

ASSESSING PSYCHOLOGICAL INJURY IN MOTOR VEHICLE INSURANCE COMPENSATION CLAIMS: VALIDATING A CUSTOMIZED PROTOCOL

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The Spanish legislation on Civil Responsibility and Motor Vehicle Insurance (Ley 30/1995) of 8 November 1995 introduced the provisions whereby plaintiffs sustaining psychological injury in a traffic accident are eligible for compensation. As the plaintiff must provide evidence of the nature and degree of psychological injuries sustained in order to claim compensation, psychologists are now required to undertake three main tasks: identify and determine the psychological injury, estimate the degree of deterioration in psychological health, and detect the feigning or exaggeration of psychological injury. Hence, a scientifically validated and customized protocol for the assessment of psychological injury and the detection of feigning or malingering in motor vehicle insurance compensation claims has been designed. This paper describes the protocol and examines a case study of psychological injury assessment using the said protocol.

Key words: Psychological injury, feigning, motor vehicle accident, compensation, post-traumatic stress disorder.

La valoración del daño psíquico consecuencia de un accidente de tráfico fue introducido, a través de lo que denominan daño moral, como un elemento de tasación en la Ley 30/1995, del 8 de noviembre, Ley de Responsabilidad Civil y Seguro en la Circulación de Vehículos a Motor. Esto supone que la parte demandante ha de demostrar no sólo el daño sino también tasarlo en términos porcentuales. En consecuencia, a los peritos psicólogos se nos demanda la resolución de tres tareas: identificación y medida del daño psíquico, cómputo del porcentaje de deterioro en la salud psíquica del accidentado y control de la simulación o sobresimulación. Para la realización de estas tareas hemos construido y validado científicamente y en la Sala de Justicia un protocolo de medida, de cuantificación del daño y de control de la simulación. En esta contribución se presenta dicho protocolo así como un ejemplo de pericia basado en éste.

Palabras clave: Daño moral, daño psíquico, simulación, accidente de tráfico con vehículos a motor, trastorno de estrés postraumático.

Traffic accidents are one of the commonest causes of death in our society. Recent figures for road deaths were 3643 in 2004, 4084 in 2003, 4031 in 2002 and 4170 in 2001. But behind this figure for deaths is another, no less important, for those who sustained injuries. In 2004 this was 138,383 and the previous year 150,635, while in 2002 it was 146,917 and in 2001 it was 149,599 (Source: *Direction General de Tráfico*). In sum, the annual total of deaths is around 4000, and that of injured over 145,000. In the wake of each death or injury is irreparable harm, compensation for which is covered by the legislation on Civil Responsibility and Motor Vehicle Insurance (Ley 30/1995, of 8 November; revised text approved by Royal Decree 8/2004, of 29 October). The damages or harm liable for compensation are material, physical and psychological, the last of these being referred to as *psychological injury*.

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All injury, in order to be legally considered as such, must be demonstrated. In the psychological context, the National Comorbidity Survey (e.g., Bryant & Harvey, 1995) has identified Post-traumatic Stress Disorder (PTSD) as the primary indication of psychological injury, and as indirect consequences in traffic accident cases, depression and dysthymia (Blanchard & Hickling, 2004). Thus, PTSD must be diagnosed as the direct outcome in the forensic psychological examination, so that where no PTSD is found it cannot be concluded that there is psychological injury, insofar as its co-occurrence with depression or dysthymia must be understood as a confirmation of injury, while if no depression or dysthymia is diagnosed it cannot be inferred that no injury has occurred. In turn, given that this is a medico-legal context, malingering must be considered as a hypothesis (American Psychiatric Association, 2002). The assessment of psychological injury in conjunction with a decision on potential malingering requires a multimethod approach (Rogers, 1997). For measurement within the Spanish legal system,

such a multimethod approach involves assessment using two task formats: recognition and knowledge (Arce, Pampillón & Fariña, 2002). In the recognition task (thus called because the plaintiffs under assessment must recognize whether or not they have the symptom presented to them) the measurement instrument usually applied in forensic practice is the MMPI (Butcher & Miller, 1999), which fulfils the two basic objectives of the forensic psychological examination: the assessment of direct and indirect injury and the measurement of malingering through scales for checking the protocol validity. As regards the knowledge task format (whereby plaintiffs perform a task in which they must report symptoms they have without these being presented to them), this is implemented through the so-called clinical-forensic interview (Arce & Fariña, 2001).

The structure of this interview, which must be carried out by a trained interviewer with psychopathological expertise, is based on the following steps: 1) presentation of the interview, its objective and its procedure; 2) asking interviewees to report in their own words the symptoms, behaviours and thoughts they have at present, compared to their state prior to the accident (GFS of the DSM-IV-TR); 3) re-establishment of contexts: if interviewees do not respond on their own initiative, they will also be asked to provide information about their family relations (GARF of the DSM-IV-TR); social relations (SOFAS of the DSM-IV-TR) and work relations (SOFAS); 4) construction of a table of symptoms (DSM-IV-TR) and symptom count [symptom detection takes place using two complementary methods: direct report from the interviewee, and coders' observations on analyzing the protocols, i.e., behaviour observation and registration]; 5) fitting the symptoms to disorders [in our case, PTSD, depression and dysthymia]; and 6) reliability check through the study of malingering strategies.

ASSESSMENT IN A KNOWLEDGE TASK: OF OBVIOUS AND SUBTLE SYMPTOMS AND MALINGERING STRATEGIES

Analysis of the content of 105 clinical-forensic interviews with malingerers in road accident psychological injury cases (Arce, Fariña, Carballal & Novo, 2006) revealed that 3.8% of interviewees were capable of feigning Post-traumatic Stress Disorder, and that certain types of symptom were highly accessible to malingering, whilst others were more inaccessible. The kinds of symptoms most inaccessible to malingering, that is, the subtler ones

($p \leq .05$) were those of thought-avoidance, amnesia, hypervigilance and exaggerated startle responses. On the other hand, symptoms accessible to the feigning of PTSD –obvious ones– included: intense fear responses; recurring memories; unpleasant dreams; behaviours or feelings appearing as though the event was happening again (flashbacks); intense psychological distress when exposed to internal or external stimuli symbolizing or recalling some aspect of the traumatic event; physiological responses; avoidance of activities, places or people that bring back memories of the trauma; sharp reduction in interest or participation in significant activities; distancing from others; affective restriction; dreariness about the future; sleeping problems; irritability/anger attacks; concentration difficulties; significant deterioration as a result of the accident in the areas of work, social life, family relationships and partner relationship; and finally, significant clinical distress. In sum, the set of accessible symptoms would permit feigning of a condition characteristic of PTSD, but the combination of all these symptoms in a single interview was only achieved in 3.8% of cases.

The study of the internal consistency of the content of the clinical-forensic interviews with the 105 malingerers through malingering strategies identified 76.2% as unreliable protocols. Specifically, the strategies most commonly employed by the malingerers (frequency $>.05$) were those of "obvious symptoms" (.229), that is, symptoms of a psychotic nature, $Z(105)=8.4$; $p<.001$; "subtle symptoms" (.667), i.e., they reported not real symptoms but everyday problems, $Z(105)=28.97$; $p<.001$; "rare symptoms" (.105), i.e., symptoms rarely found even in psychiatric population, $Z(105)=2.58$; $p<.05$; and "severity of symptoms" (.200), involving the attribution of extreme severity to the reported symptoms, $Z(105)=7.04$; $p<.001$.

ASSESSMENT IN A RECOGNITION TASK

The same 105 persons underwent an assessment of feigning of psychological injury with the MMPI-2, which involves a recognition task, 60.9% succeeding in feigning ($T>70$) psychological injury characteristic of a road accident in both the direct (Ps and Pk scales) and indirect (depression) measures. The relevant instruments for the malingering measure did not correctly classify all the malingerers (the ? Scale classified none; the F Scale, 59.9%; the K Scale, 78.1%; the Gough Index, 55.2%; and the "Inverted V" profile, 23.81%). Analysis of the task



overall reveals that 24.76% of the malingeringers would have executed the task perfectly in this measure, that is, they had feigned perfectly the expected injury and would not have been consistently detected by the malingering indicators. By way of a complement, we found neither a $K \geq 70$, characteristic of simulation, among participants for the malingering task, nor invalidity of the protocol due to non-response (≥ 30).

MULTIMETHOD APPROACH: KNOWLEDGE AND RECOGNITION TASKS

In order to be able to determine the existence of psychological injury there is a need, from both the psychological and legal points of view, for an "injury measure". Starting out from this maxim, we observed that in the knowledge measure only around 4% of malingeringers were capable of achieving their goal; that is, the remaining malingeringers did not succeed in feigning effectively. In the effective malingeringers we found a lack of inter-measure consistency (in the psychometric measure they had also feigned other clinical injuries in the psychotic triad, and even psychopathic deviation, which did not appear in the interview). Moreover, these malingeringers were detected as such by both the measures of internal consistency of the interview (i.e., malingering strategies) and the psychometric instrument (K , F , $F-K$, Inverted V Profile). Specifically, no less than 6 of these indicators suggested malingering.

PROTOCOL FOR THE MEASUREMENT OF PSYCHOLOGICAL INJURY AND DETECTION OF MALINGERING, BY ARCE & FARINA

In the light of the above results some criteria can be established for making the decision about the authenticity or feigning of psychological injury. These criteria can be grouped into positive and negative.

a) Positive criteria. Those criteria associated with non-malingering, so that the observation of them validates the protocol. Positive criteria are the registration of subtle symptoms in the clinical-forensic interview and a $K \geq 70$ in the MMPI. Invalidity of the MMPI due to non-response is not considered a positive criterion (this possibility can only be considered in the case of neurological damage that justifies such a response style).

b) Negative criteria. Our results indicate a series of negative criteria, that is, which annul or reduce the validity of the protocol. These are: 1) no observation

in the MMPI/SCL-90-R or clinical-forensic interview of symptoms characteristic of psychological injury resulting from a road accident; 2) the validity check scales and their combinations detect malingering; 3) detection of some malingering strategy in the interview; and 4) lack of inter-measure agreement. The first criterion is eliminatory, that is, if the psychological injury is not measurable it cannot be sustained legally (take special note of the clinical-forensic interview, in which just 4% of malingeringers achieve their objective). If we find the psychological injury symptoms characteristic of a traffic accident in the clinical-forensic interview, malingering will only be concluded if numerous indicators of invalidity are observed.

On the basis of the results and their discussion we can derive the following validated procedural protocol for the assessment of psychological injury in road accident cases (forensic psychologists who are so interested may obtain from the authors an expert assessment format based on it):

- Psychosocial interview, behaviour observation and registration, and study of the documentary evidence.
- Study of cognitive capacities. It is necessary to evaluate the cognitive capacities of the person under assessment in order to establish whether he or she is competent to undergo the psychological assessment and to give evidence. If reasonable signs of deterioration in neuropsychological functions are observed, a neuropsychological examination will be required. For this it is recommended to begin with a non-verbal measure such as TONI-2 (Brown, Sherbenou & Johnsen, 1995) and, given the slightest sign of deterioration, to continue with the Wechsler scales. The confirmation of significant differences between the verbal and performance scales is a reliable indicator of brain lesion (a performance coefficient 10 or more above the verbal coefficient indicates relevant lesion). In this case it is necessary to proceed to a neuropsychological examination to identify which areas show deterioration (and how much) and which do not [it is advisable to use the relevant subscales of the Test Barcelona (Peña-Casanova, 1990) or the ERFC/Rapid Evaluation of Cognitive Function (Gil, 1999)].
- Measurement of clinical effects related to involvement in a traffic accident. Clinical assessment is carried out using two instruments that require the performance of



different tasks: the clinical-forensic interview, which involves a knowledge task, and the MMPI-2, which involves a recognition task. Also recommended is the application of other psychometric instruments, such as the SCL-90-R (Derogatis, 2002). In all cases, measures for checking the protocol validity are necessary (in the SCL-90-R these are the global severity index, the distress index referring to positive symptoms and the total positive symptoms index, which permit an estimation of potential malingering), and the dimensions measured must include PTSD and/or secondary effects of a road accident. This second measure permits the testing of not only the protocol validity (a single invalidity indicator is not a sufficient test), but also the inter-measure consistency. In those cases in which the clinical assessment does not confirm a clinical state deriving from the direct consequences (PTSD) of involvement in a road accident, that is, the predictive validity (or accuracy with which the measurement fits the expected psychological injury) is tested, it must be concluded that there is no psychological injury. Secondary effects, depression or dysthymia, are not sufficient proof on their own. Analysis of effects, by means of predictive validity, can be integrated with the study of discriminant validity, that is, unexpected injury.

- d) **Personality study.** It is recommended to carry out a personality assessment in order to reveal possible anomalies at the same time as testing for possible distortions in responses. For this purpose it is advisable to use the 16 PF-5, which includes three measures of response style: Social Desirability, Infrequency and Acquiescence. According to our findings a single invalidity indicator cannot be considered sufficient for doubting the validity of the protocol, but rather as a characteristic of the examinee's personality.
- e) **Study of the reliability of the measurements.** It is always important to guarantee the reliability of the measurement of the issue or person under assessment, and especially in cases such as those that concern us here. Even though the measurement instruments may be reliable and valid, it cannot be inferred that the specific measurement is so. In order to test the reliability of the measurement made for the expert assessment it is necessary to estimate (Weick, 1975):

- ✓ **Inter-measure consistency.** Lack of inter-measure consistency (e.g., discrepancy between what is reported and observed, identification of a pathology in one measure without indicators of it in other measures) will be considered a sufficient factor for invalidating the results.
- ✓ **Intra-measure consistency.** The measurement instruments, the clinical-forensic interview, MMPI-2 and, where applicable, SCL-90-R, include protocol validity checks. In order to consider invalid a protocol in which psychological injury has been consistently observed, numerous indicators of malingering are required. A protocol with consistent inter-measure indication of psychological injury with only a few intra-measure indications of possible malingering will not lead to a conclusion of malingering; rather, these will be attributed to the person's response style.
- ✓ **Inter-assessor consistency.** Two assessors interpret the results separately, and only consider the results to be reliable and valid if the inter-assessor agreement index is above 0.801 (Tversky, 1977).
- ✓ **Inter-context consistency.** Inter-context reliability is dealt with through recourse to a trained assessor who has been effective and consistent in previous expert assessments and with other assessors.
- f) Evaluation of psychological injury. If the data are reliable, that is, if the malingering hypothesis is rejected, and psychological injury (PTSD) is found in the person assessed, a multiaxial assessment (DSM-IV-TR, 2002) takes place:
 - I. Axis I. This will necessarily include, in the case of psychological injury, PTSD, as primary diagnosis, and as secondary disorders only depression/dysthymia.
 - II. Axis II. This is not applicable unless there has been neurological injury.
 - III. Axis III. Physical injuries (always supported by documentary evidence, unless indicated that this is not applicable).
 - IV. Axis IV. Psychosocial and environmental problems.
 - V. Axis V. Global assessment of functioning. Here, injury is quantified in percentages. For this, the Global Functioning Scale (GFS) is used. The steps to follow for the quantification are:

AI = agreement / (agreement + disagreement)

- 1) Beginning with the highest level, the examinee's state is compared with the normative one; if the state is poorer, the process continues at the next level down.
- 2) The same procedure is repeated until reaching the level at which the examinee's state fits.
- 3) The next level down is checked to make sure that it does not correspond to the examinee's state.
- 4) The examinee's level of psychological functioning is set (it is recommended to take the mid-point of the range).
- 5) The difference is calculated between the observed state and the average value of normality (90), the resulting figure giving the percentage of psychological injury caused.
- g) Additionally, it is recommended to repeat this procedure with the SOFAS and GARF assessment scales.
- h) In this eventuality or when there is also physical injury, i.e., there are multiple consequences of the accident, the calculation of the final rating should be carried out using the following formula:

$$\frac{[100-M] \cdot m}{100} + M, \text{ where } M = \text{Highest score}; m = \text{Lowest score}$$

i) The rating system should be restricted to the following categories: "probable malingering or with systematic indication of malingering"; "probable non-malingering or without systematic indication of malingering". It is important to use these probabilistic terms. Though the Supreme Court demands total certainty, not high probability, it should be acknowledged that, as seen in the present study, our assessment systems and measures are subject to error, so that the establishment of certainty should be avoided (e.g., Supreme Court sentence of 29 October 1981, RA 3902). Finally, if the forensic psychologist cannot come to a decision on malingering, the conclusion must be one of "no decision on malingering", since opting for "probable non-malingering" or "probable malingering" involves, *de facto*, a decision in favour of one of the parties in the lawsuit, without conclusive supporting evidence.

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