

## **DISCRIMINATING REAL VICTIMS FROM FEIGNERS OF PSYCHOLOGICAL INJURY IN GENDER VIOLENCE: VALIDATING A PROTOCOL FOR FORENSIC SETTINGS.**

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### **Abstract**

Standard clinical assessment of psychological injury does not provide valid evidence in forensic settings, and screening of genuine from feigned complaints must be undertaken prior to the diagnosis of mental state (American Psychological Association, 2002). Whereas psychological injury is Post-traumatic Stress Disorder (PTSD), a clinical diagnosis may encompass other nosologies (e.g., depression and anxiety). The assessment of psychological injury in forensic contexts requires a multimethod approach consisting of a psychometric measure and an interview. To assess the efficacy of the multimethod approach in discriminating real from false victims, 25 real victims of gender violence and 24 feigners were assessed using a the Symptom Checklist-90-Revised (SCL-90-R), a recognition task; and a forensic clinical interview, a knowledge task. The results revealed that feigners reported more clinical symptoms on the SCL-90-R than real victims. Moreover, the feigning indicators on the SCL-90-R, GSI, PST, and PSDI were higher in feigners, but not sufficient to provide a screening test for invalidating feigning protocols. In contrast, real victims reported more clinical symptoms related to PTSD in the forensic clinical interview than feigners. Notwithstanding, in the forensic clinical interview feigners were able to feign PTSD which was not detected by the analysis of feigning strategies. The combination of both measures and their corresponding validity controls enabled the discrimination of real victims from feigners. Hence, a protocol for discriminating the psychological sequelae of real victims from feigners of gender violence is described.

**Keywords:** violence against women, forensic assessment, malingering, psychological injury, real victims, false victims.

### **Resumen**

La evaluación clínica ordinaria no es prueba válida de daño psicológico en el campo forense pues previamente al diagnóstico del estado mental ha de sospecharse simulación (American Psychological Association, 2002) y, en la evaluación clínica tradicional, nunca se diagnosticó ésta. Además, la huella psicológica sólo puede ser una, el Trastorno de Estrés Postraumático (TEP), mientras que en el diagnóstico clínico caben otras nosologías (p.e., depresión, ansiedad). Para evaluar la huella psicológica en el contexto forense se requiere de una aproximación multimétodo. Por ello hemos contrastado la evaluación de 25 víctimas reales de violencia de género y 24 falsas en una tarea de reconocimiento, el SCL-90-R, y otra de conocimiento, la entrevista clínico-forense. Los resultados mostraron que las falsas víctimas informaban de más sintomatología clínica que las verdaderas en el SCL-90-R. Por su parte, los indicadores de simulación del SCL-90-R, GSI, PST y PSDI, advertían de más indicios (sobre)simulación entre las víctimas falsas, pero no conforman una prueba suficiente para invalidar los protocolos falsos. Por el contrario, en la entrevista clínico-forense las víctimas reales informaban de más sintomatología clínica relacionada con el TEP que las falsas. Ahora bien, hallamos que falsas víctimas podían llegar a simular en ésta un TEP que no era detectado por el estudio de las estrategias de simulación. No obstante, encontramos que la combinación ambas medidas y de los controles de validez de ambas podía permitir discriminar entre daño de víctimas reales y simuladas. Como consecuencia, se define un protocolo de evaluación para discriminar entre secuelas psicológicas de víctimas reales y falsas de violencia de género.

**Palabras clave:** homicidio domestico, perfil psicológico, violencia doméstica, crimen, predicción violencia.

## Introduction

Though Spain is at the bottom of the table in terms of the number of women who are murdered as a consequence of gender violence (on average 64 women per year murdered by their spouse, ex-husband, fiancée or boyfriend), the reports of violence against women are steadily increasing from 47.262 in 2002 to 81.301 in 2007 i.e., a 72.1% increase (Spanish Ministry for Equality, 2008). In recent years, most western governments have legislated to protect women from gender violence in the home (e.g., under the United States Federal Law, *The Violence against Women Act* of 1994, 1998, 2000, 2005; the United Kingdom, *Domestic Violence, Crime and Victims Bill, 2003*; and in Spain, L.O. 1/2004, *Medidas de Protección Integral contra la Violencia de Género*). According to the Spanish penal code, gender violence is defined as any *physical or psychologically violent act i.e., aggression towards a persons sexual freedom i.e., threats, coercion, and arbitrary restriction of freedom* (article 1, paragraph 3, of Law L.O. 1/2004). Similarly, the UN defines a victim as: *a person who has suffered physical or psychological injury* (i.e., emotional stress), and/or material loss or damage or a deterioration to the individual's rights (United Nations, 1988). Consequently, the assessment of gender violence involving psychological aggression must entail the assessment of psycho-emotional victimization i.e., psychological injury or sequelae. The psychological harm of criminal acts are identified through the assessment of their impact on mental and emotional health (e.g., Breslau Davis, Andreski, & Peterson, 1991; Edleson, 1999; Kessler, Sonnega, Hughes, & Nelson, 1995; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). Moreover, in legal contexts one must establish, beyond reasonable doubt, a cause and effect relationship linking the crime with the alleged injuries. This contingency is quite problematic since forensic assessment in cases of gender violence must evaluate other concurrent factors that may harm mental or emotional health (e.g., emotional break-ups, dire financial difficulties, social desestructuring). Thus, it is vital not only to undertake an assessment of psychological injury, but also to establish a cause-effect (causal) relationship between the alleged injury and the accusation of gender violence. Of the mental disorders described in the international manuals or inventories on mental illnesses e.g., the *International classification of diseases* (ICD) (Health World Organization, 1992),

and the *Diagnostic and statistical manual of mental disorders* (DSM) (American Psychiatric Association, 2000), only Posttraumatic Stress Disorder (PTSD) fulfils the double function of assessing psychological injury and establishing a causal relationship with the criminal act (Young, Kane, & Nicholson, 2007). Moreover, this syndrome is a common characteristic in cases of gender violence (e.g., Kessler et al., 1995; Koch, Douglas, Nichols, & O'Neil, 2006; National Comorbidity Surver Replication, 2008). The prevalence of PTSD has been estimated to be 50-55% of the victims of gender violence receiving psychological treatment (Echeburúa and Corral, 1998). Thus, PTSD is regarded as the primary disorder in cases of gender violence (i.e., Bryant & Harvey, 1995; Echeburúa, Corral, Sarasua, & Zubizarreta, 1998; Freyd, 1996; Taylor & Koch, 1995; Vallejo-Pareja, 1998; Kessler et al., 1995). As for associated i.e., secondary trauma, depression, social maladjustment, anxiety, and sexual dysfunctions are among the most prominent (v. gr., Bargai, Ben-Shakhar, & Shalev, 2007; Echeburúa et al., 1998; Esbec, 2000). Nevertheless, when secondary trauma are observed in the absence of PTSD these cannot be attributed as sequelae to the traumatic event (O'Donnell et al., 2006). Hence, psychological assessment in forensic contexts must involve screening for the detection of feigning (American Psychiatric Association, 2000).

The literature regarding the evaluation of psychological injury in forensic contexts has revealed that the general population is able to feign. In fact, under feigning instructions subjects were able to recognise symptoms on the psychometric test that accorded with their hypothetical mental state as well as circumventing the endorsement of unrelated symptoms. These results have been observed in cases of sexual aggression and harassment (Arce, Fariña, & Freire, 2002), gender violence (Arce, Carballal, Fariña, & Seijo, 2004), traffic accidents (Arce, Fariña, Carballal, & Novo, 2006), and criminal insanity (Arce, Fariña, & Pampillón, 2002) i.e., it has been systematically and consistency reported in a wide array of context. Though the ability to feign has been explored, feigning strategies identified, and a protocol validated for the forensic assessment of psychological injury in cases of gender violence (Arce, Fariña, Carballal, & Novo, 2009), no empirical evidence is available to contrast the performance of real victims and feigners of gender violence. Though the protocol of Arce et al (2009), based on the results of mock victims of gender violence, enables the detection of feigners, the exact number of false positives (the number of real victims identified as malingerers) remains elusive and undermines our understanding of the full scope of gender violence.

Thus, the aim of this study was to compare real victims with feigners of gender violence using the assessment protocol of Arce and Fariña (2007) involving a recognition task, the SCL-90-R (Derogatis, 1977, 2002); and a knowledge task i.e., the forensic clinical interview (Arce & Fariña, 2001) to examine the efficacy of this protocol for the discrimination of real victims from feigners and, by controlling type II errors (the acceptance of the  $H_0$  as being false i.e., false victim labelled as real, which in forensic settings must be 0) to quantify the indirect costs of controlling feigning i.e., false positives.

## **Method**

### **Participants**

A total of 49 women participated in the study, and all subjects were above the legal age with sufficient cognitive abilities to undergo psychological assessment ( $IQ > 80$  on the WAIS). Age ranged from 18 to 73 years with a mean age of 32.6 ( $SD = 12.9$ ) years. Of these, 25 were real victims of gender violence who had taken legal proceedings leading to the conviction of the assailants whose age ranged from 18 to 46 ( $M = 32.5$ ;  $SD = 9.8$ ) years. The remaining 24 women, who were living with their partners and had never experienced gender violence, were aged 22 to 73 ( $M = 32.6$ ;  $SD = 14.3$ ) years.

### **Design**

The experimental design contrasted the files of real victims from the Forensic Psychology Unit of the University of Santiago de Compostela (Spain) with data from mock victims from the general population. A psychometric instrument involving a symptom recognition task, and a forensic clinical interview, a knowledge task, was employed to assess the psychological injury of violence against women.

### **Procedure**

Real cases of gender violence were taken from the archives of the Forensic Psychology Unit of the University of Santiago de Compostela (Spain). Real cases were

selected according to the compliance of two criteria: a plea-bargained acceptance by the accused of the sentence demanded by the prosecution i.e., admitting the charges; and sentencing based on overwhelming evidence of guilt (e.g., documentary evidence, irrefutable expert evidence, violation of restraining orders) leading to the conviction of the accused. The feigners, on the other hand, were women above the legal age who were living or had lived with a partner and had not been subjected to gender violence. Prior to commencing the evaluations, feigners were given malingering instructions asking women to imagine they had made a false accusation of gender violence, and would subsequently undergo evaluation to determine psychological injury. The false accusation was justified on the grounds that the women were to obtain associated benefits such as child custody, revenge, financial compensation, etc. Care was taken to ensure recall, comprehension and compliance with the feigning instructions in accordance with the recommendations of Rogers (1997). Thus, to ensure the instructions were comprehensible they were previously tested using a control group specific and contextualized to gender violence. Moreover, the experimental control group was informed of the relevance of the results for the detection of the false accusations (e.g., for the falsely accused, and child custody, etc). Although feigners received no coaching, they were told to make their responses credible and to ensure full commitment to the task (subjects who were not willing to comply with the instructions were told they were free to leave the study if they so wished, all subjects participated voluntarily in the study). To further enhance subject involvement in the study, feigning was encouraged through an economic incentive of 150 Euros for the five best simulations. Prior to assessing their clinical state by trained forensic psychologists, subjects were given a 1-week period to plan the faking of psychological injury.

### **Measurement instruments**

The measurement instruments consisted of a recognition task i.e., the SCL-90-R (Derogatis, 1977, 2002), and a knowledge task, the forensic clinical interview (Arce & Fariña, 2001).

The SCL-90-R (Symptom Check List 90-R) is an extensively used multidimensional psychological status symptom inventory consisting of 90 items. It is an objective method for symptom assessment requiring subjects to rate their psychopathological problems and symptoms using a five-point Likert-type scale ranging from “not at all” (0), “a little bit” (1), “moderately” (2), “quite a bit” (3) to “extremely”

(4). This instrument assesses 9 primary symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism) and 3 global indexes of distress (global severity index, positive symptom distress index, and positive symptom total). The analysis of inventory reliability for the sample ( $n=49$ ) revealed a Cronbach's Alpha Coefficient of .949.

In the knowledge task subjects underwent a *forensic clinical interview* (Arce & Fariña, 2001) using a free narrative interview format which has proven to be reliable and productive in forensic contexts (i.e., Arce et al., 2002; Arce et al., 2006). Subjects were asked to describe all the changes that had taken place in their lives (i.e., symptoms, behaviour, and thoughts) since the traumatic event. Thereafter, significant contexts were reinstalled when necessary (i.e., the V axis of the DSM-IV) for clinical evaluation (i.e., interpersonal relationships, work or academic contexts, and family personal relationships). As for the choice of interview format, a free narrative interview format was preferred as opposed to the traditional structured clinical interviews such as the Structured Clinical Interview for DSM-IV (SCID-IV) (Spitzer, Williams, Gibbon, & First 1995); Clinician Administered PTSD Scale for DSM-IV (CAPS) (Blake et al., 1998); the Structured Interview for PTSD (SIP) (Davidson, Williams, Gibbon, & First, 1997); and the PTSD Symptom Scale-Interview (PSS-I) (Foa, Riggs, Daneu, & Rothbaum, 1993) as these would facilitate manipulation on the symptom recognition instrument (the recognition task) without having to describe or define them (the cognition task). The advantage of this instrument is that subjects must evaluate their clinical disorder by describing their symptoms, behaviour, and thoughts; unless they are unwilling to cooperate or refuse to respond, which is a basic feigning strategy described in the DSM-IV), or suffer from neurological lesions or mental deficiencies (both contingencies were absent in our study given that cognitive ability was evaluated using the Wechsler Adult Intelligence Scale (WAIS), and because all subjects were willing to respond. Moreover, the interviewers responsible for the clinical protocols were trained and had ample experience in this type of assessment in forensic and research contexts.

### **Analysis of the protocols**

The free-narrative interviews recorded on video underwent systematic content analysis to identify the diagnostic criteria of psychological injury. The categories for analysis were those described in the DSM-IV-TR (American Psychiatric Association, 2000). The aim was to design a reliable and valid mutually exclusive system of categories

i.e., a methodic system of categories (Weick, 1985). Thus, the categories for analysis correspond to the diagnostic criteria on the DSM-IV-TR though they specifically focused on PTSD which is the psychological disorder sustained in MVA (Note: results referring to other symptoms and diagnosis may be obtained directly from the authors). The categories endorse two complementary methods: the subject's personal account and the encoder's inferences following analysis of the protocols. In other words, the loss of memory may be explicitly manifested by the participant or inferred by the encoder after encoding the interview. The analysis of the internal consistency of the scale for the sample ( $n= 49$ ) revealed a Cronbach's Alpha Coefficient of .76.

Two encoders were responsible for evaluating the different tasks i.e., the 8 feigning strategies that a potential feigner could use as opposed those used in real assessments. The relevant literature was reviewed for the selection and design of potential categories which provided a mutually exclusive, reliable and valid categorical system (Anguera, 1990). Moreover, the procedure was completed with successive approximations to identify new categories. For this purpose, the encoders employed an open category referred to as "other strategies" which was used for classifying other feigning strategies observed during the encoding of the interviews. The categories and their corresponding definitions are listed below:

- a) No cooperation with the assessment. This category refers to unwillingness to cooperate or refusal to respond (American Psychiatric Association, 2000; Lewis & Saarni, 1993).
- b) Subtle symptoms. Subtle symptoms are not real symptoms, but everyday problems which are regarded as symptoms associated to mental illness (i.e., to be unorganized, lack of motivation, and difficulty in ordinary decision-making) (Rogers, 1990).
- c) Improbable symptoms. Improbable symptoms are fantastic or ridiculous in nature (opinions, attitudes or bizarre beliefs) and do not respond to real referents, with the exclusion of rare symptoms (Rogers, 1990).
- d) Obvious symptoms. These are psychotic symptoms related to what is vulgarly known as madness or mental illness (Greene, 1980).
- e) Rare symptoms. This category refers to a subject's description of symptoms that are rarely observed even in real psychiatric populations (Rogers, 1990).

f) Symptom combinations. This indicator of feigning includes real symptoms reported by participants but rarely occur simultaneously (Rogers & Mitchell, 1991) or when the participant describes an indiscriminate array of symptoms that have no internal consistency among them (Rogers, 1988).

g) Severity of symptoms. As the term indicates, the category analyzes the degree of symptom severity. Feigners frequently over-exaggerate symptom severity (Rogers & Mitchell, 1991).

h) Inconsistency of symptoms (observed or manifest). The category analyses the association between the symptoms described by the participant and the encoder's observation regarding the concordance between the symptoms and the participant's attitude, composure and/or behaviour (Jaffe & Sharma, 1998).

The unit of analysis in all of the categories of the protocol was marked as either present or absent.

Following content analysis of the interviews, the encoders determined if the symptoms constituted a disorder, if the disorder was attributed to psychological injury and in turn if it pertained to PTSD.

### **Encoder training**

Two encoders participated in the study; one had ample experience in encoding the type of material under study and in psychopathological assessment (Arce, Fariña, & Vivero, 2007). The encoders were exhaustively trained in this and other types of encoding systems. Training consisted of providing examples for each category of analysis, and practising with material that was not later used for encoding. The concordance index was used as an instrument for detecting inconsistencies, and errors in the encodings were corrected by homogenising the criteria.

The definitions of the categories under analysis are in accordance with the diagnostic criteria on the DSM-IV. Thus, the encoders had a copy of the DSM-IV, and their own self-made manual with examples for each category as a reference for encoding and for specifying the categories under analysis.

As several forensic experts were responsible for the forensic clinical interviews, the influence of the interviewer factor on the interviews was controlled by dividing the protocols from real victims and feigners into two random groups. If the protocols were



not contaminated by the interviewer factor, no differences should be observed in the symptoms registered. The results showed the protocols were similar in the register of symptoms both for real victims,  $F(1;23)= 0.72$ ;  $SS= 10.57$ ; ns,  $\eta^2= .030$ ;  $1-\beta= .128$ , and for feigners,  $F(1;22)= 0.34$ ;  $SS= 4.17$ ; ns,  $\eta^2= .016$ ;  $1-\beta= .087$ . Hence, the interviews were not contaminated by the interviewer factor. Moreover, the interviewers were consistent and productive in other studies (Arce et al., 2006).

**Table 1.** Within- and between-encoder consistency of PTSD criteria and "malingering strategies". Concordance index (CI).

<b>VARIABLE</b>	<b>INTRA1</b>	<b>INTRA2</b>	<b>INTER</b>
Responses involved intense fear	1	1	1
Recurrent or intrusive recollections of the event	1	1	1
Recurrent distressing dreams of the event	1	1	.8
Acting as the traumatic event was recurring	1	1	1
Physiological distress at exposure to reminders	1	1	.8
Physiological reactivity on exposure to reminders	1	.8	.8
Efforts to avoid thoughts about the trauma	1	1	1
Efforts to avoid places that remind the event	1	1	.8
Inability to recall part of the event	1	.8	1
Diminished interest in significant activities	1	1	.8
Feelings of detachment	.8	1	1
Restricted affect	1	1	1
Foreshortened future	1	1	.8
Falling or staying asleep	1	1	.8
Irritability or anger	1	1	1
Difficulty concentrating	1	1	1
Hypervigilance	1	1	.1
Exaggerated startle response	1	1	.80
Clinically significant distress	1	1	1
Obvious symptoms	1	1	1
Subtle symptoms	1	1	1
Rare symptoms	1	1	1
Symptom combinations	1	1	1
Improbable/absurd symptoms	1	1	1
Severity of symptoms	1	1	.8
No cooperation with the evaluation	1	1	1
<u>Inconsistency of symptoms</u>	<u>1</u>	<u>1</u>	<u>1</u>

Note: Concordance index= Agreements/(agreements + disagreements). The A1 Criterion "the person experienced, witnessed, or was confronted with an event or events that that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others" is assumed, in our study, to be a gender aggression.

The two encoders randomly distributed the interviews of real cases and feigners between them. One week after encoding all the interviews, the encoders repeated the encoding of 20% of the interviews to assess intra-encoder reliability.

Encodings are considered to be concordant if the concordance index is higher than the .80 cut-off point (Tversky, 1977). The results (Table 1) for PTSD criteria and the malingering strategies have shown to be inter- and intra-encoder consistent through time. Furthermore, the encodings were consistent with other contexts (Arce, Fariña, & Vivero, 2007), indicating the data are reliable (Wicker, 1975).

## Results

### **Analysis of the reliability of the results of the psychometric assessment**

In forensic contexts feigning should be suspected (American Psychiatric Association, 2000); thus, prior to the analysis of the results of the clinical assessment, malingering must be previously controlled. In the sample of real cases, the Positive Symptom Total ( $M_{PST}=4$  2.9;  $SD=$  13.82) informed of (cut-off scores were taken from the Spanish normative sample, Derogatis, 2002) no negation of symptoms ( $PST>6$ ), nor symptom combination ( $PST<60$ ), whereas in the sample of feigners symptom combination was detected ( $M_{PST}=$  76.6;  $SD=$  13.3). Moreover, in the Global Severity Index ( $M_{GSI}=$  2.35;  $T>70$ ) and the Positive Symptom Distress Index ( $M_{PSDI}=$  2.78;  $T>70$ ) feigners informed of symptom severity (cut-off  $T\geq 70$ ) i.e., possible exaggeration of symptom severity. In contrast, symptom severity was not observed among real victims as can be seen from the Global Severity Index ( $GSI=$  1.07;  $T=$  62), and the Positive Symptom Distress Index ( $PSDI=$  2.24;  $T=$  58). Whereas in 87.5% (21) of feigning cases the symptom rate was ( $PST>60$ ,  $T\geq 70$ ), which suggest possible exaggeration of injuries, possible exaggeration of injuries was found in 12% (3) of real cases, which highlights a significant difference  $\chi^2(1)=$  24.99;  $p<.001$ ;  $\phi=$  .755. Moreover, a greater number of cases of over-simulation (over exaggerated injury) were observed on the Global Severity Index,  $\chi^2(1)=$  27.96;  $p<.001$ ;  $\phi=$  .796, and the Positive Symptom Distress Index,  $\chi^2(1)=$  4.98;  $p<.05$ ;  $\phi=$  .362, in the sample of feigners (87.5 and 50%, for GSI and PSDI, respectively) as compared to real cases (8 and 16% on the GSI and PSDI,

respectively. Whilst 50% ( $n= 12$ ) of feigners were consistently reported by the three feigning indexes, in real cases this contingency was 0.

A MANOVA with the population factor, feigners vs. real victims, in the validity scales showed significant multivariate differences,  $F(3;45)= 24.7$ ;  $p<.001$ ;  $\eta^2=.622$ ;  $1-\beta= 1$ , that explained 62.2% of the variance. The univariate effects (see Table 2) exhibited differences in the three validity measures. Succinctly, the validity indicators revealed higher rates of feigning on the Global Severity Index, Positive Symptom Distress Index and the Positive Symptom Total in mock victims.

**Table 2.** Global indexes of distress in SCL-90.

<b>Variables</b>	<b>SS</b>	<b>F</b>	<b>p</b>	<b><math>\eta^2</math></b>	<b>1-<math>\beta</math></b>	<b><math>M_{\text{false}}</math></b>	<b><math>M_{\text{real}}</math></b>
Global Severity Index (GSI)	19.9	58.6	.000	.555	1.0	2.35	1.07
Positive Symptom Total (PST)	13943.5	75.9	.000	.618	1.0	76.6	42.9
Positive Symptom Distress Index (PSDI)	2.7	8.9	.005	.159	.830	2.71	2.24

Note:  $df(1;47)$ .  $M_{\text{false}}$ = Mean of false victims of gender violence group;  $M_{\text{real}}$ = Mean of real victims of gender violence group.

In short, the validity indicators showed that feigners systematically used a double strategy of feigning psychological injury i.e., symptom combination and symptom severity. In other words, feigners report any type of symptoms as associated to the trauma of gender violence as well as a severity which is not frequently observed in psychiatric populations, and higher than in real populations of gender violence.

### **Analysis of the reliability of the forensic clinical interview**

No contingency of feigning was observed in the forensic clinical interviews of real victims of gender violence. In contrast, in 13 of the 24 forensic clinical interviews of feigners, that is in more than half of the population of feigners, at least one feigning strategy was informed by the analysis of feigning strategies,  $\chi^2(1)= 0.17$ ; ns. Three feigning strategies were employed by feigners: subtle symptoms (not real symptoms, but rather everyday problems that are confused with symptoms associated to a mental illness); symptom combination (say they suffer from a combination of real symptoms though these rarely appear simultaneously), and symptom severity (extreme symptom

severity). Of the three strategies that have shown to be productive, mock victims employed with a significant frequency ( $p > .05$ , a probability equal to or less than .05 is considered to be a random effect whereas a probability greater than .05 is significant as it is greater than randomly expected) the subtle symptom and symptom severity strategies (see Table 3).

**Table 3.** Z scores for the strategies observed with a test value of .05.

<b>Strategy</b>	<b>Frequency</b>	<b>Observed proportion</b>	<b>Z</b>	<b>p</b>
Subtle symptoms	5	.208	3.55	.001
Symptom combinations	1	.042	0.18	ns
<u>Severity of symptoms</u>	<u>8</u>	<u>.33</u>	<u>7.41</u>	<u>.001</u>

*Note:*  $n = 24$  (among the real victims none malingering strategy was registered). The other strategies were unproductive.

### **Comparison of the clinical state of real victims vs. feigners in the psychometric assessment**

A significant multivariate effect was observed in the self-informed clinical state on the SCL-90-R of real victims of gender violence and feigners  $F(9;29) = 7.29$ ;  $p < .001$ ;  $\eta^2 = .627$ ;  $1-\beta = 1$ , explained 62.7% of the variance.

**Table 4.** Univariate effects on the dimensions of the SCL-90-R by the “sample” factor.

<b>Variables</b>	<b>MS</b>	<b>F</b>	<b>p</b>	<b><math>\eta^2</math></b>	<b>1-<math>\beta</math></b>	<b><math>M_{\text{false}}</math></b>	<b><math>M_{\text{real}}</math></b>
Somatization	9.07	13.81	.001	.227	.953	2.056	1.195
Obsessive-Compulsive	21.08	49.34	.000	.512	1.0	2.592	1.280
Interpersonal Sensitivity	27.1	42.58	.000	.475	1.0	2.433	0.945
Depression	21.51	32.23	.000	.407	1.0	2.915	1.589
Anxiety	25.48	31.5	.000	.401	1.0	2.763	1.32
Hostility	12.01	21.17	.000	.311	.995	1.480	.489
Phobic Anxiety	31.92	41.03	.000	.466	1.0	2.396	0.782
Paranoid Ideation	13.31	18.15	.000	.279	.987	2.111	1.068
<u>Psychoticism</u>	<u>17.04</u>	<u>30.42</u>	<u>.000</u>	<u>.393</u>	<u>1.0</u>	<u>1.692</u>	<u>0.512</u>

*Note:*  $df(1;47)$ .  $M_{\text{false}}$  = Mean of false victims of gender violence group;  $M_{\text{real}}$  = Mean of real victims of gender violence group.

**Table 5.** Contrast of clinical cases in real and false victims.

<b>Variables</b>	<b>Z</b>	<b>p</b>	<b>φ</b>	<b>%<sub>real</sub></b>	<b>%<sub>false</sub></b>
Somatization	3.8	.05	.324	16(4)	45.8(11)
Obsessive-Compulsive	20.1	.001	.681	8(2)	75(18)
Interpersonal Sensitivity	19.7	.001	.675	12(3)	79.2(19)
Depression	15.2	.001	.598	12(3)	70.8(17)
Anxiety	10.8	.001	.510	24(6)	75(18)
Hostility	5.21	.05	.379	4(1)	33.3(8)
Phobic Anxiety	15	.001	.594	24(6)	83.3(20)
Paranoid Ideation	9.1	.01	.471	20(5)	66.7(16)
Psychoticism	15.2	.001	.598	12(3)	70.8(17)

Note:  $df(1)$ . A case is considered a clinical if exceeds the cut-off of  $T_{70}$  ( $M= 50$ ;  $SD= 10$ ) in general population.

As for the univariate effects, differences in all of the clinical variables were observed (see Table 4). Thus, feigners informed of more somatization (i.e., cardiovascular, respiratory gastrointestinal dysfunctions; headaches, pain); obsessive-compulsive (i.e., unwanted thoughts, impulses and actions experiences as unremitting and irresistible); interpersonal sensitivity (feelings of personal inadequacy and inferiority, self-deprecation, feelings of uneasiness, inhibition in interpersonal relationships); depression (feelings of hopelessness, thoughts of suicide, symptoms of dysphoric mood and affect as signs of withdrawal of life interest, lack of motivation, loss of vital energy); anxiety (i.e., nervousness, tension, panic attacks, feelings of terror); hostility (thoughts, feelings, or actions characteristics of aggression, irritability, rage o resentment); phobic anxiety (persistent response fear to a specific person, place, object or situation that is characterised as being irrational and disproportionate, and which leads to avoidance or escape behaviours); paranoid ideation (e.g., projective thought, hostility, suspiciousness, grandiosity, centrality, fear of loss of autonomy, delusions); and psychoticism (i.e., withdrawn, isolated, schizoid life style, hallucinations, thought-broadcasting). Thus, feigners, in contrast to real victims, reported greater clinical injury in all of the diagnostic clinical categories.

Since the goal of forensic assessment is to identify psychological injury associated to gender violence, it is vital to determine the number of clinical cases in each of the clinical variables. The results (see Table 5) illustrate that of all of the clinical

variables examined, the probability of clinical cases was greater among the mock victims. Thus, false victims report severe clinical injury indiscriminately i.e., both in pathologies related to the psychological injury of gender violence as in unrelated ones.

**Table 6.**  $\chi^2$  test of PTSD criteria by sample.

<b>VARIABLE</b>	<b>%false</b>	<b>%real</b>	<b><math>\chi^2</math></b>	<b><i>p</i></b>	<b><math>\phi</math></b>
<b>CRITERION A</b>					
Responses involved intense fear	100	100	----	----	----
<b>CRITERION B</b>					
Recurrent or intrusive recollections of the event	41.7	44	0	1	-.024
Recurrent distressing dreams of the event	25	48	1.89	.170	-.238
Acting as the traumatic event was recurring	12.5	24	0.45	.503	-.148
Physiological distress at exposure to reminders	33.3	72	5.88	.015	-.387
Physiological reactivity on exposure to reminders	12.2	36	2.5	.114	-.273
<b>CRITERION C</b>					
Efforts to avoid thoughts about the trauma	33.3	56	1.71	.191	-.228
Efforts to avoid places that remind the event	25	44	1.2	.273	-.200
Inability to recall part of the event	4.2	16	0.8	.370	-.195
Diminished interest in significant activities	75	84	0.18	.669	-.112
Feelings of detachment	41.7	48	0.15	.874	-.064
Restricted affect	33.3	52	1.06	.302	-.189
Foreshortened future	37.5	40	0	1	-.026
<b>CRITERION D</b>					
Falling or staying asleep	37.5	56.0	1.02	.312	-.185
Irritability or anger	16.7	48	4.12	.042	-.334
Difficulty concentrating	16.7	40	2.22	.136	-.258
Hypervigilance	12.5	32	1.67	.196	-.234
Exaggerated startled responses	4.2	36	5.81	.016	-.395
<b>CRITERION F</b>					
<u>Clinically significant distress</u>	<u>70.8</u>	<u>92</u>	<u>2.38</u>	<u>.123</u>	<u>-.273</u>

Note: *df*(1). The Criterion A1 “the person experienced, witnessed, or was confronted with an event or events that that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others” is assumed, in our study, that is gender violence.

### **Analysis of psychological injury in the forensic clinical interview**

The comparison of PTSD criteria registered in the interviews of real and false victims of gender violence revealed significant differences,  $F(1;47)= 11.89$ ;  $p<.001$ ,  $\eta^2= .202$ ;  $1-\beta= .922$ . In contrast to the results of the psychometric assessment, more symptoms were observed among real victims ( $M= 10.24$ ;  $SD= 0.73$ ) than feigners ( $M= 6.67$ ;  $SD= 0.74$ ). In particular, real victims informed of a greater prevalence of symptoms such as: a) psychological distress when exposed to internal or external stimuli that symbolize or remind one of an aspect of the traumatic event; b) irritability or attacks of anger; and c) exaggerated startled responses to trauma (see Table 6).

As for expected psychological injury i.e., PTSD, more real victims (56%) than feigners (8.3%) met the diagnostic criteria for this trauma,  $\chi^2(1; n=49)= 10.58$ ;  $p<.001$ ;  $\phi= -.508$ . However, two feigners were being able to feign this injury in the forensic clinical interview. The comparison of the efficacy of feigners in the knowledge task (8.3%) and recognition task (100%) highlights that the recognition task tends to facilitates feigning,  $\chi^2(1)= 18.61$ ;  $p<.001$  whereas the knowledge task hinders it.

### **Analysis of the global detection of feigning**

The consistency in the results of the assessment, in line with the legal principle of *persistence*, is a necessary condition for a judicial judgement (i.e., sentence of the Spanish Supreme Court of September 28 1988, RJ 7070). In other words, a measure of clinical injury is not sufficient and the results must show internal and inter-measurement consistency. Thus, an analysis of cases was undertaken in line with current practice in forensic psychology. The analysis detected 2 subjects who managed to feign PTSD in the interview, and were also able to feign in the psychometric assessment the indirect measures (i.e., depression, anxiety), and direct measures of PTSD (the symptoms specific to this trauma as described in the protocol) associated to psychological injury. In other words, 2 feigners were able to feign psychological sequelae of gender violence consistently on the inter-instruments measure. Notwithstanding, one of these feigners informed of all of the symptoms on the SCL-90-R (PST= 90,  $T>70$ ) i.e., used the symptom combination strategy, which was detected by the global severity indexes (GSI= 3.07;  $T>70$ ; and PSDI= 3.07;  $T>70$ ). Moreover, the content analysis of the forensic clinical interview showed this feigner had used the symptom combination

strategy. Furthermore, a lack of inter-measurement consistency in unexpected psychological injury was also observed. In short, besides the psychological injury of gender violence, other clinical injuries were reported in the psychometric assessment, (i.e., psychoticism, paranoia, interpersonal susceptibility) that were not symptoms informed in the forensic clinical interview. As for the second effective feigner in the interview, the Positive Symptom Total (PST= 80,  $T > 70$ ) also indicated probable symptom combination. Likewise, the global severity indexes (GSI= 3.01,  $T > 70$ ; PSDI= 3.39,  $T > 63$ ) suggested symptom severity. In addition, no inter-measurement consistency was found in unexpected clinical injuries. Succinctly, feigners informed of severe clinical pathology (i.e., psychoticism, paranoia, interpersonal susceptibility) in the recognition task i.e., the SCL-90-R, but not so in the knowledge task, the forensic clinical interview. Finally, in both cases a discrepancy was observed between the manifest (the SCL-90-R) and that observed in the forensic clinical interview. For example, no behaviour that implied related psychotic symptoms was observed in the SCL-90-R. In short, the effective feigners of psychological injury in both measures, psychometric and interview, were detected by at least 5 feigning criteria, including the lack of inter-measurement consistency in unexpected injury, and inconsistency between the manifest and the observed.

As for the analysis of false positives, all of the evaluations of real victims were on the whole inter-measurement consistent both in terms of expected and unexpected psychological injury, no feigning strategies were identified in the forensic clinical interviews, no discrepancies were observed between what was manifested in the psychometric assessment and the forensic clinical interview and, as many as two SCL-90-R invalidity criteria in 8% of the protocols were registered (and 1 criterion in 16%). In short, between-measures consistency i.e., consistency between the manifest and observed as well as the absence of feigning strategies in the interview were indicative of real victims with severe sequelae, and two feigning criteria on the SCL-90-R, in all likelihood is indicative of severe injury.



## Discussion

Caution should be taken in deriving conclusions from the findings of this study; initially, five limitations should be borne in mind when generalizing the results. First, though care was taken to ensure that the group of real victim consisted of bona fide subjects, one cannot absolutely guarantee this was the case. Similarly, one cannot be absolutely certain that all of the feigners had never been a direct or indirect victim of gender violence. Secondly, one assumes that real victims of gender violence are able to inform of their clinical symptoms in the recognition task. Thirdly, feigning in real life and under laboratory conditions are considered to be equivalent in terms of the degree of reliability yet they are not entirely identical circumstances. Fourthly, the case type refers exclusively to gender violence; consequently, caution should be taken in extrapolating the results to other case types. Fifthly, though the decision criteria serve to assist the judgement of the forensic psychologists, this does not exclude that experts reajust their decisions in the light of the evidence of each case. Bearing in mind these limitations, one may conclude in terms of forensic practice:

a) Feigners were able feign the psychological injury of gender violence in a recognition task such as the SCL-90-R, and 100% of feigners were able to feign the indirect measures of psychological injury (anxiety, depression) and specific PTSD symptoms.

b) The indicators of the SCL-90-R validity protocol were sensitive to feigning i.e., 87.5% possibly exaggerated symptom severity. Nevertheless, not all of the feigners were detected (the validity controls of the SCL-90-R failed entirely in 12.5% of cases), and inter-indicator consistency was observed in only 50% of cases. Moreover, these indicators were not sensitive to false positives, that is, they inform of honest responses as feigned: 12% for real cases were informed by the PST ( $PST > 60$ ) as potential symptom combination whereas the GSI and the PSDI indicated 8% and 16%, respectively, in all likelihood they had exaggerated the gravity of the injury. Nonetheless, when the three indicators converged in the detection of distorted responses they proved to be a powerful tool for the detection of feigning.

c) The cumulative efficacy of three control indexes on the SCL-90-R revealed 50% were not acceptable for the context in question i.e., judicial cases, given that they did not comply with an indispensable objective in judicial contexts: avoid committing a type II error i.e., to classify a feigned response as honest. In fact, if the criterion for annulling the feigning protocols was the detection of these criteria, 50% of false victims would be classified as honest.

d) The knowledge task hindered the feigning of PTSD symptoms (only 8.3% managed to feign the disorder), but isolated symptoms were accessible to feigning which implies that the diagnosis of psychological injury must entail the verification of PTSD as a whole (O'Donnell et al., 2006). Moreover, 56% of real victims stated they had suffered clinical symptoms compatible with a diagnosis of PTSD, which is in line with reports of 50-55% of battered women under clinical treatment (Echeburúa & Corral, 1998).

e) Feigning was hampered by the knowledge task rather than on the recognition task.

f) The feigning strategies outlined in the forensic clinical interview were used by 50% of the feigners.

g) The combination of the analysis of feigning strategies and the forensic clinical interview were not entirely productive for the detection of feigning.

h) The assessment of feigning using a multi-measures analysis (two measures of clinical condition), and multi-method approach (a recognition task and a knowledge task) with multiple reliability controls (the validity indexes of the SCL-90-R, the analysis of feigning strategies in the forensic clinical interview, and consistency of between-measures of injury) enabled the detection of all the feigners without producing false positives. In order to fulfil judicial requirements, the direct and indirect psychological harm of gender violence must be determined given that failure to do so would imply either that an incident of gender violence had caused no psychological injury or that the feigner had not achieved the intended goal, which would make the analysis of feigning superfluous. If psychological injury compatible with gender violence is detected (the need for PTSD becomes manifest). In order to annul the

assessment for feigning more than four feigning indicators are required (i.e., the validity indexes of the SCL-90-R, the analysis of the feigning strategies in the forensic clinical interview, the inter-measures inconsistency of psychological injury both expected and unexpected, and discrepancy between the data in the forensic clinical interview and the results of the psychometric assessment). In any case, a protocol for forensic assessment can be considered reliable when between-measures consistency for PTSD is observed in at least two invalidity criteria on the SCL-90-R.

### References

- Anguera, M. T. (1990). Metodología observacional. In J. Arnau, M. T. Anguera, & J. Gómez (Eds.), *Metodología de la investigación en las ciencias del comportamiento* (pp. 125-236). Murcia: Servicio de Publicaciones de la Universidad de Murcia.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Arce, R., Carballal, A., Fariña, F., & Seijo D. (2004). Can mock battered women malingering psychological evidence in a recognition task? In A. Czerederecka, T. Jaskiewicz-Obydzinska, R. Roesch & J. Wójcikiewicz (Eds.), *Forensic psychology and law. Facing the challenges of a changing world* (pp. 327-336) Kraków: Institute of Forensic Research Publishers.
- Arce, R., & Fariña, F. (2001). *Construcción y validación de un procedimiento basado en una tarea de conocimiento para la medida de la huella psíquica en víctimas de delitos: La entrevista forense*. Unpublished Manuscript, University of Santiago de Compostela.
- Arce, R., & Fariña, F. (2007). Evaluación forense de la huella psíquica consecuencia de la violencia de género. In R. Arce, F. Fariña, E. Alfaro, C. Civera & F. Tortosa. (Eds.), *Psicología Jurídica. Evaluación e intervención* (pp. 47-57). Valencia: Servicio de Publicaciones de la Diputació de València.

- Arce, R., Fariña, F., Carballal, A. y Novo, M. (2009). Creación y validación de un protocolo de evaluación forense de las secuelas psicológicas de la violencia de género. *Psicothema*, 21(2), 241-247.
- Arce, R., Fariña, F., & Freire, M. J. (2002). Contrastando la generalización de los métodos empíricos de detección del engaño. *Psicologia: Teoria, Investigação e Prática*, 7(2), 71-86.
- Arce, R., Fariña, F. y Vivero, A. (2007). Estudio exploratorio de la efectividad de las técnicas de análisis de contenido de las declaraciones en casos de violencia de género. En C. Guillén y R. Guil (Coords.), *Psicología social: Un encuentro de perspectivas* (VOL I, pp. 590-604). Cádiz: Asociación de Profesionales de la Psicología Social.
- Arce, R., Pampillón, M. C., & Fariña, F. (2002). Desarrollo y evaluación de un procedimiento empírico para la detección de la simulación de enajenación mental en el contexto legal. *Anuario de Psicología*, 33(3), 385-408.
- Bargai, N., Ben-Shakhar, G. & Shalev, A. Y. (2007). Posttraumatic stress disorder and depression in battered women: The mediating role of learned helplessness. *Journal of Family Violence*, 22(5), 267-275.
- Blake, D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Charney, D. S. & Keane, T. M. (1998). *Clinician-administered PTSD scale for DSM-IV*. Boston: National Center for Posttraumatic Stress Disorder.
- Breslau, N., Davis, G., Andreski, P. & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry*, 48, 216-222.
- Bryant, R. A., & Harvey, A. G. (1995). Avoidant coping style and posttraumatic stress following motor vehicle accidents. *Behaviour Research Review*, 15, 721-738.
- Davidson, J., Malik, M. & Travers, J. (1997). Structured interview for PTSD (SIP): Psychometric validation for DSM-IV criteria. *Depression and Anxiety*, 5, 127-129.
- Derogatis, L. R. (1977). *Manual I: Scoring, administration and procedures for the SCL-90*. Baltimore: Clinical Psychometric Research.
- Derogatis, L. R. (2002). *SCL-90-R. Manual*. Madrid: TEA Ediciones.
- Echeburúa, E., & Corral, P. (1998). *Manual de violencia familiar*. Madrid: Siglo XXI.

- Echeburúa, E., Corral, P. Sarasua, B. & I. Zubizarreta, (1998). Mujeres víctimas de maltrato. In E. Echeburúa & P. Corral (1998). *Manual de violencia familiar* (pp. 11-69). Madrid: Siglo XXI.
- Edleson, J. L. (1999). Children's witnessing of adult domestic violence. *Journal of Interpersonal Violence*, 14, 839-870.
- Esbec, C. (2000). El psicólogo forense en el proceso penal. In E. Esbec, & G. Gómez-Jarabo (Eds.), *Psicología forense y tratamiento jurídico-legal de la discapacidad* (pp. 111-254). Madrid: Edisofer.
- Foa, E. B., Riggs, D. S., Daneu, C. V. & Rothbaum, B. O. (1993). Reliability and validity of a brief instrument for assessing posttraumatic stress disorder. *Journal of Traumatic Stress*, 6, 459-473.
- Freyd, J. (1996). *Betrayal trauma: The logic of forgetting childhood abuse*. Cambridge, Mass.: Harvard University Press.
- Greene, R.L. (1980). *The MMPI: An interpretative manual*. New York: Grune & Stratton.
- Hastie, R., Penrod, S. & Pennington, N. (1983). *Inside the jury*. Cambridge, Mass.: Harvard University Press.
- Health World Organization (1992). *International classification of diseases, 10<sup>th</sup> revision (ICD-10)*. Geneva, Switzerland: World Health Organization.
- Jaffe, M.E. & Sharma, K. (1998). Malingering uncommon psychiatric symptoms among defendants charged under California's "Three Strikes and you're Out" Law. *Journal of Forensic Sciences*, 43(3), 549-555.
- Kane, A.W. (1999). Essentials of malingering assessment. In M. J. Ackerman (Ed.), *Essentials of forensic psychological assessment*. New York: John Wiley and Sons.
- Kessler, R. C., Sonnega, A., Hughes, M. & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry*, 52, 1048-1060.
- Koch, W. J., Douglas, K. S., Nicholls, T. L. & O'Neill, M. L. (2006). *Psychological injuries. Forensic assessment, treatment, and law*. New York: Oxford University Press.
- Lewis, M. & Saarni, C. (1993). *Lying and deception in everyday life*. New York: Guilford Press.

- Ministerio de Igualdad (2008). *Evaluación de la aplicación de la ley orgánica 1/2004, de 28 de diciembre, de medidas de protección integral contra la violencia de género*. Retrieved April, 8, 2008 from [http://www.migualdad.es/noticias/pdf/informe\\_ejecutivo-14\\_julio\\_2008def.pdf](http://www.migualdad.es/noticias/pdf/informe_ejecutivo-14_julio_2008def.pdf)
- O'Donnell, M. L., Creamer, M. Bryant, R. A., Schnyder, U. & Shalev, A. (2006). Posttraumatic disorders following injury: Assessment and other methodological considerations. In G. Young, A. W. Kane, & K. Nicholson (Eds.), *Psychological knowledge in courts. PTSD, pain and TBI* (pp. 70-84). New York: Springer.
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E. & Best, C. L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology, 61*, 984-991.
- Rogers, R. (1988). Structured interviews and dissimulation. In R. Rogers (Ed.), *Clinical assessment of malingering and deception* (pp. 250-268). New York: Guilford Press.
- Rogers, R. (1990). Models of feigned mental illness. *Professional Psychology: Research and Practice, 21*, 182-188.
- Rogers, R. (1997). Researching dissimulation. In R. Rogers (Ed.), *Clinical assessment of malingering and deception* (2<sup>nd</sup> ed., pp. 398-426). New York: Guilford Press.
- Rogers, R., & Mitchell, C. N. (1991). *Mental health experts and the criminal courts: A handbook for lawyers and clinicians*. Scarborough, ON: Thomson Professional Publishing.
- Spitzer, R. L., Williams, J. B., Gibbon, M. & First, M. B. (1995). *Structured clinical interview for DSM-IV*. Washington, D.C.: American Psychiatric Press.
- Taylor, S. & Koch, W. J. (1995). Anxiety disorders due to motor vehicle accidents: Nature and treatment. *Clinical Psychology Review, 15*, 721-738.
- Tversky, A. (1977). Features of similarity. *Psychological Review, 84*, 327-352.
- United Nations (1988). *Committee on crime prevention and control. Report on the tenth session*. Vienne: United Nations Publications.
- National Comorbidity Survey Replication. Retrieved April, 8, 2008 from [http://www.hcp.med.harvard.edu/ncs/ncs\\_data.php](http://www.hcp.med.harvard.edu/ncs/ncs_data.php)

- Vallejo-Pareja, M. (1998). *Avances en modificación y terapia de conducta: Técnicas de intervención*. Madrid: Fundación Universidad Empresa.
- Weick, K. E. (1985). Systematic observational methods. In G. Lindzey, & E. Aronson (Eds.), *The handbook of social psychology bulletin* (Vol. 1, pp. 567-634). Hillsdale, N.J.: LEA.
- Wicker, A. W. (1975). An application of a multiple-trait-multimethod logic to the reliability of observational records. *Personality and Social Psychology Bulletin*, 4, 575-579.
- Young, G., Kane, A. W. y Nicholson, K. (2007). *Causality of psychological injury: Presenting evidence in court*. Nueva York: Springer.
- Yudofsky, S. (1985). Malingering. In H. Kaplan, & B. Sadock (Eds.), *Comprehensive textbook of psychiatry*. Baltimore: Williams & Wilkins.