

### Psychology, Crime & Law



ISSN: 1068-316X (Print) 1477-2744 (Online) Journal homepage: http://www.tandfonline.com/loi/gpcl20

# Typologies, risk and recidivism in partner-violent men with the B-SAFER: a pilot study

#### Ismael Loinaz

**To cite this article:** Ismael Loinaz (2014) Typologies, risk and recidivism in partner-violent men with the B-SAFER: a pilot study, Psychology, Crime & Law, 20:2, 183-198, DOI: 10.1080/1068316X.2013.770854

To link to this article: <a href="http://dx.doi.org/10.1080/1068316X.2013.770854">http://dx.doi.org/10.1080/1068316X.2013.770854</a>

|           | Published online: 28 Mar 2013.                     |
|-----------|----------------------------------------------------|
|           | Submit your article to this journal $oldsymbol{G}$ |
| ılıl      | Article views: 414                                 |
| Q         | View related articles 🗗                            |
| CrossMark | View Crossmark data ☑                              |
| 4         | Citing articles: 6 View citing articles 🗹          |

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=gpcl20



## Typologies, risk and recidivism in partner-violent men with the B-SAFER: a pilot study

Ismael Loinaz\*

Department of Personality, Assessment and Psychological Treatment, University of the Basque Country (UPV/EHU), San Sebastian, Spain

(Received 24 April 2012; final version received 26 November 2012)

The research describes the criminal profile of 100 imprisoned partner-violent men (PVM) in Spain, and the follow-up for an average of 15 months of 40 released cases. The ability of the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER) to classify offenders according to typologies and to predict recidivism is analyzed. The results show that PVM have low level of specialization (only 45% limit their criminal activity to intimate partner violence (IPV)) and high level of recidivism (47% previously have been in prison, and 41% have prior arrest for IPV). The B-SAFER shows a high capacity to classify according to batterers typologies (accuracy of 79% with a score ≥13) in two groups: non-pathological and antisocial/pathological offenders. After prison release, 17.5% relapsed (15% in IPV), and 66% have done so within the first year. The B-SAFER had a predictive accuracy of 70% (sensitivity 100%). From antisocial/pathological group, 21% have recidivate compared to 12.5% in non-pathological aggressors, with an over-representation of antisocial/pathological subtype among recidivists (71%). The best predictive variables are the justification of violence, age at first imprisonment, and treatment. There is a 9% of recidivism among treated offenders compared to 50% in the untreated group.

Keywords: partner-violent men; risk assessment; recidivism; typologies; prison

#### Introduction

An effective intervention with partner-violent men (PVM) requires a detailed analysis of risk factors, precipitating situations, typological profiles, therapeutic interventions, and political and legal measures adopted to face the problem (Dixon & Graham-Kevan, 2011). One indicator of this effectiveness is the recidivism after passing through specific treatment programs or after the application of a prison sentence. This paper addresses two of these aspects, the assessment of risk factors and its relationships with offender's typological profiles.

Research in the field of recidivism assessment presents some methodological particularities as is the choice of the type of study (prospective or retrospective), the choice of the variables associated with the recidivism (ad hoc, post hoc, for convenience), the choice of the sources of information (official or self-reports), and the follow-up period (Quinsey, Harris, Rice, & Cormier, 2006). In this sense, recidivism rates vary greatly between studies, from less than a 15% in 1-year follow-ups (Eckhardt, Holtzworth-Munroe, Norlander, Sibley, & Cahill, 2008; Kingsnorth,

<sup>\*</sup>Email: ismael.loinaz@gmail.com

2006; Lin et al., 2009) to 60% found in a 10-year follow-up (Klein & Tobin, 2008). These percentages also depend on the source of information used. In general, the official prevalence rates are lower than those obtained from the report of the victims (Williams & Houghton, 2004) or even the offender's self-report in the Revised Conflict Tactics Scales (CTS-2; Eckhardt, Holtzworth-Munroe et al., 2008). Furthermore, meta-analytic research about treatment effectiveness concludes that based on the self-report of the victims the effect may be zero (Feder & Wilson, 2005).

Differences also depend on the typology of the PVM. A recent study found that the proportion of recidivism was higher in the *general violent* and *pathological* groups (19% and 16%, respectively) characterized by more offenses, more psychopathology, and behavioral problems, whereas *low-level antisocial* and *non-pathological* groups, with minor psychological or behavioral problems, reoffend less (14% and 7%, respectively; Thijssen & de Ruiter, 2011). Moreover, the first two groups took significantly less time to recidivate (an average of 25 months). The results are consistent with a previous research (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2003), which analyzed the cessation of violence in different subtypes of offenders in a 3-year follow-up. The highest cessation was in *family only* and *low-level antisocial* men (40% and 23%, respectively), and the lowest in *generally violent* and *borderlines* offenders (7% and 14%, respectively). Similar results have been found in other research, with an over-representation of recidivists among *generally violent* subjects (45.5%) and *borderlines* (37.5%), reflecting their greater tendency to be impulsive and antisocial (Eckhardt, Holtzworth-Munroe et al., 2008).

One of the most common limitations of recidivism studies is the short follow-up periods (Klein & Tobin, 2008) and, thus, the possibility to analyze only the short-term efficacy of the treatment. Follow-ups commonly range from 3 months to 4 years (Eckhardt, Holtzworth-Munroe et al., 2008; Gondolf & Wernik, 2009; Jones & Gondolf, 2001; Kingsnorth, 2006; Lin et al., 2009; Tollefson & Gross, 2006; Williams & Houghton, 2004), and only recently these periods have been overcome reaching, in some cases, a 10-year follow-up (Coulter & Vande Weerd, 2009; Hilton, Harris, Popham, & Lang, 2010; Klein & Tobin, 2008). In addition, the international research has highlighted the scarcity of longitudinal studies with intimate partner violence (IPV) offenders (Hilton & Harris, 2007). This scarcity of longitudinal research becomes clear in the Spanish scientific context where, to date, there is only one comprehensive publication about treatment in the community (Echeburúa, Sarasua, Zubizarreta, & de Corral, 2009) and now, after the legal changes, it is becoming important to analyze the results of rehabilitation programs (Novo, Fariña, Seijo, & Arce, 2012).

Although in some cases most of the recidivism occurs in the first months of follow-up, some studies indicate that a short-term cessation of the violence (Klein & Tobin, 2008) or the behavioral change after treatment (Bowen, Gilchrist, & Beech, 2008) does not imply an effect or modification in the violent behavior that is maintained over time. Therefore, this lack of relationship between post-treatment and long-term behavior should be taken into account in research on therapeutic effectiveness and recidivism, increasing the follow up in this type of offenders and the risk management strategies.

Regarding the violence-risk assessment, the development of tools for this purpose has reached a considerable magnitude, with more than a hundred different available instruments (Singh & Fazel, 2010). However, the predictive accuracy of most of them

or the higher validity of some of them still must be empirically analyzed (Campbell, French, & Gendreau, 2009). A recent meta-analysis has found that there are substantial differences between the predictive validity of the most commonly used tools (Singh, Grann, & Fazel, 2011): instruments for specific populations are more predictive, actuarial instruments and structured clinical judgment instruments seem to have similar validity, and the predictive validity increases when the tested sample is more similar to the validation sample of the tool. In the case of partner violence risk assessment, there also has been a big progress, and with the increase in the number of perpetrators, the ability to predict accurately the risk of recidivism has become vitally important (Bowen, 2011b). However, there is some ambiguity in the field, and more research is needed to validate instruments across cultural groups and countries because, despite the wide use of some tools, there are no publications about their validity and reliability (Bowen, 2011a; Dixon, Hamilton-Giachritsis, & Browne, 2008), and very few studies evaluating the utility of IPV risk assessment instruments in law enforcement contexts (Belfrage et al., 2012).

Risk assessment may be defined as the process of speculating in an informed way about the possibility of aggressive behavior in a person or his probability of violent recidivism (Au et al., 2008; Hilton, Harris, & Rice, 2010), with the final goal of managing the risk and preventing violence (Kropp, 2009). Moreover, risk assessment should be used to adapt treatment programs to the type of offender as the principle of *risk*, *need*, *and responsivity* proposes (Andrews & Bonta, 2010). This is one of the potential utilities of the PVM typologies (Dixon & Browne, 2003), the risk management making decisions on how to intervene with PVM. A recent combination between these research lines has been the classification of batterers with risk assessment tools, the recidivism prediction according to their typological profile, or the tailoring of treatment programs according to the specific typological profile of the offender (Fowler & Westen, 2011; Stoops, Bennett, & Vincent, 2010; Thijssen & de Ruiter, 2011), an approach that wants to be applied in this pilot study.

In the last 10 years, the violence risk assessment has become an important topic in Spain (Andrés-Pueyo & Echeburúa, 2010). Nevertheless, the empirical adaptation or development of tools in this context is still scarce, especially those relating to IPV. In this case, only one tool has been empirically developed in Spanish sample (Echeburúa, Amor, Loinaz, & de Corral, 2010), and despite the wide use of the Spousal Assault Risk Assessment Guide (SARA; Kropp, Hart, Webster, & Eaves, 1999), there is a lack of empirical results about its usefulness or predictive ability in Spain.

This study, the first of this kind in the Spanish context, seeks to analyze the relationship between PVM typologies, prison recidivism, and the ability to predict the risk of recidivism by a short scale like the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER; Kropp & Hart, 2004; Kropp, Hart, & Belfrage, 2005). The results are intended to help a better understanding of the etiology of violent behavior in couples and to allow the adoption of more effective methods of prevention and risk management (use of reliable scales, description of differential profiles, and design of programs tailored to the offenders needs). Based on existing research, it was hypothesized that higher scores in the B-SAFER would be related to the antisocial/pathological profile, and this typological profile with an increased recidivism after prison released. In the same way, it was expected a positive effect of the treatment on the recidivism reduction.

#### Method

#### **Participants**

The study has two major objectives and, therefore, specific samples for each one. The main sample consists of 100 offenders in a Spanish prison (*Brians-2* prison, Barcelona) for an IPV crime (mainly physical injuries, threats, and protection order violations). They were assessed by the principal researcher, having extensive information on each case, as a part of a research line on batterer typologies (see Loinaz, Echeburúa, & Torrubia, 2010; Loinaz, Ortiz-Tallo, Sánchez, & Ferragut, 2011). To analyze the recidivism after the prison/treatment and the predictive accuracy of the B-SAFER, those cases from the previous sample released after the assessment were selected, a total of 40 offenders. Characteristics of the full sample and sub-sample are shown in Table 1.

#### Instruments

#### **B-SAFER**

The B-SAFER (Kropp & Hart, 2004; Kropp et al., 2005) is a structured guideline for assessing risk of partner violence. It is derived from the SARA (Kropp et al., 1999) but briefer and easier to use (Kropp, 2008). The statistical analyses of the SARA suggested 10 risk factors divided into two sections: *Spousal Assault* and *Psychological Adjustment*, with five risk factors each. The presence of a risk factor can be assessed for the *current moment* (the past four weeks including the incident under investigation) or for the *past* (prior to the past four weeks), using a three-point response format: 0 (absent), 1 (possibly or partially present), and 2 (present). In this research, the Spanish translation of the B-SAFER has been used (Loinaz, 2011). Recent research suggests that the B-SAFER can correctly classify PVM and controls

Table 1. Characteristics of the sample.

| Variable                     | Total sample $(n = 100)$                              | Follow-up sample $(n = 40)$      |
|------------------------------|-------------------------------------------------------|----------------------------------|
| M(SD) age                    | 40 (8.7)                                              | 41.8 (6.7)                       |
| Nationality                  | 76% Spanish                                           | 82.5% Spanish                    |
| M (SD) prison conviction     | 48 (35.8) months                                      | 29 (17.1) months                 |
| M (SD) crimes per conviction | 3.4 (2.5)                                             | 2.6 (1.2)                        |
| Prior criminal conviction    | 64%                                                   | 65%                              |
| Prior imprisonment           | 47%                                                   | 37.5%                            |
| Prior IPV conviction         | 41%                                                   | 35%                              |
| IPV recidivist               | 49%                                                   | 42.5%                            |
|                              | Physical injury 39%                                   | Threats 42.5%                    |
|                              | Threats 39%                                           | Protection order violation 37.5% |
| Principal crime              | Protection order violation 36% Mistreatment/abuse 24% | Physical injury 32.5%            |
| Generalized violence         | 55%                                                   | 52.5%                            |
| Typological profile          | 45% Non-pathological                                  | 40% Non-pathological             |
| distribution                 | 55% Antisocial                                        | 60% Antisocial                   |

(91% and 100%) and has good concurrent validity with measures like the CTS-2 (Au et al., 2008). Likewise, the instrument has been used to identify subtypes of spousal assaulters in a Dutch sample (Thijssen & de Ruiter, 2011), supporting the crosscultural validity of Holtzworth-Munroe and Stuart's (1994) typology as well as the distribution of the subtypes in the community.

#### CTS-2

The CTS-2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) is a 78-item selfreport inventory (39 items for each member of the partner) and is the most widely used instrument to measure the extension and magnitude of IPV. Items are rated on a 0-7 scale (never happened, 1 time, 2 times, 3-5 times, 6-10 times, more than 20 times, and has happened but not in the last year) and scored according to a frequencyweighted system proposed by Straus et al. (1996); answers 0, 1 and 2, the same values; 3 (4 points); 4 (8 points); 5 (15 points); and 6 (25 points). Its validity and reliability have been analyzed in at least 17 countries (see Straus, 2004). Its internal consistency (Cronbach's alpha) varies between 0.34 and 0.94 (Straus, 2004, 2007), with similar properties in the English and Spanish versions (Connelly, Newton, & Aarons, 2005). The test-retest reliability in batterers is between 0.80 and 0.49, depending on the scale (Vega & O'Leary, 2007). In this research, the Spanish version of Loinaz (2009; see Loinaz, Echeburúa, Ortiz-Tallo, & Amor, 2012) has been used. The psychometric properties of this scale in a Spanish sample of PVM show an internal consistency of 0.88 for the 39 items of perpetration (varying from 0.59 to 0.83 among the subscales) and its utility to discriminate between batterers and general population in physical and psychological violence (Loinaz et al., 2012).

#### Millon Clinical Multiaxial Inventory III (MCMI-III)

The MCMI-III (Millon, Davis, & Millon, 1997) is a self-report inventory composed of 175 true—false items, designed to assess personality disorders and clinical syndromes. This instrument has been widely used around the world in the assessment and typological classification of PVM. The MCMI-III assesses 24 clinical scales (11 personality disorder scales, 3 severe personality disorder scales, 7 clinical syndrome scales, and 3 severe syndrome scales) and has 4 validity indices. MCMI uses base rate (BR) scores ranging from 0 to 115 (75 = presence of a trait; 85 presence of a disorder). The original version of MCMI-III (Millon et al., 1997) has produced alpha coefficients ranging from 0.66 to 0.90 and test—retest reliabilities ranging from 0.82 to 0.96. In this research, the Spanish adaptation of the instrument has been used (Cardenal & Sánchez, 2007), with similar properties (internal consistency ranging from 0.65 to 0.88 and test—retest median of 0.91).

Inventory of Distorted Thoughts about Women and Violence (IDTWV; Echeburúa & Fernández-Montalvo, 1998)

The IDTWV is a checklist of 29 items developed to detect irrational thoughts about the role of women or the use of violence as an acceptable way of resolving conflicts. In this research, a more accurate version, proposed by Ferrer, Bosch, Ramis, Torrens, and Navarro (2006) has been used. In this version, the dichotomous (yes/no)

response has been replaced by four-point Likert scale, and items that correlated less than 0.30 with the total score have been eliminated. The final version contains 24 items and has a Cronbach's alpha of 0.84. Finally, they proposed a four-factor correction: (1) acceptance of traditional stereotypes and misogyny, (2) blaming women victims of abuse, (3) acceptance of violence as a suitable form for solving problems, and (4) minimization of violence against women as a problem and excuse of the batterer.

#### **Procedure**

PVM were assessed after signing a written informed consent document. The psychological assessment included individual and group sessions (five participants per group) with a comprehensive assessment protocol (personality, impulsivity, empathy, attachment, anger, etc.). Assessments took place between 2008 and 2010. After each evaluation, a verbal report regarding the psychometric results was returned to each participant.

Offenders were typologically classified in two subtypes (Loinaz et al., 2010, 2011) according to international research. Subjects in *group 1 (non-pathological)* are equivalent to offenders called *family only* (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000; Holtzworth-Munroe & Stuart, 1994; Thijssen & de Ruiter, 2011), *overcontrolled* (Dutton, 2006, 2007), *low pathology* (Johnson et al., 2006), *low anger* (Eckhardt, Samper, & Murphy, 2008), or *low-level criminality* (Stoops et al., 2010) described internationally. *Group 2 (antisociallpathological)* is more heterogeneous (include most pathological offenders) but the features largely coincide with those internationally called *generally violentlantisocial* (Holtzworth-Munroe et al., 2000; Holtzworth-Munroe & Stuart, 1994; Thijssen & de Ruiter, 2011), *antisocial* (Johnson et al., 2006), *instrumentallundercontrolled* (Dutton, 2006, 2007), or *low anger-expressive* (Eckhardt, Samper et al., 2008).

The B-SAFER was independently coded by two raters, based on sources of information like the psychological assessment, professional reports, and prison databases, as shown in Table 2. The risk assessment was blind to actual recidivism and typological profile conditions.

#### Follow-up

Considering a minimum follow-up of 4 months, the final sample that could be tracked was of 40 inmates. The mean follow-up after the release from *Brians-2* prison was 15 months (SD = 7.9; range 4–27). It should be noted that 55% of the sample (n=22) presented an average follow-up period of 21 months. The monitoring of the cases has been made by means of prison information databases SIPC (only Catalonia) and SIP (rest of Spain), including information on convictions, imprisonment, social reports, and so on.

#### Statistical analyses

The scores in the B-SAFER and the item response distribution have been analyzed in a descriptive way (mean, standard deviation, and distribution of risk factors) for the total sample (n = 100). The predictive validity of the B-SAFER was assessed using

Table 2. Source of information for each item of the B-SAFER.

| Item                              | Source of information                                                                                                                                                                                                                                           |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section I: spousal violence       |                                                                                                                                                                                                                                                                 |
| 1. Assault                        | Self-report in the interview of sexual or physical violence; CTS-2 (physical assault scale items; items 19 or 47 in sexual coercion scale); physical injury in a sentence                                                                                       |
| 2. Violent threats or ideation    | Convicted of this crime; CTS-2 (items 57, 69 or 75); description of this kind of behavior in a judgment                                                                                                                                                         |
| 3. Escalation                     | Sequence of crimes and convictions in official reports; evolution of IPV in judgments; criminal record                                                                                                                                                          |
| 4. Violation of court orders      | Convicted of this crime; self-report                                                                                                                                                                                                                            |
| 5. Negative attitudes             | Denial or minimization in interviews; level of cognitive distortion in the IDTWV                                                                                                                                                                                |
| Section II: psychological a       | djustment                                                                                                                                                                                                                                                       |
| 6. Other antisocial behavior      | Criminal versatility; criminal record; antisocial behavior reported in professional reports or self-reports                                                                                                                                                     |
| 7. Intimate relationship problems | Professional reports and prison database records (SIPC); self-report in the interview                                                                                                                                                                           |
| 8. Employment problems            | Professional reports and SIPC; self-report in the interview                                                                                                                                                                                                     |
| 9. Substance use problems         | Drug or alcohol problems in professional reports; BR ≥75 in MCMI-III dependence scales; drug treatment outside prison; socially-excluding drugs use (heroin)                                                                                                    |
| 10. Mental health problems        | At least two BR $\geq$ 75 in some severe disorder of the MCMI-III ( <i>Personality</i> : schizotypal, borderline, paranoid; <i>Axis I disorders</i> : thought disorder, major depression, delusional disorder); psychiatric hospitalization for mental disorder |

the relative operating characteristic (ROC) curve, balancing between sensitivity and specificity. As in previous risk assessment research, ROC curve has been used to identify suitable cut-off points for dichotomous decisions (Grann & Wedin, 2002). The index area under the curve (AUC) expresses the probability that a randomly selected recidivist scores higher than a randomly selected non-recidivist. In our case, this analysis has been used to test the ability to discriminate the typological profiles according to the total score in the B-SAFER (n = 100) and to assess the accuracy of the B-SAFER scores to predict the recidivism after release from prison (n = 40). Furthermore, a series of binary logistic regressions were performed to identify predictors of recidivism between socio-demographic and psychometric variables (first *forward* and *backward* Wald methods, and after the *enter* method to assess specific variables or improvements).

#### Results

#### Risk assessment with the B-SAFER (N = 100)

The B-SAFER, applied to the full sample (n = 100), gave a mean total score of 11.21 (SD = 4.21, range = 2-20). The histogram (Figure 1) shows that the

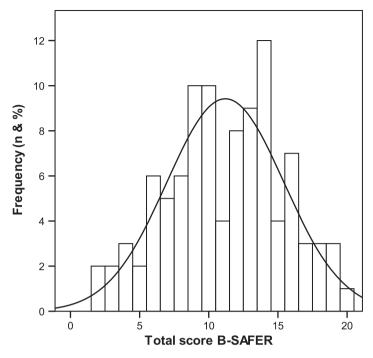


Figure 1. Histogram of total scores in the B-SAFER (N = 100).

distribution can be considered to be approximately normal (skew = -0.116; SE = 0.241, and kurtosis = -0.591; SE = 0.478).

In Table 3, the distribution of the ten risk factors is shown. Assaults and threats were the most frequent factors, whereas the less prevalent ones were mental and employment problems.

#### B-SAFER typological classification (N = 100)

To establish the most suitable cut-off point to differentiate offenders, the typological classification developed in previous studies (Loinaz et al., 2010, 2011) with the same

Table 3. Distribution of the B-SAFER responses in the total sample.

|                                   | Total sample $(n = 100)$ % response |    |    |  |
|-----------------------------------|-------------------------------------|----|----|--|
| Risk factor                       | 0                                   | 1  | 2  |  |
| 1. Assault                        | 24                                  | 6  | 70 |  |
| 2. Violent threats or ideation    | 28                                  | 0  | 72 |  |
| 3. Escalation                     | 31                                  | 8  | 61 |  |
| 4. Violation of court orders      | 40                                  | 0  | 60 |  |
| 5. Negative attitudes             | 29                                  | 21 | 50 |  |
| 6. Other antisocial behavior      | 48                                  | 1  | 51 |  |
| 7. Intimate relationship problems | 26                                  | 10 | 64 |  |
| 8. Employment problems            | 62                                  | 5  | 33 |  |
| 9. Substance use problems         | 47                                  | 2  | 51 |  |
| 10. Mental health problems        | 71                                  | 14 | 15 |  |

sample (with cluster analyses) was taken as a reference. There were statistically significant differences (p=0.000) between both subtypes of offenders regarding the risk, with a mean score of 8.6 (SD = 3.6) in the non-pathological group, and 13.4 (SD = 3.4) in the antisocial/pathological group. The balance between sensitivity and specificity showed that the best cut-off point was 13. A total score of 13 points or higher allowed classifying correctly the 79% of the sample according to their typological profile (69% of 'antisocial/pathological aggressors' –sensitivity– and 91% of 'non-pathological aggressors' –specificity–). An AUC of 0.60 can be considered a marginal improvement over random prediction (0.50); between 0.70 and 0.79, the effect size is moderate, and if greater than 0.80, the effect can be considered large. The AUC for this sample was 0.83 (SE = 0.41; p=0.000), a probability significantly better than chance to differentiate correctly the offender typology with the score in the B-SAFER.

#### Recidivism after release (n = 40)

After the release from prison, nine cases (22.5%) returned to prison. In turn, four cases (10%) were in a permanent location measure (like GPS bracelets) imposed after his release. A detailed analysis of the databases showed that seven of nine readmissions were due to the conviction of a crime after release. Therefore, 17.5% of subjects actually did recidivate in the follow-up period, and the remaining 5% were serving a prison sentence for a crime committed before the last imprisonment (average of 5 years earlier). For those who did reoffend, six (15%) of the sample) had committed IPV (50%) violation of protection order, 33.3% threats, and 16.6% physical injury) and one robbery. Regarding the time to relapse, 50% did so in less than 7 months, with a mean of 292 days (SD = 188; range = 57-554).

#### Accuracy of recidivism prediction

The ROC curve analysis indicated that the best conjugation between sensitivity and specificity was given by the cut-off point  $\geq 13$ . The AUC of 0.76 (SE = 0.07, p < 0.05) indicates a moderate predictive capacity.

The predictive ability of B-SAFER is presented in Table 4. The instrument classified correctly the 70% of the observed recidivism (diagnostic accuracy): 100% of recidivists (sensitivity) and 63% of non-recidivists (specificity). However, there were many false positives, something to be discussed in the conclusions.

|              |            | Observed recidivism |                |       |
|--------------|------------|---------------------|----------------|-------|
|              |            | No recidivism       | Recidivism     | Total |
| B-SAFER risk | Low (<13)  | True negative 21    | False negative | 21    |
|              | High (≥13) | False positive      | True positive  | 19    |
|              | Total      | 33                  | 7              | 40    |

Table 4. B-SAFER recidivism predictive accuracy.

|                        | Recidivism after release |         |       |                     |
|------------------------|--------------------------|---------|-------|---------------------|
| Variables              | В                        | Exp (B) | p     | Nagelkerke R square |
| Acceptance of violence | 3.108                    | 22.370  | 0.020 | 0.625               |

0.818

0.931

0.024

0.090

-0.201

-0.071

Table 5. Logistic regression significant model.

#### Recidivism predictors

Alcohol dependence

Age at first imprisonment

Taking into account the global distribution (see Table 1), 21% of the antisocial/pathological versus 12.5% of the non-pathological men relapsed. In the recidivists group, 71% are of the *antisocial* subtype, whereas 29% are *non-pathological* offenders. Despite the difference, the magnitude was not statistically significant because of the limitations in the sample.

Regarding the B-SAFER risk assessment, recidivist (M=14; SD = 1.4) and non-recidivist offenders (M=10.39; SD = 4.5) differed significantly in their total score (U=56; p=0.03). This means that before their recidivism (during their stay in prison), the recidivists were correctly rated as higher risk.

In the follow-up sample, 80% of the participants received a cognitive-behavioral treatment before their release (with an average of 25 sessions carried out by prison staff). The majority of non-recidivists (29 of 33) had undergone specific treatment for partner violence in prison, whereas the majority of recidivist had not been treated. The difference was statistically significant (p = 0.006). Among untreated aggressors, the distribution of recidivists and non-recidivist was the same (50%). Among treated, the presence of recidivist (9.4%) was significantly lower than non-recidivists (90.6%;  $X^2 = 7.32$ ; p = 0.006).

The binary logistic regression analyses led to the conclusion that only acceptance of violence (from cognitive distortions scale) and age at first imprisonment variables had a statistically significant predictive capacity (see Table 5). The inclusion of alcohol dependence in the model improved the predictive ability from 82.1% to 89.7%, and these three variables correctly predicted 57% of recidivists versus 28% for the two variables alone ( $X^2 = 18.7$ ; p = 9.000).

From the remaining analyses was concluded that having received treatment in prison reduces recidivism. This factor explained 23.4% of the variance in recidivism  $[B=-2.27; \, \text{Exp}(B)=0.103; \, p=0.015]$ . The variable by itself correctly predicted 82.5% of all cases (57.1% of recidivists).

#### Discussion

The purpose of the current research was to analyze the recidivism of PVM after prison release. Moreover, the effectiveness of the B-SAFER (a short scale for violence risk assessment) to classify offenders according to their typological profile, and to predict the recidivism was assessed. The major findings are consistent with previous studies in other countries, and confirm the initial hypothesis.

The criminal career in the full sample, with high number of prior imprisonments and criminal records, is consistent with international studies (Klein & Tobin, 2008), as well as the little deterrent effect of protection orders (Frantzen, San

Miguel, & Kwak, 2011), and highlight the need to intervene early and with alternatives to criminal proceedings.

The B-SAFER has shown a high ability to classify offenders based on their typological profile, correctly classifying 79% of the sample with a score  $\geq$ 13. The results are consistent with a recent study showing the effectiveness of the B-SAFER as a tool for the typological profiling (Thijssen & de Ruiter, 2011). The use of risk assessment tools in the typological classification and the adjustment of treatment programs could be one of the main future research lines.

The recidivism rate in IPV (15%) can be considered low, compared with previous research that estimates the recidivism between 21% and 60% (Gondolf & Wernik, 2009; Gondolf & White, 2001; Grann & Wedin, 2002; Hilton, Harris, Popham et al., 2010; Klein & Tobin, 2008; Tollefson & Gross, 2006; Williams & Houghton, 2004). However, taking into account the number of batterers sentenced to prison in the Spanish context, it could represent a thousand victims. In addition, it has been argued that the greater proportion of relapses occur during the first 6 months (Gondolf, 2000; Kingsnorth, 2006; Lin et al., 2009). In our case, 50% of subjects have done it in less than 7 months. As has been argued in the literature (Dutton & Kropp, 2000), the prediction of recidivism has been an achievable goal. The B-SAFER assessment was successful in 70% of cases (100% for recidivist), and the scores in the tool were related to recidivism as in previous studies with other tools (Belfrage et al., 2012).

From the typological approach, it has been argued that recidivism rates may differ according to the typological profile of the PVM. In our sample, the recidivism rate differs between subtypes of offenders, with 21% in the *antisociallpathological* group and 12% in the *non-pathological* group. In the recidivist group, 71% are of the *antisociallpathological* group. This result is consistent with other studies in which the recidivism of antisocial/pathological subtypes stands at 16–19% (Thijssen & de Ruiter, 2011), and there is an over-representation of these groups among the recidivists, 45% of antisocial and 37% of borderlines (Eckhardt, Holtzworth-Munroe et al., 2008).

The effect of treatment on recidivism also is consistent with previous research. The proportion of recidivists among those not treated (50%) is significantly higher than that for treated subjects (9%). The difference between treated and untreated groups is higher than the established in other studies (Coulter & Vande Weerd, 2009; Lin et al., 2009; Tollefson & Gross, 2006), but consistent with proposals suggesting that treatment may reduce the risk of recidivism up to 67% (Stoops et al., 2010). The 50% of recidivism in untreated offenders is greater than the 17% for not treated sexual offenders (Hanson et al., 2002), whereas the 9% of recidivism among treated offenders is lower than the proposed at international level for PVM (20% in Gondolf, 2004; Gondolf & White, 2001).

Although the results are still preliminary, the recidivism rates seem to be lower than those established internationally, possibly because of the differences in the legal system and the higher proportion of *non-pathological* subjects (lowest risk) in our prison samples. The treatment appears to have a powerful effect in reducing recidivism, although the factors that actually influence the treatment efficacy or the new aggression must be established by comparing individual features and specific aspects of treatment (Dixon et al., 2008; Novo et al., 2012; Stokes, Dixon, & Beech,

2009). It has been claimed that, sometimes, only 5% reduction in recidivism can be attributed to treatment effect (Babcock, Green, & Robie, 2004).

There are some limitations that should be taken into account. First, this is a pilot study and the sample is still small to draw definitive conclusions. Also, the follow-up period may be considered short. It will therefore be interesting to continue with this research to achieve a long-term longitudinal study (e.g., 5 years), required to draw conclusions about behavioral stability and to detect most of recidivism that may occur (Bowen et al., 2008; Klein & Tobin, 2008). Regarding the predictive accuracy of the B-SAFER, there are still some uncertainties. From the point of view of victim safety the scope should be the smallest number of false negatives. However, paying attention to the guarantees of the offender requires the reduction of false positives. Apart from this, the high number of false positives in the sample may be due to follow-up period. It is expected that extending the follow-up will reduce it as a result of increased recidivism, as has been found in previous research (Klein & Tobin, 2008).

Regarding future research lines, it will be useful to have recidivism information from police and courts. It is also of great interest to have the report of the partner/ex-partner because it has been argued that the treatment effect is slightly positive when based on official reports about recidivism, but when the assessment is made from victims' reports, the effect is zero (Feder & Wilson, 2005). Moreover, it will be necessary to test different risk assessment tools and the empirical validity of some risk factor prior to use in practice.

#### Acknowledgments

This work was supported by the Center of Legal Studies and Specialized Training (Department of Justice, Government of Catalonia, Grant number SC-3.167.10), and the Government of the Basque Country (Research Staff Training Program, BFI-09.185). The author would like to acknowledge the management and staff of the Brians-2 prison, especially Lluis Fernández Berga, for the help and support given to the project. Special acknowledgment is due Mayalen Irureta and Ferran Domènech for their work in the research.

#### References

Andrés-Pueyo, A., & Echeburúa, E. (2010). Valoración del riesgo de violencia: instrumentos disponibles e indicaciones de aplicación [Violence risk assessment: Available tools and instructions for use]. *Psicothema*, 22(3), 403–409. Retrieved from http://www.psicothema.com/PDF/3744.pdf

Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5th ed.). New Providence, NJ: LexisNexis.

Au, A., Cheung, G., Kropp, R., Yuk-Chung, C., Lam, G. L. T., & Sung, P. (2008). A preliminary validation of the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER) in Hong Kong. *Journal of Family Violence*, 23(8), 727–735. doi:10.1007/s10896-008-9198-z

Babcock, J. C., Green, C. E., & Robie, C. (2004). Does batterers' treatment work? A metaanalytic review of domestic violence treatment. *Clinical Psychology Review*, 23(8), 1023– 1053. doi:10.1016/j.cpr.2002.07.001

Belfrage, H., Strand, S., Storey, J. E., Gibas, A. L., Kropp, P. R., & Hart, S. D. (2012). Assessment and management of risk for intimate partner violence by police officers using the Spousal Assault Risk Assessment Guide. *Law and Human Behavior*, 36, 60–66. doi:10.1037/h0093948

- Bowen, E. (2011a). An overview of partner violence risk assessment and the potential role of female victim risk appraisals. *Aggression and Violent Behavior*, 16(3), 214–226. doi:10.1016/j.avb.2011.02.007
- Bowen, E. (2011b). The rehabilitation of partner-violent men. Chichester: Wiley-Blackwell.
- Bowen, E., Gilchrist, E., & Beech, A. R. (2008). Change in treatment has no relationship with subsequent re-offending in UK domestic violence sample A preliminary study. *International Journal of Offender Therapy and Comparative Criminology*, 52(5), 598–614. doi:10.1177/0306624x08319419
- Campbell, M. A., French, S., & Gendreau, P. (2009). The prediction of violence in adult offenders: A meta-analytic comparison of instruments and methods of assessment. *Criminal Justice and Behavior*, 36(6), 567–590. doi:10.1177/0093854809333610
- Cardenal, V., & Sánchez, M. P. (2007). Adaptación y baremación al español del Inventario Clínico Multiaxial de Millon-III (MCMI-III) [Spanish adaptation of the Millon Clinical Multiaxial Inventory-III (MCMI-III)]. Madrid: TEA Ediciones.
- Connelly, C. D., Newton, R. R., & Aarons, G. A. (2005). A psychometric examination of English and Spanish versions of the revised conflict tactics scales. *Journal of Interpersonal Violence*, 20(12), 1560–1579. doi:10.1177/0886260505280341
- Coulter, M., & VandeWeerd, C. (2009). Reducing domestic violence and other criminal recidivism: Effectiveness of a multilevel batterers intervention program. *Violence and Victims*, 24(2), 139–152. doi:10.1891/0886-6708.24.2.139
- Dixon, L., & Browne, K. (2003). The heterogeneity of spouse abuse: A review. *Aggression and Violent Behavior*, 8(1), 107–130. doi:10.1016/s1359-1789(02)00104-0
- Dixon, L., & Graham-Kevan, N. (2011). Understanding the nature and etiology of intimate partner violence and implications for practice and policy. *Clinical Psychology Review*, *31*(7), 1145–1155. doi:10.1016/j.cpr.2011.07.001
- Dixon, L., Hamilton-Giachritsis, C., & Browne, K. (2008). Classifying partner femicide. *Journal of Interpersonal Violence*, 23(1), 74–93. doi:10.1177/0886260507307652
- Dutton, D. G. (2006). Rethinking domestic violence. Vancouver: UBC Press.
- Dutton, D. G. (2007). The abusive personality. *Violence and control in intimate relationships* (2nd ed.). New York: The Guilford Press.
- Dutton, D. G., & Kropp, P. R. (2000). A review of domestic violence risk instruments. *Trauma, Violence, & Abuse, 1*(2), 171–181. doi:10.1177/1524838000001002004
- Echeburúa, E., Amor, P. J., Loinaz, I., & de Corral, P. (2010). Escala de Predicción del Riesgo de Violencia Grave contra la pareja Revisada- (EPV-R) [Severe intimate partner violence risk prediction scale-revised]. *Psicothema*, 22(4), 1054–1060. Retrieved from http://www.psicothema.com/pdf/3840.pdf
- Echeburúa, E., & Fernández-Montalvo, J. (1998). Hombres maltratadores [Batterer men]. In E. Echeburúa & P. Corral (Eds.), *Manual de Violencia Familiar* [Handbook of family violence] (pp. 73–175). Madrid: Siglo XXI.
- Echeburúa, E., Sarasua, B., Zubizarreta, I., & de Corral, P. (2009). Evaluación de la eficacia de un tratamiento cognitivo-conductual para hombres violentos contra la pareja en un marco comunitario: Una experiencia de 10 años (1997–2007) [Effectiveness of a cognitive-behavioral program in the treatment of male batterers in a community setting: A review of ten years (1997–2007)]. International Journal of Clinical and Health Psychology, 9(2), 199–217. Retrieved from http://www.aepc.es/ijchp/articulos\_pdf/ijchp-317.pdf
- Eckhardt, C., Holtzworth-Munroe, A., Norlander, B., Sibley, A., & Cahill, M. (2008). Readiness to change, partner violence subtypes, and treatment outcomes among men in treatment for partner assault. *Violence and Victims*, 23(4), 446–475. doi:10.1891/0886-6708.23.4.446
- Eckhardt, C., Samper, R. E., & Murphy, C. M. (2008). Anger disturbances among perpetrators of intimate partner violence: Clinical characteristics and outcomes of court-mandated treatment. *Journal of Interpersonal Violence*, 23(11), 1600–1617. doi:10.1177/0886260508314322
- Feder, L., & Wilson, D. B. (2005). A meta-analytic review of court-mandated batterer intervention programs: Can courts affect abusers' behavior? *Journal of Experimental Criminology*, *I*(2), 239–262. doi:10.1007/s11292-005-1179-0

- Ferrer, V. A., Bosch, E., Ramis, C., Torrens, G., & Navarro, C. (2006). La violencia contra las mujeres en la pareja: creencias y actitudes en estudiantes universitarios/as [Domestic violence: Beliefs and attitudes in university students]. *Psicothema*, 18(3), 359–366. Retrieved from http://www.psicothema.com/pdf/3223.pdf
- Fowler, K. A., & Westen, D. (2011). Subtyping male perpetrators of intimate partner violence. *Journal of Interpersonal Violence*, 26(4), 607–639. doi:10.1177/0886260510365853
- Frantzen, D., San Miguel, C., & Kwak, D. K. (2011). Predicting case conviction and domestic violence recidivism: Measuring the deterrent effects of conviction and protection order violations. *Violence and Victims*, 26(4), 395–409. doi:10.1891/0886-6708.26.4.395
- Gondolf, E. W. (2000). A 30-month follow-up of court-referred batterers in four cities. *International Journal of Offender Therapy and Comparative Criminology*, 44(1), 111–128. doi:10.1177/0306624x00441010
- Gondolf, E. W. (2004). Evaluating batterer counseling programs: A difficult task showing some effects and implication. *Aggression and Violent Behavior*, 9(6), 605–631. doi:10.1016/j.avb.2003.06.001
- Gondolf, E. W., & Wernik, H. (2009). Clinician ratings of batterer treatment behaviors in predicting reassault. *Journal of Interpersonal Violence*, 24(11), 1792–1815. doi:10.1177/0886260508325493
- Gondolf, E. W., & White, R. J. (2001). Batterer program participants who repeatedly reassault Psychopathic tendencies and other disorders. *Journal of Interpersonal Violence*, 16(4), 361–380. doi:10.1177/088626001016004006
- Grann, M., & Wedin, I. (2002). Risk factors for recidivism among spousal assault and spousal homicide offenders. *Psychology Crime & Law*, 8(1), 5–23. doi:10.1080/10683160208401806
- Hanson, R. K., Gordon, A., Harris, A. J., Marques, J. K., Murphy, W., Quinsey, V. L., & Seto, M. C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. Sexual Abuse: A Journal of Research and Treatment, 14(2), 169–194. doi:10.1177/107906320201400207
- Hilton, N. Z., & Harris, G. T. (2007). Assessing risk of intimate partner violence. In J. C. Campbell (Ed.), Assessing dangerousness: Violence by sexual offender, batterers and child abusers (2nd ed., pp. 105–125). New York, NY: Springer.
- Hilton, N. Z., Harris, G. T., & Rice, M. E. (2010). Risk assessment for domestically violent men: Tools for criminal justice, offender intervention, and victim services. Washington, DC: American Psychological Association.
- Hilton, N. Z., Harris, G. T., Popham, S., & Lang, C. (2010). Risk assessment among incarcerated male domestic violence offenders. *Criminal Justice and Behavior*, 37(8), 815–832. doi:10.1177/0093854810368937
- Holtzworth-Munroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Munroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology*, 68(6), 1000–1019. doi:10.1037/0022-006x.68.6.1000
- Holtzworth-Munroe, A., Meehan, J. C., Herron, K., Rehman, U., & Stuart, G. L. (2003). Do subtypes of maritally violent men continue to differ over time? *Journal of Consulting and Clinical Psychology*, 71(4), 728–740. doi:10.1037/0022-006x.71.4.728
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, *116*(3), 476–497. doi:10.1037/0033-2909.116.3.476
- Johnson, R., Gilchrist, E., Beech, A. R., Weston, S., Takriti, R., & Freeman, R. (2006). A psychometric typology of UK domestic violence offenders. *Journal of Interpersonal Violence*, 21(10), 1270–1285. doi:10.1177/0886260506291655
- Jones, A. S., & Gondolf, E. W. (2001). Time-varying risk factors for reassault among batterer program participants. *Journal of Family Violence*, 16(4), 345–359. doi:10.1023/a:1012268725273
- Kingsnorth, R. (2006). Intimate partner violence: Predictors of recidivism in a sample of arrestees. *Violence against Women*, 12(10), 917–935. doi:10.1177/1077801206293081
- Klein, A. R., & Tobin, T. (2008). A longitudinal study of arrested batterers, 1995–2005. Career criminals. *Violence Against Women*, 14(2), 136–157. doi:10.1177/1077801207312396
- Kropp, P. R. (2008). Intimate partner violence risk assessment and management. *Violence and Victims*, 23(2), 202–220. doi:10.1891/0886-6708.23.2.202

- Kropp, P. R. (2009). Intimate partner violence risk assessment. In J. L. Ireland, C. A. Ireland, & P. Birch (Eds.), *Violent and sexual offenders. Assessment, treatment and management* (pp. 43–67). Cullompton: Willan Publishing.
- Kropp, P. R., & Hart, S. D. (2004). The development of the Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER): A tool for criminal justice professionals. Retrieved from http://www.justice.gc.ca/en/ps/rs/rep/2005/rr05fv-1/
- Kropp, P. R., Hart, S. D., & Belfrage, H. (2005). *The Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER)*. Vancouver: ProActive Resolutions Inc.
- Kropp, P. R., Hart, S. D., Webster, C. D., & Eaves, D. (1999). *Manual for the spousal assault risk assessment guide*. Toronto, ON: Multi-Health Systems and BC Institute Against Family Violence.
- Lin, S. C., Su, C. Y., Chou, F. H. C., Chen, S. P., Huang, J. J., Wu, G. T. E., & Chen, C. C. (2009). Domestic violence recidivism in high-risk Taiwanese offenders after the completion of violence treatment programs. *Journal of Forensic Psychiatry & Psychology*, 20(3), 458–472. doi:10.1080/14789940802638341
- Loinaz, I. (2009). Aproximación teórica y empírica al estudio de las tipologías de agresores de pareja: análisis descriptivo de variables e instrumentos de evaluación en el centro penitenciario Brians-2 [Theoretical and empirical approach to the study of partner-violent men typologies: Descriptive analysis of variables and assessment tools in the Brians-2 prison]. Madrid: Ministerio del Interior Secretaria General Técnica.
- Loinaz, I. (2011). Clasificación de agresores de pareja en prisión. Implicaciones terapéuticas y de gestión del riesgo [Partner-violent men in prison classification: Therapeutic and risk management implications]. In *Intervención con agresores de violencia de género* [Intervention with gender violence offenders] (pp. 153–276). Barcelona: Centro de Estudios Jurídicos y Formación Especializada, Generalitat de Cataluña.
- Loinaz, I., Echeburúa, E., Ortiz-Tallo, M., & Amor, P. J. (2012). Propiedades psicométricas de la Conflict Tactics Scales (CTS-2) en una muestra española de agresores de pareja [Psychometric properties of the Conflict Tactics Scales (CTS-2) in a Spanish sample of partner-violent men]. *Psicothema*, 24(1), 142–148. Retrieved from http://www.psicothema.com/pdf/3991.pdf
- Loinaz, I., Echeburúa, E., & Torrubia, R. (2010). Tipología de agresores contra pareja en prisión [Typology of incarcerated intimate partner aggressors]. *Psicothema*, 22(1), 106–111. Retrieved from http://www.psicothema.com/pdf/3703.pdf
- Loinaz, I., Ortiz-Tallo, M., Sánchez, L. M., & Ferragut, M. (2011). Clasificación multiaxial de agresores de pareja en centros penitenciarios [Multiaxial classification of partner-violent men in prisons]. *International Journal of Clinical and Health Psychology*, 11(2), 249–268. Retrieved from http://www.aepc.es/ijchp/articulos\_pdf/ijchp-379.pdf
- Millon, T., Davis, R., & Millon, C. (1997). *Millon Clinical Multiaxial Inventory-III (MCMI-III) manual* (2nd ed.). Minneapolis: Pearson.
- Novo, M., Fariña, F., Seijo, D., & Arce, R. (2012). Assessment of a community rehabilitation programme in convicted male intimate-partner violence offenders. *International Journal of Clinical and Health Psychology*, 12(2), 219–234. Retrieved from http://www.aepc.es/ijchp/articulos\_pdf/ijchp-408.pdf
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (2006). Violent offenders: Appraising and managing risk (2nd ed.). Washington, DC: American Psychological Association.
- Singh, J. P., & Fazel, S. (2010). Forensic risk assessment: A metareview. *Criminal Justice and Behavior*, 37(9), 965–988. doi:10.1177/0093854810374274
- Singh, J. P., Grann, M., & Fazel, S. (2011). A comparative study of violence risk assessment tools: A systematic review and metaregression analysis of 68 studies involving 25,980 participants. *Clinical Psychology Review*, 31(3), 499–513. doi:10.1016/j.cpr.2010.11.009
- Stokes, H., Dixon, L., & Beech, A. (2009). Predicting drop out of incarcerated men from a long-term aggression programme. *Journal of Aggression, Conflict and Peace Research*, 1(1), 36–44. doi:10.1108/17596599200900005
- Stoops, C., Bennett, L., & Vincent, N. (2010). Development and predictive ability of a behavior-based typology of men who batter. *Journal of Family Violence*, 25(3), 325–335. doi:10.1007/s10896-009-9294-8

- Straus, M. A. (2004). Cross-cultural reliability and validity of the revised Conflict Tactics Scales: A study of university student dating couples in 17 nations. *Cross-Cultural Research*, 38(4), 407–432. doi:10.1177/1069397104269543
- Straus, M. A. (2007). Conflict Tactics Scales. In N. A. Jackson (Ed.), *Encyclopedia of domestic violence* (pp. 190–197). New York: Routledge.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2). Development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283–316. doi:10.1177/019251396017003001
- Thijssen, J., & de Ruiter, C. (2011). Identifying subtypes of spousal assaulters using the B-SAFER. *Journal of Interpersonal Violence*, 26(7), 1307–1321. doi:10.1177/0886260510369129
- Tollefson, D. R., & Gross, E. R. (2006). Predicting recidivism following participation in a treatment program for batterers. *Journal of Social Service Research*, 32(4), 39–62. doi:10.1300/J079v32n04\_03
- Vega, E. M., & O'Leary, K. D. (2007). Test-retest reliability of the revised conflict tactics scales (CTS2). *Journal of Family Violence*, 22(8), 703-708. doi:10.1007/s10896-007-9118-7
- Williams, K. R., & Houghton, A. B. (2004). Assessing the risk of domestic violence reoffending: A validation study. *Law and Human Behavior*, 28(4), 437–455. doi:10.1023/B:LAHU.0000039334.59297.f0