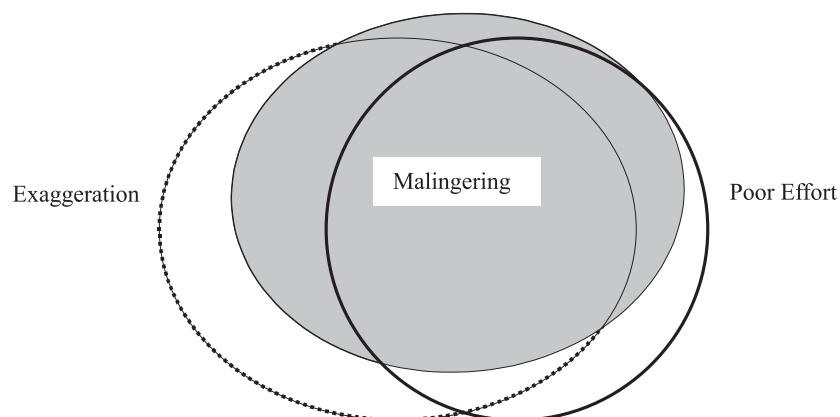
Nonoptimal effort, suboptimal effort, incomplete effort, poor effort, biased responding, and negative response bias are some of the terms typically used to describe effort test or neuropsychological test performance. Faking, feigning, simulating, dissimulating, magnifying, amplifying, and exaggerating are some of the terms used to describe interview behavior or responses on psychological tests. Those familiar with the literature over the past decade will appreciate that nearly all of the previous terms have been used to describe both test performance and symptom endorsement.

My preferred terms are *poor effort* for describing underperforming on neuropsychological tests and *exaggerating* for describing responding on psychological tests, such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2). These terms are simple, descriptive, and communicative. For this article, I adopted the expression *symptom validity assessment*, used in the National Academy of Neuropsychology position paper (Bush et al., 2005), to refer to all methods and procedures on which the practitioner can draw to make inferences regarding poor effort during testing and exaggeration of symptoms or problems during interview or on psychological tests.

Psychological and neuropsychological evaluations should include assessment measures designed to detect exaggeration of symptoms and problems and poor effort on cognitive tests. There is longstanding conceptual confusion among clinicians and researchers regarding the similarities and differences between

exaggeration and poor effort. They are not synonymous behavioral constructs, although, unfortunately, the distinction between them has often been blurred. For example, clinicians frequently refer to poor performance on an effort test as exaggeration, such as “symptom exaggeration” or “cognitive exaggeration.” The term exaggeration is less ambiguous conceptually if it is used to describe symptom reporting during interview, symptom endorsement on psychological tests or behavioral observations (e.g., facial expressions or pain behaviors). Poor effort, on the other hand, refers to *behavior during testing*. This simply means the person underperformed during testing. The clinician might wish to infer that this underperformance constitutes “exaggeration” of problems, such as memory problems, but it is important to appreciate that this is a *secondary clinical inference*; the primary clinical inference is “poor effort,” “underperformance,” or “submaximal effort.”

The conceptual and assessment-related overlap among exaggeration, poor effort, and malingering is illustrated in Figure 1. The shaded circle represents malingering, the dotted circle exaggeration, and the solid circle poor effort. As illustrated with the shaded circle, malingering in a neuropsychological evaluation typically involves both exaggeration and poor effort; however, it can occur with only one of these constructs being present (or accurately detected). Notice the small shaded area at the top, within malingering, that does not involve exaggeration or poor effort. This could be a situation involving false imputation, in that a person reports legitimate symptoms and problems, reasonably accurately, but deliberately and knowingly attributes them to a false cause (e.g., a motor vehicle



**Figure 1.** Conceptual and assessment overlap between exaggeration, poor effort, and malingering.  
**Note.** The shaded circle represents malingering, the dotted circle exaggeration, and the solid circle poor effort.

accident). Notice that exaggeration and poor effort, singly or in combination, can occur without the person malingering. A person with a factitious disorder, for example, might exaggerate and underperform during testing. In inpatient adult or geriatric psychiatric settings, or outpatient adolescent psychiatric settings, poor effort during testing might occur simply because the person does not want to undergo the assessment. Under these circumstances, the results are not valid or accurate, but the clinical inference for the behavior would not be malingering. Some degree of exaggeration is likely ubiquitous in civil and criminal forensic evaluations, and it is believed to be relatively common in clinical settings especially among people with somatoform disorders, fibromyalgia, chronic pain, and certain personality disorders. As illustrated in Figure 1, exaggeration can occur independently of malingering and poor effort.

### ETHICAL ISSUES AND CONSIDERATIONS

The central issues regarding symptom validity assessment, from an ethical perspective, relate to competence, objectivity, clarity in communication, and the proper use of tests. Common sense dictates that symptom validity assessment is essential. However, it is, by its very nature, controversial. Eleven ethical concerns, issues, and considerations are summarized in the following:

1. Failing to use well-researched effort tests. This concern, of course, is not limited to effort testing. It relates to assessment in general. Using tests with a poor or limited empirical foundation might significantly adversely affect (a) the accuracy of the conclusions drawn (e.g., poor effort or adequate effort) and (b) the usefulness of this information to the various parties involved. Some practitioners believe that effort testing is unnecessary because most neuropsychological tests require "effort." Therefore, if a person performs well on some of the more difficult tests in the battery, then there is no reason to be concerned about effort. Although this position appears superficially logical, this approach (a) runs counter to mainstream recommendations and standard practice in forensic neuropsychology and (b) has never been empirically validated.

2. Using effort tests only for defense cases. A clinician who uses these tests for defense cases or disability evaluations, but who chooses to omit them from plaintiff cases, is inviting criticism of bias.

3. Using more or fewer effort tests, systematically, depending on whether you were retained by the defendant or the plaintiff. For example, giving one effort test, such as the Test of Memory Malingering, during plaintiff evaluations and not examining performance patterns on other tests, such as Digit Span (e.g., Binder & Willis, 1991; Greiffenstein, Baker, & Gola, 1994; Iverson & Franzen, 1994, 1996; Iverson & Tulsky, 2003; Meyers & Volbrecht, 1998; Suhr, Tranel, Wefel, & Barrash, 1997; Trueblood & Schmidt, 1993), the Category Test (e.g., DiCarlo, Gfeller, & Oliveri, 2000; Forrest, Allen, & Goldstein, 2004; Sweet & King, 2003; Tenhula & Sweet, 1996) or the California Verbal Learning Test (e.g., Ashendorf, O'Bryant, & McCaffrey, 2003; Coleman, Rappaport, Millis, Ricker, & Farchione, 1998; Demakis, 1999; Moore & Donders, 2004; Slick, Iverson, & Green, 2000; Sweet et al., 2000). In contrast, for defense evaluations, the clinician might give three effort tests and examine performance patterns on multiple tests.

4. Using different effort tests depending on which side retains you. For example, using the Rey 15 Items Test for plaintiff cases and the Word Memory Test and the Computerized Assessment of Response Bias for defense cases. The former test has lower sensitivity (e.g., Arnett, Hammeke, & Schwartz, 1995; Guilmette, Hart, Guiliano, & Leininger, 1994; Iverson & Binder, 2000; Millis & Kler, 1995); therefore, the clinician would be systematically, with forethought, reducing the likelihood of detecting poor effort.

5. Using effort tests differently depending on which side retains you. An obvious example would be to give simple effort tests at the end of the evaluation or after much more difficult tests, such as a battery of memory tests. Researchers have cautioned that from a common-sense perspective this practice might reduce the sensitivity of the effort test (e.g., Bernard, 1990; Iverson, 2003), and there is some empirical support for this concern (e.g., Guilmette, Whelihan, Hart, Sparadeo, & Buongiorno, 1996).

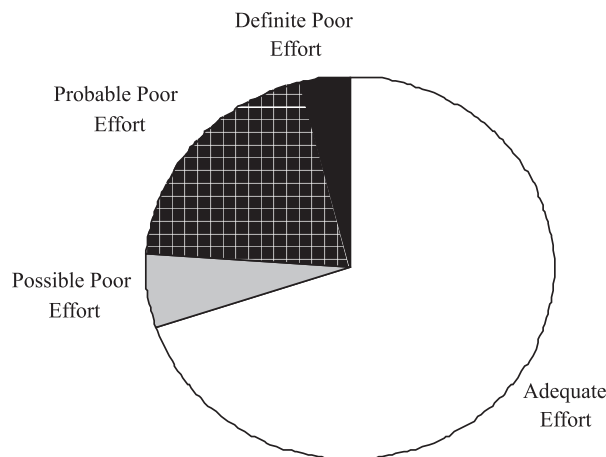
6. Warning or prompting patients immediately before taking an effort test. It is appropriate to warn patients that methods for detecting exaggeration and poor effort are part of the evaluation process (Slick & Iverson, 2003). It is not, of course, appropriate to subtly or directly warn or prompt the patient immediately before the test is administered (e.g., by saying "Most people find this test very easy" or "Be sure to try your best on this test" or "Remember, we have tests designed to detect poor effort"). Warning a patient immediately before taking an effort test can greatly reduce its sensitivity (Gervais, Green, Allen, & Iverson, 2001).

7. Interpreting effort test results differently, systematically, depending on which side retains you. The most extreme examples would be to systematically interpret effort test failure as a cry for help or “distraction due psychological factors or pain” for plaintiff cases and due to “malingering” for defense cases.

8. Assuming that someone who passes an effort test gave his or her “full,” “complete,” or “best” effort during the evaluation. There are four reasons why this assumption might not be correct. First, passing an effort test simply means the person passed the effort test. It does not mean that the person gave his or her best effort during the neuropsychological evaluation. This generalization from adequate effort on a single test to best effort across many tests is not appropriate. It is usually best to conceptualize a person’s effort as “adequate” or not (see Figure 2). The clinical inference of adequate effort is made on the basis of converging evidence (e.g., careful behavioral observations and performance on one or more effort tests). Second, in nearly every analog malingering study, there is a subset of participants who are deliberately faking deficits during testing but who are not detected with the procedure under study. False-negative rates can be quite high on tests designed to detect poor effort because researchers tend to select cutoff scores designed to minimize false positives. Third, it is entirely possible that a person chooses not to underperform, or underperforms to a small degree, on that specific test; whereas, on other tests the poor effort might be more prominent. Finally, it is possible that attorney coaching (Youngjohn, 1995) could affect how a patient performs on a specific test (e.g., the MMPI-2 or

a computerized effort test). Some researchers have reported that coached subjects are less likely to be accurately identified on effort tests (e.g., DiCarlo et al., 2000; Frederick & Foster, 1991; Rose, Hall, Szalda-Petree, & Bach, 1998).

9. Interpreting effort test failure or exaggerated symptoms, in isolation, as malingering. (See Figure 1 and accompanying text for the conceptual overlap among these constructs.) Effort tests do not measure malingering, per se; they measure behavior that is associated with malingering. Malingering should not be inferred from a single test; rather this conclusion is derived from converging evidence that the person was deliberately exaggerating symptoms and/or performing poorly on testing to increase the probability of obtaining an obvious external incentive. It is possible that a person scoring below an empirically derived cutoff on a single test designed to detect poor effort could (a) be a false positive or (b) have performed poorly, even deliberately, for reasons other than those associated with malingering (e.g., general uncooperativeness or serious psychiatric disturbance). The clinical inference of malingering is complex and requires multiple sources of converging evidence (Bianchini et al., 2005; Slick et al., 1999). Often this converging evidence is not available, or when it is the inference of malingering might simply be too provocative and pejorative for the clinician’s comfort. Under these circumstances, it is appropriate to discuss exaggeration and poor effort as behavior without making the inference of malingering. The clinician should consider explicitly listing all reasonably possible differential diagnoses or explanations that could ac-



**Figure 2.** Definitional categories for effort. *Note.* Most people provide adequate effort during testing. This includes effort ranging from adequate to outstanding. “Possible poor effort” refers to a clinical inference with 50% or less certainty. “Probable poor effort” refers to a clinical inference with greater than 50% certainty. “Definite poor effort” can be used when a person performs below the probable range of random responding (i.e., below the 90% confidence interval for chance), or there is converging and compelling evidence of poor effort. The definitional categories in Figures 2 and 3 are similar to the categories for malingering presented in Slick, Sherman, & Iverson (1999).

count for the behavior and making clear the evidence that favors one more strongly than another. It might be necessary to point out that there is insufficient evidence to decide among two or more alternative diagnoses or explanations. It can be helpful to use the definitional descriptors for effort presented in Figure 2 (i.e., adequate effort, possible poor effort, probable poor effort, definite poor effort) and exaggeration presented in Figure 3 (i.e., underendorsement of symptoms and problems, accurate reporting, possible exaggeration, probable exaggeration, and definite exaggeration). Future research will bolster and further clarify the psychometric and decision-making foundations for the definitional descriptors provided in Figures 2 and 3.

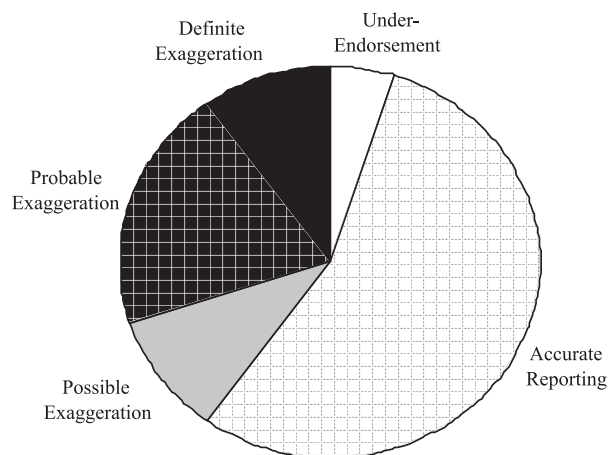
10. Inappropriately interpreting exaggeration as a cry for help. The underlying motivation for exaggeration (or poor effort during testing) can be very difficult to infer. Clinicians should be careful to not simply use a cry for help as a stock standard inference for the cause of the exaggeration. This explanation for the exaggeration, like any explanation (including malingering), should be based on clear and converging evidence. It could be considered biased if a clinician has a much lower threshold, and relies on much less evidence, to attribute exaggeration to a cry for help versus deliberate misrepresentation of symptoms and problems to influence the results of a forensic evaluation.

11. Competent, responsible, informed use of tests. As a general rule, one cannot simply rely on test manuals. The literature on specific tests is constantly evolving; clinicians should actively keep up with the literature for the specific tests used. For example, in addition to the test manual, a person using the Word Memory

Test should be familiar with the body of work with this test (e.g., Dunn, Shear, Howe, & Ris, 2003; Gervais, Rohling, Green, & Ford, 2004; Gervais et al., 2001; Green & Flaro, 2003; Green & Iverson, 2001; Green, Iverson, & Allen, 1999; Green, Lees-Haley, & Allen, 2002; Green, Rohling, Iverson, & Gervais, 2003; Green, Rohling, Lees-Haley, & Allen, 2001; Iverson, Green, & Gervais, 1999; Rohling, Allen, & Green, 2002; Rohling, Green, Allen, & Iverson, 2002; Tan, Slick, Strauss, & Hultsch, 2002).

### CONCLUSIONS AND RECOMMENDATIONS

The National Academy of Neuropsychology position paper clearly states that symptom validity assessment is not optional. This position paper solidifies the recommendation for routine effort and validity testing made by clinical researchers for more than 10 years (e.g., Doss, Chelune, & Naugle, 1999, p. 17; Green et al., 2001, p. 1059; Greve et al., 2003, p. 179; Iverson & Binder, 2000, p. 853; Iverson & Franzen, 1996, p. 38; Lu, Boone, Cozolino, & Mitchell, 2003, p. 426; Mateer, 2000, p. 54; Millis, Ross, & Ricker, 1998, p. 172; Slick, Hopp, Strauss, & Spellacy, 1996, p. 920; Suchy & Sweet, 2000, p. 56; Suhr & Boyer, 1999, p. 701; Sweet, 1999, p. 278; Tombaugh, 2002, p. 68). From an ethical perspective, neuropsychologists who fail to conduct symptom validity assessment are not conducting a competent forensic evaluation. The primary reasons for questioning a clinician’s competence for not conducting a proper symptom validity assessment are as follows: (a) poor effort during

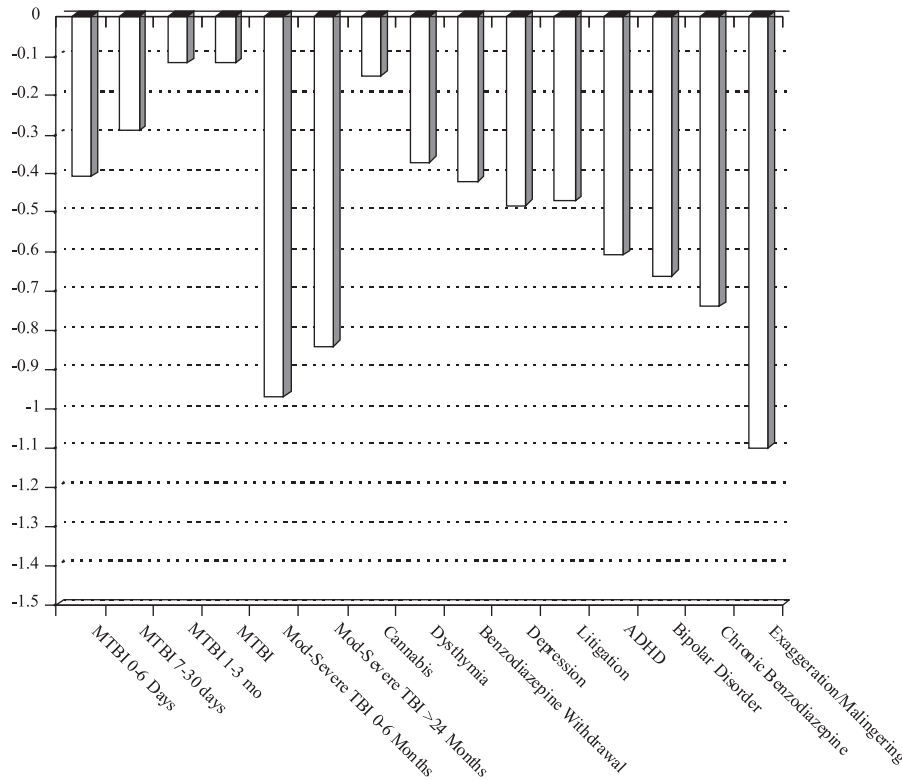


**Figure 3. Definitional categories for exaggeration.** *Note.* Most people provide reasonably accurate portrayals of their symptoms and problems. Some people downplay or minimize their problems (underendorsement). “Possible exaggeration” refers to a clinical inference with 50% or less certainty. “Probable exaggeration” refers to a clinical inference with greater than 50% certainty. “Definite exaggeration” can be used when there is converging and compelling evidence of exaggeration.

testing is, unfortunately, common (Larrabee, 2003; Mittenberg, Patton, Canyock, & Condit, 2002); (b) the effect of poor effort on neuropsychological test results is major (Vickery et al., 2001), and, in fact, dwarfs the effect of mild traumatic brain injuries (see Figure 4); (c) there are well-validated tests for detecting poor effort that have low false-positive rates; and (d) it is considered standard practice in forensic psychology and neuropsychology to do so.

Clinicians can avoid most ethical problems by following the four recommendations listed in the following. The ethical and professional guidelines that provide the rationale for these recommendations are provided in Appendix.

1. Neuropsychologists should routinely assess for poor effort during testing and exaggerated symptoms and problems. It can be very helpful to place a simple effort test at the beginning of the evaluation, before more difficult tests are administered. It is also helpful to insert at least one more at some point during the evaluation (if an evaluation spans 2 days, it is appropriate to include a test on each day). Passing an effort test, however, does not mean that the person gave adequate effort throughout the evaluation, so examination of performance patterns looking for inconsistencies, or things that do not make biological or psychometric sense, is also important (e.g., Iverson, 2003; Larrabee, 1990; Slick et al., 1999).



**Figure 4.** Effect sizes on overall neuropsychological functioning. *Note.* Effect sizes typically are expressed in pooled, weighted standard deviation units. However, across studies, there are some minor variations in the methods of calculation. By convention, effect sizes of .2 are considered small, .5 medium, and .8 large. This is from a statistical, not necessarily clinical, perspective. For this figure, the overall effect on cognitive or neuropsychological functioning is reported. The effect sizes are displayed in a negative direction to visually illustrate the “negative” or “adverse” effect on cognitive functioning. These effect sizes were presented in a different format in Iverson (2005). Effect sizes less than .3 should be considered very small and difficult to detect in individual patients because the patient and control groups largely overlap. Mild traumatic brain injury (MTBI) 0–6 days, 7–29 days, 30–89 days, moderate-severe traumatic brain injury (TBI) 0–6 months, > 24 months, all in Schretlen and Shapiro (2003), 39 studies,  $N = 1,716$  TBI,  $N = 1,164$  controls; MTBI (Binder, Rohling, & Larrabee, 1997), 11 studies,  $N = 314$  MTBI,  $N = 308$  controls; a recent meta-analysis relating to neuropsychological deficits associated with MTBIs revealed similar findings (Belanger, Curtiss, Demery, Lebowitz, & Vanderploeg, 2005); cannabis (Grant, Gonzalez, Carey, Natarajan, & Wolfson, 2003), long-term regular use, 11 studies,  $N = 623$  users,  $N = 409$  nonusers or minimal users; dysthymia, depression, and bipolar disorder (Christensen, Griffiths, Mackinnon, & Jacomb, 1997), 3 comparisons for dysthymia, 97 comparisons for depression, and 15 comparisons for bipolar disorder; benzodiazepine withdrawal (Barker, Greenwood, Jackson, & Crowe, 2004b), 10 studies, long-term follow-up, 44 comparisons; litigation/financial incentives (Binder & Rohling, 1996), 17 studies,  $N = 2,353$  total; attention deficit hyperactivity disorder (ADHD; Frazier, Demaree, & Youngstrom, 2004), based on full-scale IQ, 123 studies; chronic benzodiazepine use (Barker, Greenwood, Jackson, & Crowe, 2004a), 13 studies,  $N = 384$ , 61 comparisons; exaggeration/malingering (Vickery et al., 2001), 32 studies published between 1985 and 1998, 41 independent comparisons.

2. Neuropsychologists should explain to examinees that it is important to provide their best effort and to report their symptoms and problems accurately. Neuropsychologists should notify them that failure to do so can often be detected.

3. Neuropsychologists should be familiar with the literature on poor effort, exaggeration, and malingering and be very familiar with the literature regarding the specific tests and measures used. It is helpful to write out detailed procedures for how to interpret tests measuring different aspects of exaggeration and poor effort. To sort out the complexities of differential explanations and diagnoses that might underlie exaggerated symptoms and poor effort, it is often important to consider (a) behavioral observations, (b) interview data, (c) collateral records, (d) collateral interviews, and (e) psychological and neuropsychological test results. Before concluding that a person is malingering, the clinician should systematically rule out alternative explanations for the behavior.

4. Neuropsychologists should state conclusions about poor effort, exaggeration, and malingering carefully but also explicitly and clearly. Psychologists have an ethical responsibility to report assessment results fairly, accurately, and objectively. When there is clear evidence of poor effort, exaggeration, or both, this should be stated clearly in one's report. It should not be dismissed or obfuscated. Classification of exaggeration and effort can be based on the terminology illustrated in Figures 2 and 3. The failure to accurately report presumed poor effort, exaggeration, or both is similar to failing to accurately report symptoms of depression or poor performance on memory testing. Exaggeration, of course, does not equal malingering. It would be irresponsible and unethical for a clinician to simply conclude that a person is malingering because the person appeared to be exaggerating. We should be very cautious in our conclusions regarding malingering. The clinician should have persuasive converging evidence before reaching this conclusion.

## CONCLUSION

Careful assessment of effort and the accuracy of symptom reporting underlies proper test interpretation. The central issues, from an ethical perspective, relate to competence, objectivity, clarity in communication, and the proper use of tests. For practical, psychometric, and ethical reasons, symptom validity assessment is essential. However, it is and will remain, by its very nature, controversial.

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## APPENDIX

Specific Quotes from Ethical Standards and Guidelines (italics added).

Recommendation 1. Neuropsychologists should routinely conduct Symptom Validity Assessment.

VI.A. (Forensic Specialty) Because of their special status as persons qualified as experts to the court, forensic psychologists have an obligation to maintain current knowledge of scientific, professional and legal developments within their area of claimed competence. They are obligated also to use that knowledge, consistent with accepted clinical and scientific standards, in selecting data collection methods and procedures for an evaluation, treatment, consultation or scholarly/empirical investigation.

VI.C. (Forensic Specialty) In providing forensic psychological services, forensic psychologists take special care to avoid undue influence upon their methods, procedures, and products, such as might emanate from the party to a legal proceeding by financial compensation or other gains. As an expert conducting an evaluation, treatment, consultation, or scholarly/empirical investigation, the forensic psychologist maintains professional integrity by examining the issue at hand from all reasonable perspectives, *actively seeking information that will differentially test plausible rival hypotheses.*

2.04 American Psychological Association [APA] Psychologists' work is based upon established scientific and professional knowledge of the discipline.

9.01(a) (APA) Psychologists base the opinions contained in their recommendations, reports, and diagnostic or evaluative statements, including forensic testimony, on information and techniques sufficient to substantiate their findings.

9.06 (APA) When interpreting assessment results, including automated interpretations, *psychologists take into account the purpose of the assessment as well as the various test factors, test-taking abilities, and other characteristics of the person being assessed, such as situational, personal, linguistic, and cultural differences, that might affect psychologists' judgments or reduce the accuracy of their interpretations.* They indicate any significant limitations of their interpretations.

7.7 Standards for Educational and Psychological Testing [SEPT] In testing applications involving individualized interpretations of test scores other than selection, *a test taker's score should not be accepted as a reflection of standing on the characteristics being assessed without consideration of alternate explanations for the test taker's performance on that test at that time.*

11.20 (SEPT) In educational, clinical, and counseling settings, *a test taker's score should not be interpreted in isolation; collateral information that may lead to alternative explanations for the examinee's test performance should be considered.*

12.18 (SEPT) The interpretation of test or test battery results generally should be based upon multi-

ple sources of convergent test and collateral data and an understanding of the normative empirical, and theoretical foundations as well as the limitations of such tests.

12.19 (SEPT) *The interpretation of test scores or patterns of test battery results should take cognizance of the many factors that may influence a particular testing outcome. Where appropriate, a description and analysis of the alternative hypotheses or explanations that may have contributed to the pattern of results should be included in the report.*

Recommendation 2. Neuropsychologists should emphasize the importance of honesty and best effort. Patients should be informed that there are methods to detect invalidity within the evaluation.

IV.E. (Forensic Specialty) Forensic psychologists have an obligation to ensure that prospective clients are informed of their legal rights with respect to the anticipated forensic service, of the purposes of any evaluation, of the nature of procedures to be employed, of the intended uses of any product of their services, and of the party who has employed the forensic psychologist.

I.23 Canadian Psychological Association [CPA] Provide, in obtaining informed consent, as much information as reasonable or prudent persons would want to know before making a decision or consenting to the activity. The psychologist would relay this information in language that the persons understand (including providing translation into another language, if necessary) and would take whatever reasonable steps are needed to ensure that the information was, in fact, understood.

I.24 (CPA) Ensure, in the process of obtaining informed consent, that at least the following points are understood: purpose and nature of the activity; mutual responsibilities; confidentiality protections and limitations; likely benefits and risks; alternatives; the likely consequences of non-action; the option to refuse or withdraw at any time, without prejudice; over what period of time the consent applies; and, how to rescind consent if desired.

3.11(a) (APA) Psychologists delivering services to or through organizations provide information beforehand to clients and when appropriate those di-

rectly affected by the services about (1) the nature and objectives of the services, (2) the intended recipients, (3) which of the individuals are clients, (4) the relationship the psychologist will have with each person and the organization, (5) the probable uses of services provided and information obtained, (6) who will have access to the information, and (7) limits of confidentiality. As soon as feasible, they provide information about the results and conclusions of such services to appropriate persons.

8.7 (SEPT) Test takers should be made aware that having someone else take the test for them, disclosing confidential test material, *or any other form of cheating [e.g., faking impairment] is inappropriate and that such behavior may result in sanctions.*

11.5 (SEPT) Those who have a legitimate interest in the assessment should be informed about the purposes of testing, how tests will be administered, the factors considered in scoring examinee responses, how the scores are typically used, how long the records will be retained, and to whom and under what conditions the records may be released.

Recommendation 3. Neuropsychologists should stay current with the literature in general and with specific tests used in particular.

III.A. (Forensic Specialty) *Forensic psychologists provide services only in areas of psychology in which they have specialized knowledge, skill, experience, and education.*

III.B. (Forensic Specialty) Forensic psychologists have an obligation to present to the court, regarding the specific matter to which they will testify, the boundaries of their competence, the factual bases (knowledge, skill, experience, training, and education) for their qualification as an expert, and the relevance of those factual bases to their qualification as an expert on the specific matters at issue.

2.01(a) (APA) Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience.

2.01(c) (APA) Psychologists planning to provide services, teach, or conduct research involving pop-

ulations, areas, techniques, or technologies new to them undertake relevant education, training, supervised experience, consultation, or study.

2.03 (APA) Psychologists undertake ongoing efforts to develop and maintain their competence.

2.01(b) (APA) Where scientific or professional knowledge in the discipline of psychology establishes that an understanding of factors associated with age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, or socioeconomic status is essential for effective implementation of their services or research, psychologists have or obtain the training, experience, consultation, or supervision necessary to ensure the competence of their services, or they make appropriate referrals.

9.02(a) (APA) *Psychologists administer, adapt, score, interpret, or use assessment techniques, interviews, tests, or instruments in a manner and for purposes that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques.*

9.02(b) (APA) Psychologists use assessment instruments whose validity and reliability have been established for use with members of the population tested. When such validity or reliability has not been established, psychologists describe the strengths and limitations of test results and interpretation.

12.1 (SEPT) Those who use psychological tests should confine their testing and related assessment activities to their areas of competence, as demonstrated through education, supervised training, experience, and appropriate credentialing.

II.6 (CPA) Offer or carry out (without supervision) only those activities for which they have established their competence to carry them out to the benefit of others.

III.4 (CPA) *Maintain competence in their declared area(s) of psychological competence, as well as in their current area(s) of activity.*

Recommendation 4. Neuropsychologists should report the results of symptom validity assessment carefully but also explicitly and clearly.

VII.A. (Forensic Specialty) Forensic psychologists make reasonable efforts to ensure that the products of their services, as well as their own public statements and professional testimony, are communicated in ways that will promote understanding and avoid deception, given the particular characteristics, roles, and abilities of various recipients of the communications.

VII.D. (Forensic Specialty) *When testifying, forensic psychologists have an obligation to all parties to a legal proceeding to present their findings, conclusions, evidence, or other professional products in a fair manner.* This principle does not preclude forceful representation of the data and reasoning upon which a conclusion or professional product is based. It does, however, preclude an attempt, whether active or passive, to engage in partisan distortion or misrepresentation. *Forensic psychologists do not, by either commission or omission, participate in a misrepresentation of their evidence, nor do they participate in partisan attempts to avoid, deny, or subvert the presentation of evidence contrary to their own position.*

VII.F. (Forensic Specialty) Forensic psychologists are aware that their essential role as expert to the court is to assist the trier of fact to understand the evidence or to determine a fact in issue. In offering expert evidence, they are aware that their own professional observations, inferences, and conclusions must be distinguished from legal facts, opinions, and conclusions. Forensic psychologists are prepared to explain the relationship between their expert testimony and the legal issues and facts of an instance case.

1.01 (APA) If psychologists learn of misuse or misrepresentation of their work, they take reasonable steps to correct or minimize the misuse or misrepresentation.

9.06 (APA) When interpreting assessment results, including automated interpretations, psychologists take into account the purpose of the assessment as well as the various test factors, test-taking abilities, and other characteristics of the person be-

ing assessed, such as situational, personal, linguistic, and cultural differences, that might affect psychologists' judgments or reduce the accuracy of their interpretations. *They indicate any significant limitations of their interpretations.*

5.10 (SEPT) When test score information is released to students, parents, legal representatives, teachers, clients, or the media, those responsible for testing programs should provide appropriate interpretations. The interpretations should describe in simple language what the test covers, what scores mean, the precision of the scores, common misinterpretations of test scores, and how scores will be used.

8.8 (SEPT) When score reporting includes assigning individuals to categories, the categories should be chosen carefully and described precisely. The least stigmatizing labels, consistent with accurate representation, should always be assigned.

11.15 (SEPT) Test users should be alert to potential misinterpretations of test scores and to possible unintended consequences of test use; users should take steps to minimize or avoid foreseeable misinterpretations and unintended negative consequences.

I.7 (CPA) Make every reasonable effort to ensure that psychological knowledge is not misused, intentionally or unintentionally, to infringe on human rights.

III.6 (CPA) Ensure that their own and their colleagues' activities, functions, contributions, and likely or actual outcomes of their activities (including research results) are not misrepresented by others, and act quickly to correct any such misrepresentation.

III.11 (CPA) *Take care to communicate as completely and objectively as possible, and to clearly differentiate facts, opinions, theories, hypotheses, and ideas, when communicating knowledge, findings, and views.*

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*Note.* Material from "Specialty guidelines for forensic psychologists," by the Committee on Ethical Guidelines for Forensic Psychologists, 1991, *Law and Human Behavior*, 15, 655–665. Copyright © 1991 by Springer. Adapted with permission.

Additional sources: American Psychological Association, 2002; Canadian Psychological Association, 2000; American Educational Research Association, 1999. (See References.)