### MALINGERING OF ORGANIC ILLNESS OR MENTAL DISORDER

Mercedes Inda Caro\*, Serafín Lemos Giráldez\*, Ana María López Rodrigo\* and José Luis Alonso Rionda\*\*

\* Psychology Faculty, University of Oviedo \*\* Mental Health Service of Asturias

The purpose of this article is to analyze the nature and incidence of malingering and to describe several general measures used for determining symptom validity, as well as some instruments specifically created for assessing deception or malingering in clinical settings. In particularly, we consider some useful criteria for detecting the faking of post-traumatic stress disorder, or-ganic brain syndromes, amnesia, and psychotic disorders.

Se analiza la naturaleza y la frecuencia de la simulación de síntomas clínicos, y se describen algunos instrumentos de medida generales, que han sido utilizados para determinar la validez de los síntomas, así como pruebas específicas para tomar decisiones respecto a la existencia de simulación en el ámbito clínico. En particular, se presentan algunos criterios de utilidad para evaluar la existencia de simulación de un trastorno de estrés post-traumático, de un síndrome orgánico cerebral, de amnesia y de un trastorno psicótico.

n the psychological context, the general concept of "simulation" covers dissimulation or deception, as well as faking, but the type of simulation we are concerned with here is normally defined as malingering, which refers to the conscious and deliberate invention of a physical or mental disorder, or the attribution of an existing incapacity to an accident or illness which was not actually its cause, in order to derive some personal benefit. The DSM-IV defines malingering as "the intentional feigning or exaggeration of physical or psychological symptoms, motivated by external incentives such as avoidance of work or military service, receipt of financial compensation, evasion of criminal prosecution, or procurement of prescription drugs. Under certain circumstances, malingering may constitute adaptive behaviour: for example, feigning illness while in captivity as a prisoner of war" (American Psychiatric Association, 1995, p. 698).

The concept is considered more closely by Resnick (1997), who distinguishes between *pure malingering*, simulation of a non-existent disorder; *partial malingering*, the conscious exaggeration of present symptoms or of a now-cured disorder; and *false imputation*, the erroneous attribution of real symptoms to a particular cause, due to non-deliberate self-deceit or a wrong interpretation of the situation.

Gorman (1982) also distinguished between the act and

the state of malingering, insofar as the act implies wilfulness, an assertive attitude of desire and purpose, while the state, from a legal point of view, would be inherent to the person, due to their social condition or possible limitations.

On the other hand, the question arises as to whether malingering can, in itself, be the reflection of some mental disorder. This is fairly clearly the case in the so-called factitious disorder (American Psychiatric Association, 1994), in which the person intentionally feigns physical or psychological symptoms, with the aim of taking on the sick role, or in histrionic personality disorder, due to lack of control over one's manipulative behaviour; however, the conscious exaggeration of physical or mental complaints in order to achieve a financial, professional or similar objective may also be a neurotic behaviour, since nobody "in their right mind" would normally go to such extremes, nor choose such tortuous and painful routes, in the pursuit of potential benefits. Nevertheless, the law does not make such distinctions, and considers certain behaviours to involve clear intention on the part of the person carrying them out (Gorman, 1982).

The incidence of malingering after an accident is not well known, being estimated at between 1% and 50% of cases (Henderson, 1986; Miller & Catlidge, 1972), depending on whether the source of information is the claimant's lawyer or the insurance company. An influential factor here concerns the financial and employment conditions, since it has been observed that such malingering increases when redundancies are immi-

Correspondence: Mercedes Inda Caro, Facultad de Psicología, Universidad de Oviedo, Plaza Feijóo, s/n, 33003 Oviedo, Spain. E-mail: indamaria@uniovi.es

nent, and decreases when employees' financial or work situation improves. The disparity in estimations of the incidence of malingering may be due to the difficulty in distinguishing between those who totally invent the symptoms and those who exaggerate already-existing complaints –in whose case we could more properly speak of "patients".

Furthermore, the identification of malingerers and the study of their behaviour have traditionally been beset with difficulties. Thus, for example, in the context of compensation claims for the consequences of accidents, as in judicial processes in relation to diminished responsibility, it is found that people with access to information related to brain disorders and neuropsychological tests are more likely to able to influence their results (Coleman, Rapport, Millis, Ricker & Farchione, 1998; Youngjohn, Lees-Hayley & Binder, 1999). Research on malingering has shown training (such as the provision of information on the most common deficits associated with a brain lesion, or drawing attention to the presence of measures for detecting possible malingerers) to be another of the factors that can affect the validity of malingering indices. Studies carried out with university students, trained in simulating organic brain disorder, show that their performance is more similar to that of real patients than the performance of malingerers who are novices or who have no experience in the field of neuropsychological assessment. Nevertheless, the performance of such naïve malingerers is overwhelmingly poorer than that of persons with real brain lesions.

One of the many limitations observed in this type of research is the excessive use of samples of university students, who are asked to simulate brain damage (Strauss et al., 2002; Vickery, Berry, Inman, Harris & Orey, 2001), insofar as they are not comparable to true malingerers. Unlike simulators in experiments, real malingerers seek financial benefit from their "lesion", tend to have extensive knowledge of the problem through having undergone multiple assessments by a variety of experts (often at one- or two-week intervals), have observed patients with genuine disorders -thus learning passively and unconsciously-, and tend to have more time to prepare their assessments and examinations. Obviously, true malingerers do not acknowledge or admit their condition, which rules out their inclusion in studies. Despite such difficulties, in studies with analogue subjects it is possible to study simulation through the inconsistencies in repeated trials. In fact, it is quite difficult to maintain the

same performance when large batteries of tests are employed, so that this method permits researchers to obtain a valid index for detecting possible malingering (Cullun, Heaton & Grant, 1991). Furthermore, on comparing patients involved in litigation over their lesions with patients with the same lesions but not involved in lawsuits, it is found that in the former group there is less consistency between their assessments than in the second group, the results of the later assessments being poorer than those of the initial assessments (Reitan & Wolfson, 1996, 1997).

### DISORDERS THAT ARE FREQUENTLY THE OBJECT OF MALINGERING

### Post-traumatic stress disorder (PTSD)

In order to establish PTSD it is necessary to carry out a meticulous description of the symptoms and the treatments previously applied and to carefully corroborate the veracity of the information. In the phase of obtaining information the clinician should be extremely careful not to provide any information to the person about the key symptoms of this disorder. Moreover, if the clinician begins the assessment by questioning the patient's responses, such an aggressive approach may affect the response style, and may lead the person to justify his or her injury by means of extreme symptoms. One of the disadvantages of clinical diagnosis is that it is based on patients' self-reports about subjective symptoms. Thus, the allegedly affected person's activity one week before the occurrence of the stressor is to be compared with their activity at the time of the assessment; on the basis of this, it is examined whether there is a reasonable relationship between the symptoms and the stressor, taking into account also the time elapsed since the stressor and onset of symptoms, and the relation between any previous disorder and the current symptoms. The psychologist should insist on being provided with a detailed description of the symptoms of the disorder. Malingerers may have extensive knowledge of the characteristic PTSD symptoms, but they normally fail to fit these symptoms to their everyday life, giving a description with little hard detail. Invented symptoms tend to be vague, and often quite contrived and unconvincing (Pitman, Sparr, Saunders & McFarlane, 1996). Another indicator of possible malingering is that the person minimizes other potential causes of their symptoms and exaggerates as the cause the accident or situation for which they are demanding compensation.

Resnick (1997) suggests that third persons should not be present during the assessment, for two reasons: first, because relatives or close friends present may be used as "independent" sources for corroborating the veracity of the symptoms; and second, because it is easier for the clinician to challenge a possible malingerer when the two are alone. Another aspect stressed by this author is the advantage of a friendly and cordial approach by clinicians on telling suspected malingerers that they think they might be exaggerating the symptoms, rather than being aggressive or trying to humiliate, by using witnesses, for example; with the latter approach, the person may refuse to admit it and become angry. Resnick sets some guidelines to be followed by the clinician who suspects simulated PTSD (Table 1), and a clinical decision model for determining the existence of malingering in the case of this disorder (Table 2).

### Post-traumatic brain damage syndrome

This disorder is quite common today, largely as a consequence of occupational or road traffic accidents. It tends to be manifested through headaches, dizziness, anxiety, emotional instability, blurred vision, concentration deficit and memory problems. Of all the symptoms, the easiest to simulate are emotional ones. Post-traumatic brain damage syndrome can be confused with PTSD, since it is quite frequent after sustaining cranial-encephalic trauma. The two disorders have components in common, such as loss of memory of some element of the traumatic event, depressive symptoms (anhedonia, restricted affect, pessimistic attitude about the future), sleep alterations, irritability, concentration difficulties and intolerance of loud noises. However, some authors, such as Price (1994), maintain that it is not possible for the two disorders to coexist in the same person, since someone who has sustained a brain lesion with loss of consciousness will not be able to re-experience the traumatic event; hence, the mutually exclusive nature of the two disorders will justify the conclusion of malingering when the two are allegedly presented simultaneously.

### Amnesia

The principal measures developed for detecting malingering in relation to memory disorders include very simple tests, which can be carried out correctly even by people with brain damage, and in which malingerers tend to show more deficits than true patients. A so-called *floor effect* comes into play when novice malingerers "overact" and commit many errors in these tests; however, Cercy, Schretlen and Brandt (1997) point to several problems with these techniques. First, people with experience in simulating amnesic symptoms are aware of this strategy and avoid performing too badly in the tests. Secondly, despite the apparent simplicity of the tests, some patients with real brain damage or with neuropsychiatric disorders have considerable difficulties in carrying them out correctly.

A new current is developing for the detection of malingering in relation to amnesic disorders, represented by analysis of the *proactive interference phenomenon*. This phenomenon occurs when previously learned information interferes with the acquisition or subsequent recall of a new message, and it is analyzed, for example, by means of the paradigm of learning a word list. Proactive interference is reflected in a decline in memory for the words in it as the list progresses, so that the first words learned

### TABLE 1 THRESHOLD MODEL FOR THE EVALUATION OF MALINGERING IN POSTTRAUMATIC DISORDERS (RESNICK, 1997)

Any combination of the following criteria:

- 1. Poor work record
- 2. Prior 'incapacitating' injuries
- 3. Markedly discrepant capacity for work and recreation
- 4. Unvarying, repetitive civilian dreams
- 5. Antisocial personality traits
- 6. Overly idealized functioning before the trauma
- 7. Evasiveness
- 8. Inconsistency in symptom presentation

### TABLE 2

CLINICAL DECISION MODEL FOR ESTABLISHING MALINGERED PTSD (RESNICK, 1997)

#### A. Understandable motive to malinger PTSD

B. At least two of the following criteria:

- 1. Irregular employment or job dissatisfaction
- 2. Prior claims for injuries
- 3. Capacity for recreation, but not for work
- 4. No nightmares or, if nightmares, exact repetitions of the civilian trauma
- 5. Antisocial personality traits
- 6. Evasiveness or contradictions
- 7. Noncooperation in the evaluation
- C. Confirmation of malingering by one of the following criteria:
  - 1. Admission of malingering
  - 2. Unambiguous psychometric evidence of malingering or strong corroborative evidence of malingering

interfere in the coding and storage of subsequent ones. Interference is greater when the new information is very similar to that already stored (as in the case of words from the same semantic category) than when a different category is introduced; in the latter case there is some recovery of memory processes (Wickens, 1970). The effect of proactive interference has been shown in patients with real brain lesions, but not in people attempting to simulate memory impairment, who recall the later words of the list better than the earlier ones. This phenomenon, however, has not been confirmed by other authors, who have failed to find differences of degree between malingerers and patients with genuine cerebral damage (Baker, Hanley, Jackson, Kimmance & Slade, 1993). The relevance of proactive interference as a detector of malingering is based on the assumption that it is an automatic cognitive process, outside the conscious control of the subject.

Baker and cols. (1993) also explored the potential influence of a distractor on recall of a set of stimuli when it appeared between their presentation and the recall task; however, they found no significant differences when recall of the items was required after a 20-second interval in which subjects had to count backwards. False patients, on the other hand, performed far worse in this test.

Other studies have focused on the detection of malingering through tests of implicit memory (García Domingo, Gregredo López & Fernández Guinea, 2004). The performance of amnesic persons is generally closer to that of normal persons in tests with the priming effect, and in tasks that do not require explicit recall of the learned episode. For example, when patients with amnesia process a series of words without being told that they will later be asked to remember them, and are subsequently shown the root of the word or fragments of it, the probability of their recalling the word correctly is very high. This priming phenomenon is considered to be controlled by independent neurocognitive processes. Wiggins and Brandt (1988) suspected that malingerers would perform these implicit memory tests more poorly than true patients and, indeed, they found malingerers' performance to be relatively poorer, though they did not find statistically significant differences.

Another procedure for detecting malingerers has involved assessment of the so-called *feeling-of-knowing*, or a person's sensation of having partial recall: in other words, whether the person is aware of suffering from amnesia. However, some authors consider this indicator to be limited, given the variability among true amnesic patients. Even so, it has been found that people who simulated memory disorders and who had scored lower in a forced-choice test showed low levels in *feeling-of-know-ing* (Schacter, Harbluck & McLachlan, 1984).

### **Psychosis**

The prevalence of simulated psychosis is unknown, though Resnick (1984) considers that, given the trend towards deinstitutionalization, it could be on the increase, since thousands of chronic patients, who would prefer to live in a more protected environment, currently find themselves socially marginalized. With the drastic cutbacks in social programmes and improvements in hospital conditions, people with mental disorders may exaggerate their symptoms in order to obtain medical help; such behaviour would be comparable to that of patients with schizophrenia, who display a remarkable ability to appear healthy or sick depending on their current objectives (Rogers, Kropp, Bagby & Dickens, 1992). Simulation of a psychotic disorder may occur for a variety of reasons: avoidance of responsibility by persons involved in judicial proceedings; avoidance of military service or of postings to dangerous places (no longer applicable in Spain); obtaining financial benefit due to psychological injury or effects; release from standard prison conditions (simulation of a psychotic state to obtain transfer to a hospital, in order to gain easier access to drugs or improve the chances of escape).

Specialists lament the lack of diagnostic criteria for establishing the existence of malingering in these cases. Resnick (1997), however, suggests some principles to be taken into account by the clinician who suspects a case of malingering. Thus, with regard to auditory hallucinations, suspected malingerers should be asked about the strategies they employ for reducing the voices or making them disappear. In addition to the fact that genuine patients tend to present a reduction in this type of hallucination when the schizophrenia is in remission, while in acute outbreaks they occur with great frequency, the coping strategies used by patients with schizophrenia include specific activities, such as working or watching television, changing position (e.g., lying down or walking around), talking to a friend or relative, or rapidly taking one's medicine; in general, they find that their hallucinations tend to decrease when they are involved in some activity. These spontaneous actions and the corresponding mitigating effect on the hallucinations should



be assessed in suspected malingerers, since, if they do not have profound knowledge of the illness, they will fail to provide such information during the interview. Genuine hallucinations are characterized by a wide range of nonsensical murmurs and cries; on the other hand, the rhythm of discourse is normal. In contrast, malingerers sometimes refer to the content of their hallucinations in a contrived and over-complicated way. With regard to visual hallucinations, Resnick suggests that malingering should be suspected when their content is dramatic or atypical.

As far as delusions are concerned, malingerers report their sudden appearance, when it is well known that "real" delusions are built up over months or years, until they become systematized. When delusional ideas appear, they tend to have little influence on the patient's everyday life, even though the patient is convinced of their veracity. In the assessment of whether or not a delusion is genuine, Resnick points out the importance of considering its content. Feigned delusions tend to be persecutory, or of grandeur, but are rarely self-deprecatory. Moreover, the behaviour of malingerers is not usually in accordance with the content of the supposed delusion, whilst in persons with genuine psychosis, its behavioural relevance is greater.

Another symptom that persons with psychotic disorder often present is mutism. In malingerers, mutism may appear as an isolated symptom or as part of a more general simulated psychosis. Catatonic behaviour or waxy flexibility are very difficult to maintain for prolonged periods, so that a way of determining whether a person is feigning is to see how they react when pricked on the back with a pin. Those with genuine catatonia will respond in the same way regardless of whether they see the painful stimulus in advance; malingerers, on the other hand, will respond differently depending on whether they anticipate the stimulus or not: if they see the examiner approaching them with the pin, they will present a small reaction, having previously tensed their muscles; if they are pricked without having seen the pin they will present less muscular contraction and pupillary dilation.

In the case of conversion disorders, it is more difficult to detect malingering. Resnick argues that the distinguishing criterion is whether the mutism behaviour is under the person's voluntary control. Knowledge of the precise details of how the person came to stop speaking is very important, according to Resnick. People with conversion disorders are usually capable of writing and whispering, and tend to have a history of other conversion symptoms, as a result of a dissociative disorder, for example; on the other hand, in malingerers it is common to find a history of antisocial behaviour with lying, and a criminal record.

As regards simulation of psychotic depression, it is well known that diurnal variation forms part of its clinical expression, so that the genuine patient presents greater severity of symptoms and more dysphoric mood states in the morning and some improvement towards the end of the day. Such clinical fluctuation is less likely to be reported by malingerers, on lacking profound knowledge of the disorder.

### ASSESSMENT METHODS

Procedures for the assessment of malingering, in the clinical context, have been based on the use of conventional neuropsychological measures and of specifically designed tests.

Within the first option, researchers have analyzed: performance curves in tasks of varying difficulty (Baker et al., 1993; Frederick, Crosby & Wynkoop, 2000; Tehula & Sweet, 1996); correct responses in recall and recognition tasks and tasks that require subjects to discriminate between two types of stimulus (Coleman et al., 1998; Slick, Iverson & Green, 2000; Suhr & Gunstad, 2000; Sweet et al., 2000); memory tasks (Davis, King, Bajszar & Squire, 1995; Hanley, Baker & Ledson, 1999); digit span (Strauss et al., 1999; Suhr, Tranel, Wefel & Barrash, 1997); comparison of attention and memory indices (Mittenberg, Azrin, Millsaps & Heilbronner, 1993); and semantic knowledge (Mittenberg, Theroux-Fichera, Heilbronner & Zielinski, 1995). Although instruments of this type are considered optimum for detecting possible cases of malingering, it is also deemed necessary to apply complementary tests to improve the validity and reliability of the results. Lezak (1995) lists the following classic neuropsychological tests for the detection of malingerers:

- The Bender Test, with the recommendation of carrying out a retest several days after the first assessment (since the subject will forget what the response patterns were), and inverting the order of the cards.
- The Benton Visual Retention Test, in which malingerers make more distortion errors than patients with brain lesions, but not more omission errors.
- The Halstead-Reitan Battery (including the WAIS), in which malingerers perform worse on the tests than patients with lesions, except in the cases of the Category Test, the Tactile Performance Test and part B of the Trail Making Test.

#### MALINGERING

### Special Section

- The Minnesota Multiphasic Personality Inventory (MM-PI), in which malingerers also obtain poorer profiles than genuine patients.
- The Porch Index of Communicative Ability (PICA), for malingering of aphasic disorder.

Among the tests designed specifically for assessing malingering, two methodological lines can be identified. One is based on the so-called symptom validation paradigm (Pankratz, Fausti & Peed, 1975), originally designed for assessing deficits in sensory functioning, and later extended to the detection of simulation of memoryrelated lesions (Binder & Willis, 1991; Frederick & Foster, 1991; Iverson, Franzen & McCracken, 1991; Pankratz, 1983). This paradigm involves the administration of forced-choice tests with two response options, whose results are based on probabilities (Slick, Hopp, Strauss & Thompson, 1997; Tombaugh, 1996), and which set confidence intervals, above or below which scores are considered as indicative of simulation or exaggeration of symptoms, and cut-off points for the selection of responses. For example, persons who are not trying to simulate should obtain at least 50% of correct responses, which is the result that would be expected from someone responding at random. This was the cutoff criterion initially employed, but it was found in trials that normal persons pretending to be malingerers did not score below the response levels expected by chance, though they did make more errors than genuinely sick and honest patients. Therefore, it was decided to establish cut-off points in relation to the performance expected of a person with a real lesion and no intention to exaggerate or simulate.

Some researchers have begun to explore the utility of concealed measures, obtained from "objective" responses made by suspected malingerers, which cannot be manipulated by these persons or "improved" with successive assessments. An example of this is the computerized version of the *Portland Digit Recognition Test*, by Rose, Hall and Szalda-Petree (1995), which includes a measure of subject's response latency. These authors found that the incorporation of this measure into the original version created by Binder and Willis (1991) improved the test's sensitivity in the identification of possible malingerers.

The second methodological line in tests designed specifically for the assessment of malingering involves the study of the type of response the patient makes; for example, the way in which the patient reads very simple words or counts the number of dots appearing on a screen (Boone et al., 2000; Strauss et al., 2002). An example of this would be the *Dot Counting Test* (Binks, Gouvier & Waters, 1997), in which subjects are presented with a series of cards with grouped and ungrouped dots and asked to count the number of dots they see on the screen, scores being based on number of hits and time employed in counting the stimuli.

### ASSESSMENT BY MEANS OF INTERVIEWS AND SELF-REPORTS

Another form of detecting malingering consists in assessing the behavioural symptoms of the problem. Initial approximations were made by means of tests whose specific objective was not the detection of deceit, but which included some subscales for measuring the validity of the instrument. The first of these, and the most wellknown, is the Minnesota Multiphasic Personality Inventory (MMPI), whose F Scale has the purpose of detecting atypical response styles. With this scale, however, various problems were detected, such as overlap between scores obtained by genuine patients and those obtained by possible malingerers, and the poor sensitivity of this scale for detecting specific malingering situations, such as the simulation of memory disorders. The DM subscale of Cattell's 16 PF has also been the object of criticism in this context.

The *M Test* (Beaber, Marson, Michelli & Millis, 1985) was the first instrument developed with the primary objective of detecting possible malingerers. However, validation studies have also called this test into question, with Hankins, Barnard and Robbins (1993) arguing that it seems rather to detect persons that present cognitive deficit or deterioration. In an attempt to improve the test, Rogers and cols. developed a new scoring system, obtaining optimum results in the differentiation between psychiatric patients from a prison and a hospital (Rogers, Bagby & Gillis, 1992). Smith, Forum and Schinka (1993), on the other hand, failed to confirm these results with a similar population.

The Malingering Scale (Schretlen, 1986) constitutes another attempt to construct a test for detecting malingerers by means of psychometric assessment. This instrument consists of two scales: the malingering retardation, or MgR scale, and the malingering insanity, or Mgl scale. However, Smith and Burger (1997) point out that studies developed for validating the test have methodological deficits, related to sample bias, and that the test itself has practical drawbacks, such as its length (150 items) and



the need for it to be applied by an experienced assessor.

Rogers and cols. developed the SIRS (Structured Interview of Reported Symptoms) with the aim of unmasking those who are feigning or exaggerating a mental disorder (Rogers, Gillis & Bagby, 1990; Rogers, Gillis, Dickens & Bagby, 1991; Rogers, Kropp et al., 1992). The SIRS is an interview with 172 questions, distributed in 8 primary scales and 5 additional or complementary scales. The former are used for distinguishing between honest respondents and malingerers, and for assessing response styles. These primary scales explore: Rare Symptoms (RS) (genuine, but uncommon); Improbable and Absurd Symptoms (IA); Symptom Combinations (SC) (referring to the low probability of two genuine symptoms being presented simultaneously); Blatant Symptoms (BL); Subtle Symptoms (SU) (referring to symptoms seen by patients as problematic, when in fact they are not); Selective Symptoms (SEL); Symptom Severity (SEV); and Reported versus Observed Symptoms (RO).

With the complementary scales the clinician can make an interpretation of the subject's response styles. This second block consists of: Direct Appraisal of Honesty (DA); Defensive Symptoms (DS); Symptom Onset (SO); Overly Specified Symptoms (OS); and Inconsistency of Symptoms (INC).

The questions can be grouped in three categories: (a) detailed questions, aimed at exploring the severity of specific symptoms; (b) repeated questions, for control purposes in relation to responses to the questions from section a; and (c) general questions, aimed at examining patterns of symptoms and psychological problems.

In developing the SIRS, Rogers (1984) reviewed the literature to identify strategies of possible utility for the detection of malingerers, selecting those that met the following criteria: (a) relevance for detecting malingering of a mental illness, as opposed to other forms of deceit, and (b) ease of standardization. On the basis of these criteria, Rogers selected five strategies, from which he generated 330 questions to make up the first version of the SIRS. The scales were formally constructed following two steps: on the one hand, based on the agreement among eight experts, the apparent and descriptive validity of the proposed scales were sought, the items being assigned to the strategy they believed most appropriate, so that when at least five of the eight experts coincided with Rogers' classification the item was placed in the corresponding scale; and on the other hand, the item-scale correlations were calculated, those items that failed to correlate with the assigned scale being eliminated. The alpha coefficients of the scales were between 0.66 and 0.92, with a mean of 0.86 (Rogers, 1997).

The results for each one of the scales are classified in four categories: honest, indeterminate, probable malingering and definite malingering. The person is considered to be attempting to deceive if the score on three or more of the primary scales is in the range of *probable malingering*; or if the total SIRS score (the sum of those for the general questions and the detailed questions) exceeds 76. The person is considered to acting honestly if the score on six or more of the primary scales is in the range of *honest*, or if the global score is 71 or less.

Finally, the SIMS (Structured Inventory of Malingered Symptomatology) (Smith & Burger, 1997) is another instrument for the assessment of malingering, involving the self-report of 75 dichotomous items (true/false), grouped in five scales developed for detecting possible deception in the five most common clinical conditions of malingering: low intelligence, affective disorders, neurological damage, psychosis and amnesia. A total score is obtained from the five scales. Items were obtained from two different sources: first, already-existing instruments, such as the MMPI, SIRS and WAIS-R, which have shown some utility in the detection of possible malingering (these items were modified in order to increase their sensitivity in the detection of specific malingering situations); and second, the qualitative characteristics of malingerers (Resnick, 1984; Rogers, 1984; Seamons, Howell, Carlisle & Roe, 1981).

#### CONCLUSIONS

Malingering, deception or feigning potentially occur in all types of somatic illnesses and mental disorders. It is therefore necessary to use different assessment procedures for unmasking persons presenting or exaggerating a wide range of symptoms; it is by no means the same to simulate physical damage, such as a brain lesion, as it is to feign psychological damage, such as a mental disorder. Whatever the nature of the symptoms, it is often advantageous for a psychologist to participate in the assessment of their authenticity -particularly when the person's alleged problems affect the cognitive functions, such as attention or memory, and are accessible to neuropsychological assessment. Despite the fact that medical examinations can rule out organic brain damage, patients may often report problems in their everyday life when it comes to driving, remembering things, and so

on, and these are the factors mentioned by expert witnesses in court cases, and on which it is necessary to make a decision.

Credibility in relation to the genuine or simulated nature of symptoms or of these testimonies, insofar as it involves subjective opinions, is not particularly accessible to scientific study. Nevertheless, what can be studied is the validity of the symptoms or the clinical condition the person presents, in order to determine with scientific criteria a probable situation of malingering or exaggeration. Thus, it is suggested to undertake a multi-factor approach for determining the existence of a malingering situation; for this, it is necessary to: (1) determine the severity of the damage, through the verification of different symptoms; (2) assess the patient by means of standardized tests; (3) consider alternative psychological or medical diagnoses for explaining the cause of the symptoms adduced by the person; (4) use tests suitable for the demographic characteristics of the subjects assessed; and (5) use, simultaneously, neuropsychological tests and specific validity indicators for determining possible feigning of symptoms.

Esbec Rodriguez and Gómez-Jarabo (1999) have described, for example, up to twenty characteristics that can indicate malingering of a mental disorder, two of which stand out as the most important: the presence of some clear external benefit or gain due to the presentation of these symptoms, and verification that the subject had previously presented similar symptoms to those allegedly suffered at present.

Forensic Psychology, therefore, both in our own country and elsewhere, is faced with an important challenge: to determine, on a scientific basis, the validity of the testimonies and alleged symptoms of persons involved in judicial proceedings or who have been the victims of accidents or violence. In particular, it is necessary to develop structured and standardized procedures that permit well-founded judgements on the possibility of malingering. In the pursuit of this aim, the procedures developed by Arce and Fariña (2005) constitute a sound example to be followed.

### REFERENCES

- American Psychiatric Association. (1995). Manual Diagnóstico y Estadístico de los Trastornos Mentales (4th ed.). Barcelona: Masson.
- Arce, R. & Fariña, F. (2005). Peritación psicológica de la credibilidad del testimonio, la huella psíquica y la simulación: El Sistema de Evaluación Global (SEG). Pape-

les del Psicólogo, 26, 59-77.

- Baker, G. A., Hanley, J. R., Jackson, H. F., Kimmance, S. & Slade, P. (1993). Detecting faking of amnesia: Performance differences between simulators and patients with memory impairment. *Journal of Clinical and Experimental Neuropsychology*, 15, 668-684.
- Beaber, R. J., Marson, A., Michelli, J. & Millis, M. J. (1985). A brief test for measuring malingering in schizophrenic individuals. *American Journal of Psychiatry*, 142, 1478-1481.
- Binder, L. M. & Willis, S. C. (1991). Assessment of motivation after financially compensable minor head trauma. *Psychological Assessment*, *3*, 175-181.
- Binks, P. G., Gouvier, W. D. & Waters, W. F. (1997). Malingering detection with the Dot Counting Test. *Archives of Clinical Neuropsychology*, *12*, 41-46.
- Boone, K. B., Lu, P., Sherman, D., Palmer, B., Back, C., Shamieh, E., et al. (2000). Validation of a new technique to detect malingering of cognitive symptoms: The b test. Archives of Clinical Neuropsychology, 15, 227-242.
- Cercy, S. P., Schretlen, D. & Brandt, J. (1997). Simulated amnesia and the pseudo-memory phenomena. In R. J. Rogers (Ed.), *Clinical assessment of malingering and deception* (pp. 85-107). New York: Guilford Press.
- Coleman, R. D., Rapport, L. J., Millis, S. J., Ricker, J. H. & Farchione, T. J. (1998). Effects of coaching on detection of malingering on the California Verbal Learning Test. Journal of Clinical and Experimental Neuropsychology, 20, 201-210.
- Cullun, C., Heaton, R. & Grant, I. (1991). Psychogenic factors influencing neuropsychological performance: Somatoform disorders, factitious disorders, and malingering. In H. O. Doerr & A. S. Carlingf (Eds.), *Forensic neuropsychology: Legal and scientific bases* (pp. 141-171). New York: Gilford Press.
- Davis, H. P., King, J. K., Bajszar, J. H. & Squire, L. R. (1995). Colorado Malingering Test Package, version 2.0. Colorado Springs, CO: Colorado Neuropsychology Tests.
- Esbec Rodríguez, E. & Gómez Jarabo, G. (1999). Signos de sospecha en la simulación de los trastornos mentales. *Revista Española de Psiquiatría Forense, Psicología Forense y Criminología, 8*, 35-44.
- Frederick, R. L., Crosby, R. D. & Wynkoop, T. E. (2000). Performance curve classification of invalid responding on the Validity Indicator Profile. *Archives of Clinical Neuropsychology*, 15, 281-300.

- Frederick, R. L. & Foster, H. G. (1991). Multiple measures of malingering on a forced-choice test of cognitive ability. *Psychological Assessment*, *3*, 596-602.
- García Domingo, L., Gregredo López, L. & Fernández Guinea, S. (2004). Evaluación de la simulación de problemas de memoria dentro del ámbito legal y forense. *Revista de Neurología*, *38*, 766-774.
- Gorman, W. F. (1982). Defining malingering. *Journal of Forensic Sciences*, 27, 401-407.
- Hankins, G. C., Barnard, G. W. & Robbins, M. L. (1993). The validity of the M Test in a residential forensic facility. *The Bulletin of the American Academy of Psychiatry and Law, 21*, 111-121.
- Hanley, J. R., Baker, G. A. & Ledson, S. (1999). Detecting the faking of amnesia: A comparison of the effectiveness of three different techniques for distinguishing simulators from patients with amnesia. *Journal of Clinical and Experimental Neuropsychology*, 21, 59-69.
- Henderson, J. (1986). Psychic trauma claims in civil and administrative law. Paper presented at the 17th American Academy of Psychiatry and the Law Meeting, Philadelphia, PA.
- Iverson, G. L., Franzen, M. D. & McCracken, L. M. (1991). Evaluation of an objective assessment technique for the detection of malingered memory deficits. *Law and Human Behavior*, 16, 667-676.
- Lezak, M. D. (1995). *Neuropsychological assessment* (3rd ed.). New York: Oxford University Press.
- Miller, H. & Catlidge, N. (1972). Simulation and malingering after injuries to the brain and spinal cord. *Lancet*, *1*, 580-585.
- Mittenberg, W., Azrin, R., Millsaps, C. & Heilbronner, R. (1993). Identification of malingered head injury on the Wechsler Memory Scale-Revised. *Psychological Assessment*, *5*, 34-50.
- Mittenberg, W., Theroux-Fichera, S., Heilbronner, R. & Zielinski, R. E. (1995). Identification of malingered head injury on the Wechsler Adult Intelligence Scale-Revised. *Professional Psychology*, *11*, 271-281.
- Pankratz, L. (1983). A new technique for the assessment and modification of feigned memory deficit. *Perceptual and Motor Skills*, 57, 367-372.
- Pankratz, L., Fausti, A. & Peed, S. (1975). A forcedchoice technique to evaluate deafness in the hysterical or malingering patient. *Journal of Consulting and Clinical Psychology*, 43, 412-422.
- Pitman, R. K., Sparr, L. F., Saunders, L. S. & McFarlane, A. (1996). Legal issues in posttraumatic stress disor-

der. In B. A. van der Kolk, A. C. McFarlane & L. Weisaeth (Eds.), *Traumatic Stress* (pp. 378-397). New York: Guilford Press.

Special Section

- Price, K. P. (1994). Posttraumatic stress disorder and concussion: Are they incompatible? *Defense Law Journal*, 43, 113-120.
- Reitan, R. M. & Wolfson, D. (1996). The question of validity of neuropsychology test scores among head-injured litigants: Development of a Dissimulation Index. *Archives of General Neuropsychology*, 2, 573-580.
- Reitan, R. M. & Wolfson, D. (1997). Consistency of neuropsychological test scores of head-injured subjects involved in litigation compared with head-injured subjects not involved in litigation: Development of the Retest Consistency Index. *Clinical Psychologist*, 11, 69-76.
- Resnick, P. J. (1984). The detection of malingered mental illness. *Behavioral Sciences and the Law*, *2*, 20-38.
- Resnick, P. J. (1997). Malingering of posttraumatic disorders. In R. J. Rogers (Ed.), *Clinical assessment of malingering and deception* (pp. 130-152). New York: Guilford Press.
- Rogers, R. (1984). Towards an empirical model of malingering and deception. *Behavioral Sciences and the Law*, *2*, 93-112.
- Rogers, R. (Ed.). (1997). *Clinical assessment of malingering and deception*. New York: Guilford Press.
- Rogers, R., Bagby, R. M. & Gillis, J. R. (1992). Improvements in the M Test as a screening measure for malingering. *The Bulletin of the American Academy of Psychiatry and Law, 20*, 101-104.
- Rogers, R., Gillis, J. R. & Bagby, R. M. (1990). Cross validation of the SIRS with a correctional sample. *Behavioral Sciences and the Law, 8*, 85-92.
- Rogers, R., Gillis, J. R., Dickens, S. E. & Bagby, R. M. (1991). Standardized assessment of malingering: Validation of the SIRS. *Psychological Assessment*, *3*, 89-96.
- Rogers, R., Kropp, P. R., Bagby, R. M. & Dickens, S. E. (1992). Faking specific disorders: A study of the Structured Interview of Reported Symptoms (SIRS). *Journal* of Clinical Psychology, 48, 643-648.
- Rose, F. E., Hall, S. & Szalda-Petree, A. D. (1995). Computerized Portland Digit Recognition Test: The measurement of response latency improves the detection of malingering. *Clinical Neuropsychologist*, *9*, 124-134.
- Schacter, D. L., Harbluck, J. L. & McLachlan, D. R. (1984). Retrieval without recognition: An experimental



analysis of source amnesia. Journal of Verbal Learning and Verbal Behavior, 23, 593-611.

- Schretlen, D. (1986). *Malingering: Use of a psychological test battery to detect two kinds of simulation.* Ann Arbor, MI: University Microfilms International.
- Seamons, D. T., Howell, R. J., Carlisle, A. L. & Roe, A. V. (1981). Rorschach simulation of mental illness and normality by psychotic and nonpsychotic legal offenders. *Journal of Personality Assessment*, 45, 130-135.
- Slick, D. J., Hopp, G., Strauss, E. & Thompsom, G. (1997). Victoria Symptoms Validity Test. Odessa, FL: Psychological Assessment Resources.
- Slick, D. J., Iverson, G. L. & Green, P. (2000). California Verbal Learning Test indicators of suboptimal performance in a sample of head-injury litigants. *Journal of Clinical and Experimental Neuropsychology*, 22, 509-579.
- Smith, G. P., Borum, R. & Schinka, J. A. (1993). Rule-out and rule-in scales for the M Test for malingering: A cross-validation. *The Bulletin of the American Academy of Psychiatry and Law, 21*, 107-110.
- Smith, G. P. & Burger, G. K. (1997). Detection of malingering: Validation of the Structured Inventory of Malingered Symptomatology (SIMS). The Bulletin of the American Academy of Psychiatry and the Law, 25, 183-189.
- Strauss, E., Hultsch, D. F., Hunter, M., Slick, D. J., Patry, B. & Levy-Bencheton, J. (1999). Using intraindividual variability to detect malingering in cognitive performance. *Clinical Neuropsychologist*, 14, 420-432.
- Strauss, E., Slick, D. J., Levy-Bencheton, J., Hunter, M., MacDonald, S. W. & Hultsch, D. F. (2002). Intraindividual variability as an indicator of malingering in head injury. Archives of Clinical Neuropsychology, 17, 423-444.

- Suhr, J. A. & Gunstad, J. (2000). The effects of coaching on the sensitivity and specificity of malingering measures. *Archives of Clinical Neuropsychology*, *15*, 415-424.
- Suhr, J. A., Tranel, D., Wefel, J. & Barrash, J. (1997). Memory performance after head injury: Contributions of malingering, litigation status, psychological factors, and medication use. *Journal of Clinical and Experimental Neuropsychology*, *19*, 500-514.
- Sweet, J. J., Wolfe, P., Sattleberger, E., Numan, B., Rosenfeld, J. P., Clingerman, S., et al. (2000). Further investigation of traumatic brain injury versus insufficient effort with the California Verbal Learning Test. Archives of Clinical Neuropsychology, 15, 105-114.
- Tehula, W. N. & Sweet, J. J. (1996). Double cross-validation of the Booklet Category Test in detecting malingered traumatic brain injury. *Clinical Neuropsychologist*, 10, 104-116.
- Tombaugh, T. N. (1996). *Test of memory malingering*. New York: MHS.
- Vickery, C. D., Berry, D. T., Inman, T. H., Harris, M. J. & Orey, S. A. (2001). Detection of inadequate effort on neuropsychological testing: A meta-analytic review of selected procedures. *Archives of Clinical Neuropsychology*, 16, 45-73.
- Wiggins, E. C. & Brandt, J. (1988). The detection of simulated amnesia. *Law and Human Behavior*, *12*, 57-78.
- Wickens, D. D. (1970). Encoding categories of words: An empirical approach to meaning. *Psychological Review*, 77, 1-15.
- Youngjohn, J. R., Lees-Hayley, P. R. & Binder, L. M. (1999). Comment: Warning malingerers produces more sophisticated malingering. Archives of Clinical Neuropsychology, 14, 511-515.