



Pergamon

Archives of Clinical Neuropsychology  
19 (2004) 465–473

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Archives  
of  
CLINICAL  
NEUROPSYCHOLOGY

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## Detecting malingering: a survey of experts' practices

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Accepted 17 April 2003

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### Abstract

A survey addressing practices of 'expert' neuropsychologists in handling financial compensation claim or personal injury litigation cases was carried out. Potential participants were identified by publication history. Responses were obtained from 24 out of the 39 neuropsychologists who were surveyed. Approximately 79% of the respondents reported using at least one specialized technique for detecting malingering in every litigant assessment. Half stated that they always give specialized tests at the beginning of the assessment. The Rey 15-Item test and the Test of Memory Malingering were the most frequently reported measures. Respondents also reported frequent use of 'malingering' indexes from standard neuropsychological tests. Reported base-rates varied, but the majority of respondents indicated that at least 10% of the litigants they assessed in the last year were definitely malingering. Respondents were split on the practice of routinely giving warnings at the outset of assessments that suboptimal performance may be detected. However, when the client's motivational status was suspect, more than half (58.3%) altered their assessment routine at least on some occasions, by encouraging good effort (70.8%) or administering additional SVTs. A minority directly confronted or warned clients (25%), terminated the examination earlier than planned (16.6%), or contacted the referring attorney immediately (29.2%). Respondents almost always stated some opinion regarding indicators of invalidity in written reports (95%). However, 41.7% rarely used the term 'malingering' and 12.5% never used the term. Most respondents (>80%) instead stated that the test results are invalid, inconsistent with the severity of the injury or indicative of exaggeration.

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*Keywords:* Malingering; Expert-practices; Survey

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Neuropsychologists often play an important role in personal injury litigation concerning brain damage. Given the importance of their opinions, neuropsychologists require reliable

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and valid measures, not just of cognitive functions and psychosocial adjustment, but also of symptom exaggeration or malingering. Of equal importance to the tools used is the way in which they are employed. Studies have shown that the outcome of the examination can be influenced by factors such as the choice of tests (e.g., Gervais, Green, & Allen, 1999), the order in which tests are given (Guilmette, Hart, Sparadeo, Buongiorno, & Whelihan, 1996), and the use of warnings that exaggerated deficits can be detected (e.g., Johnson & Lesniak-Karpiak, 1997; Youngjohn, Lees-Haley, & Binder, 1999).

Neuropsychologists who perform independent medicolegal evaluations need to be well versed on the utility and limitations of current assessment tools and methodologies, both for ethical reasons (Slick & Iverson, 2003), and in order to maximize success in the legal arena. According to the court decision in the Frye case (Frye v. United States, 293 Fed. 1013 D.C. civ. 1923) and further supported in the Daubert case (Daubert v. Merrell Dow Pharmaceuticals, 113 S.Ct. 2786, 1993), the *general acceptability* of procedures used by *experts* is one criterion for admissibility of scientific evidence. Thus, information about the assessment practices of experts may have important implications for practice in the legal arena. However, the methods favored by experts for detecting malingering have not been systematically studied. It is therefore not known which methods are most common or whether any particular tests or techniques prevail. For example, the use of at least one and preferably two or more validated measures of symptom validity has been recommended by numerous authors (e.g., Inman & Berry, 2002; Spreen & Strauss, 1998), but it is not known if this is routine practice for experts, nor do we know which tests are most commonly used.

In addition to being well versed on the state of the art in techniques of assessment (i.e., the methods used by experts), neuropsychologists need to have a good working knowledge of the differential diagnoses that they are likely to encounter in their practices, including base-rates (Gouvier, 1999). In the case of malingering, base-rates are particularly difficult to estimate, in part because those who malingering actively seek to avoid detection, and in part because the need for diagnostic standards has only recently started to be addressed (Slick, Sherman, & Iverson, 1999). To date, available estimates of base-rates of malingering come from studies on the prevalence of cases meeting various ad hoc criteria, the prevalence of specific scores or other indicators, or from surveys in which neuropsychologists report prevalence rates within their practices based on whatever idiosyncratic criteria they use (e.g., Mittenberg, Patton, Canyock, & Condit, 2002). Mittenberg et al. surveyed 131 neuropsychologists on the prevalence of malingering encountered in their practice. They reported a prevalence of probable malingering of 29% among personal injury cases, 30% among disability cases, 19% among criminal cases, and 8% among medical cases. Similar estimates have been reported in other studies (Binder, 1993; Green, Lees-Haley, Allen, & Rohling, 2001; Greiffenstein, Baker, & Gola, 1994).

There is currently no professional consensus on the issue of whether or not to warn examinees that suboptimal performance may be detected. Slick and Iverson (2003) argue that it is good practice from an ethical perspective to give litigants a *general* warning regarding the fact that malingering may be detected. There is evidence that such general warnings are unlikely to significantly reduce the sensitivity of techniques for detecting suboptimal performance (e.g., Suhr, 2002). In contrast, others (e.g., Youngjohn et al., 1999) have cautioned that warning examinees of the presence of *special techniques* to detect malingering is likely to reduce the sensitivity of such techniques. Regardless, it is not known how often, if ever, experts give ei-

ther general or specific warnings. Nor is there any guidance in the literature regarding expert's preferred course of action when malingering is strongly suspected in individual cases.

Past surveys have looked at some of the practices and beliefs of neuropsychologists (Sweet, Moberg, & Suchy, 2000), and the characteristics and contents of written reports (Donders, 2001a, 2001b), but none have dealt specifically or in depth with the issue of malingering. In this study, we surveyed neuropsychologists identified as experts with regard to their assessment practices with financial compensation claim or personal injury litigation cases, focusing primarily on the identification of malingering or symptom magnification and related issues.

## 1. Method

### 1.1. Design and procedure

A survey of the practices used by 'expert' neuropsychologists in North America to identify suboptimal performance or malingering was carried out between January and March of 2002. The questionnaire explored five areas: (1) Basic demographics; (2) description of practice; (3) use of various symptom validity tests and techniques; (4) confidence in ability to detect malingering; (5) perception of base-rate of malingering in cases examined; and (6) management of clients suspected of malingering or suboptimal performance.

To be identified as an expert, individuals had to have published at least two articles on methods of detecting suboptimal performance or malingering between 1996 and 2001. Two methods were used to generate the list of experts. First, a *PsycInfo* search was conducted using these keywords: *malingering\** and (*head or brain or cognitive or neuropsycholog\**). Individuals who were not identified by using *PsycInfo*, but were known by the investigators to have published frequently on this topic were then added to the list. This method produced a list of 70 experts.

A research assistant made initial contact with the experts by phone or email. The experts were given the option to do the survey via phone or a questionnaire that was sent via email or fax. Individuals who reported that they had not examined any personal injury litigants or persons seeking injury-related financial compensation in the past year were removed from the study.

### 1.2. Participants

A list of 70 experts were identified as described above. Seven of these were removed from the list because they did not reside in North America. Nine experts were dropped from the list because their contact information could not be obtained. Fifteen reported when initially contacted that they had not seen any litigation or other compensation-seeking cases in the past 12 months. Accordingly, the final sample consisted of 39 individuals, 15 of whom did not respond. Thus, the results of the study were based on a total of 24 (61.5%) out of 39 possible responses.

There were 19 male and 5 female respondents. Table 1 shows the demographic information of the participants. All but one participant had a Ph.D. degree. About half the sample was board certified, most with the American Board of Clinical Neuropsychology (ABCN). The average

Table 1  
Demographics of respondents ( $N = 24$ )

Gender	
Male (%)	79.2
Female (%)	20.8
Degree type	
Ph.D. (%)	95.8
Psy.D. (%)	4.2
Board certification	
Not certified (%)	45.8
ABPP (%)	25.0
ABCN (%)	33.3
ABPN (%)	4.2
Other (%)	12.5
Type of work	
Academic	
Mostly (%)	28.6
Partially (%)	61.9
Little to none (%)	9.5
Private practice	
Mostly (%)	30.4
Partially (%)	39.1
Little to none (%)	30.4
Hospital-based	
Mostly (%)	39.1
Partially (%)	26.1
Little to none (%)	34.8
Consulting	
Mostly (%)	10.0
Partially (%)	40.0
Little to none (%)	50.0

respondent had obtained their degree 15 years ago and most (71%) had evaluated more than 20 claimants in the past year. The aggregate number of cases upon which the survey respondents based their responses was therefore about 720 claimants, or an average of 30 cases per expert. More than 90% of the claimants were adults.

## 2. Results and discussion

### 2.1. Use of psychometrists

Approximately 75% of the respondents employed a psychometrist or psychological associate to perform the testing on the clients. This value is somewhat higher than that reported by Sweet et al. (2000) (44–65% depending upon the type of practice). Only in 25% of the cases did the psychometrist do all of the testing.

Table 2

Ranked frequency of use of specific techniques to detect sub-optimal performance

	Percent responding			
	Never	Rarely	Often	Always
Test of Memory Malingerer (TOMM)	29.2	25.0	20.8	25.0
Rey 15-Item	25.0	37.5	20.8	12.5
Recognition Memory Test (RMT)	50.0	25.0	8.3	16.7
Word Memory Test (WMT)	50.0	29.2	16.7	4.2
Validity Indicator Profile (VIP)	66.7	12.5	12.5	8.3
Computerized Assessment of Response Bias (CARB)	66.7	16.7	8.3	8.3
Portland Digit Recognition Test (PDRT)	58.3	25.0	8.3	8.3
Victoria Symptom Validity Test (VSVT)	79.2	4.2	8.3	8.3
Digit Memory Test (DMT)	79.2	8.3	4.2	8.3

### 2.2. Use of symptom validity tests and special techniques

The majority of experts (75%) reported using a flexible test battery. Sweet et al. (2000) reported similar data in their recent survey of clinical neuropsychologists. Frequency of use of specific tests and techniques to detect suboptimal performance is shown in Table 2. In general, there is considerable variability in test usage. The Test of Memory Malingerer (Tombaugh, 1996) is the most frequently used measure, followed by the Rey 15-Item (Lezak, 1995). This finding, particularly with regard to the Rey 15-Item test, is somewhat surprising given the abundant literature indicating the test's lack of sensitivity and specificity (e.g., Spreen & Strauss, 1998; Vallabhajosula & van Gorp, 2001). Low cost, ready availability, and ease of administration may account for its popularity.

While there was considerable diversity in the choice of SVT, most experts (79%) reported using at least one specialized technique in every examination. All neuropsychologists using a fixed battery included a SVT as a standard measure.

It should be noted that experts reported using tests and techniques other than those listed above. Most experts indicated that they supported their diagnostic impressions from multiple sources of evidence. Thus, they routinely evaluate indexes from standard neuropsychological tests (e.g., Rey Auditory Verbal Learning Test, California Verbal Learning Test, Digit Span, Wechsler tests, Wisconsin Card Sorting Test, Category Test, MMPI). In addition, there were isolated reports of use of other symptom validity tests (e.g., the 21-item, Rey Dot Counting, Letter Memory Test, B-Test, VIP, Amsterdam Short-Term Memory Test).

With regard to time of test administration, 50.0% of experts *always* give measures specifically designed to detect sub-optimal performance at the *beginning* of the assessment while 45.8% reported giving such measures anytime during the course of an assessment as the need arises.

### 2.3. Perception of base-rates of malingering and confidence in detection ability

Experts were asked to estimate the proportion of cases seen in the past 12 months who were definitely or possibly malingering. As shown in Table 3, responses varied from less than

Table 3  
Estimated prevalence of malingering

	Prevalence (%)				
	<5	5–10	10–20	20–30	>30
Percent of respondents reporting listed prevalence of <i>definite</i> malingering	16.7	16.7	33.3	20.8	12.5
Percent of respondents reporting listed prevalence of <i>possible</i> malingering	16.7	33.3	16.7	12.5	20.8

5% to greater than 30%. One of the respondents indicated a base-rate of zero. One-half of the respondents reported that the base-rate of *possible* malingering was at least 10% and one-third reported a prevalence of 20% or higher. Two-thirds of the respondents reported that the prevalence of *definite* malingering was at least 10% and one-third reported a prevalence of 20% or higher. Only a minority of respondents reported base-rates of possible or definite malingering below 5%. These estimates correspond to rates reported by Mittenberg et al. (2002), and indicate that the performance of a significant minority of litigants is thought to be suspect.

The average rating of confidence in ability to detect exaggerated or faked deficits was 7.75 (S.D. = 1.51) on a scale ranging from 1 to 10 with 10 being the highest level of confidence. This shows that most experts are relatively confident but most would also likely agree that a minority of malingerers are able to avoid detection. Ratings of confidence in ability to detect malingering were weakly correlated with reported base-rates of definite malingering ( $r = -.13$ ,  $P = .44$ ), but were strongly correlated with reported base-rates of possible malingering ( $r = -.79$ ,  $P < .01$ ). That is, those respondents who reported higher rates of possible malingering generally reported lower confidence in their ability to detect malingering.

#### 2.4. Management of clients suspected of malingering

Opinion was divided on whether or not to warn clients prior to testing that poor effort, exaggeration or faked impairments may be detected by the tests. More than half the experts never gave any type of warning prior to the testing session (Table 4). More than a third gave some type of warning.

Experts were asked about their practices once they became suspicious of a client's motivational status during the test session (Table 4). More than half altered their routine (58.3%) at least on some occasions. This was true regardless of whether or not a psychometrist was employed. Most experts (70.8%) reported encouraging the client to give good effort. Some (about 25%) directly confront or warn the client. Most (73.4%) typically administer additional SVTs. Few (16.6%) terminate the examination earlier than planned although about a quarter (29.2%) contact the referring attorney immediately.

With regard to the communication of results when malingering is suspected or certain (Table 4), virtually all of the respondents (95.8%) always made some kind of statement to this effect in their report. Few (less than 5%) either did not write reports or (less than 5%) wrote reports that they did not subsequently submit. In terms of phrasing their opinion, most experts (more than 80%) tended to state that the test results were invalid, inconsistent with the severity of the injury or indicative of exaggeration. Experts appeared cautious in using the

Table 4  
Management of clients

	Percent responding				
	Never	Rarely	Sometimes	Often	Always
Prior to commencing testing, do you give litigants any type of warning regarding the fact that psychological tests may be sensitive to poor effort, exaggeration or faking of deficits?	54.2	0.0	8.3	0.0	37.5
Considering only those cases where you were highly suspicious or certain that an examinee was exaggerating or malingering cognitive deficits, how often did you:					
Continue the examination with no change in routine	8.3	16.7		33.3	41.7
Encourage examinee to give good effort	4.2	8.3		16.7	70.8
Directly confront or warned examinee to give good effort	50.0	25.0		20.8	4.2
Administer additional “malingering” tests	12.5	12.5		37.5	33.3
Terminate the examination earlier than planned	33.3	50.0		8.3	8.3
Contact the referring attorney immediately	45.8	25.0		16.7	12.5
State this opinion in your report	0.0	0.0		4.2	95.8
Write a report but did not submit it	75.0	16.7		0.0	4.2
Not write a report	66.7	25.0		4.2	0.0
When litigants obtain test results that you believe are indicative of exaggerated or malingered deficits, how do you usually express this opinion in a report or other professional communication? How often do you say that:					
Test data are invalid	0.0	8.3		45.8	45.8
No firm conclusions can be drawn	4.2	37.5		41.7	16.7
Test results suggest or indicate exaggeration	4.2	8.3		50.0	33.3
Test results suggest or indicate malingering	12.5	41.7		29.2	16.7
Test results are inconsistent with severity of injury	4.2	0.0		70.8	25.0

term ‘malingering’ in their reports. Thus, 12.5% reported that they never used the term, while 41.7% rarely used it.

### 3. Conclusions

Some limitations of our study need to be mentioned. While a good survey return rate was achieved, a substantial minority of experts did not respond and thus our findings are not fully comprehensive. A different definition of expert status than that employed to select participants for this survey (e.g., those who have conducted a large number of litigation assessments, or who are routinely called upon to give expert testimony, or who are recognized as experts in multiple jurisdictions) would have resulted in a different pool of ‘experts’ and a different set of findings. In a few cases, our impression was that estimates of the prevalence of malingering given by experts were based on actual audits of their case data. However, most estimates appeared to be retrospective impressions, which may be less accurate. Moreover, even if all prevalence estimates were derived from audits, the issue of ascertainment remains. That is, in the absence of universally accepted and adhered-to guidelines, case-by-case decisions about the presence

or absence of malingering will vary across experts as a function of multiple factors, including the tests and other methods of assessment employed, type and extent of training and clinical experience, predominant referral type (e.g., plaintiff vs. defense), unique aspects of individual cases, and general beliefs and biases concerning malingering and litigating examinees.

Bearing these limitations in mind, what guidelines can be provided to the practitioner? The general consensus from our experts is that malingering occurs in a significant minority of patients. Experts always give at least one symptom validity test although it is worth noting that one of the most commonly used test (Rey 15-Item) is the least effective (e.g., Spreen & Strauss, 1998; Vallabhajosula & van Gorp, 2001). Other symptom validity tests are frequently used as well although the precise measure varies from one expert to another. Experts also routinely rely on indicators of suboptimal performance from conventional tests. There is no firm consensus on when the tests should be given or whether warnings at the outset of testing should be given. Once suspicion is aroused, however, test routines are typically altered. Additional symptom validity tests are frequently given and litigants are encouraged to give good effort. Rarely are sessions terminated. Finally, the term ‘malingering’ tends to be avoided in reports. Rather, experts generally indicate that the test results are invalid and inconsistent with the severity of the injury.

The intention of this paper is not to define or advocate standards of practice, but rather to offer one perspective on the current state of the art as defined by the practices of a select group of neuropsychologists. Our own view is that routine use of at least two of the most efficient and well validated measures for detecting suboptimal effort should be a core element of any standards for the assessment of litigants and that in most cases the data from such measures should be given greater weight than subjective factors when evaluating the validity of test results.

## Acknowledgments

This research was supported by an NSERC grant to Dr. Strauss.

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