# Assessing risk markers in intimate partner femicide and severe violence: A new assessment instrument

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*Acknowledgements:* This study was developed through an agreement between the Basque Institute of Criminology (University of the Basque Country) and the Home Council of the Basque Government, within the framework of an investigation funded by the Spanish Ministry of Education and Science (Code SEJ2005-09170-C04-02/PSIC).

#### ABSTRACT

The aim of this study was to develop a new assessment tool to predict intimate partner femicide and severe violence. The sample for this study consisted of 1,081 men who were reported to the police station (Basque Country, Spain), because of having committed intimate partner violence. First, the most significant differences between the severe violence group (n=269) and the less severe violence group (n=812) in sociodemographic variables were determined. Results showed that both the perpetrators and the victims of the severe violence group had a higher rate of immigration. Second, the proposed 20-item scale derived from a larger 58-item scale, where only the most discriminative items between severe and non-severe intimate partner violence were taken into account. Psychometric properties of reliability and validity were rather good. Cut-off scores have been proposed according to sensitivity and specificity. This structured professional judgment (an easy-to-use tool) appears to be suitable to the requirements of criminal justice professionals and is intended for use as the basis of safety planning. Implications of these results for further research are commented upon.

**Key words:** Severe intimate partner violence. Femicide. Assessment tool. Risk assessment. Safety planning.

#### INTRODUCTION

Intimate partner violence (specifically, men's violence against women) is a very frequent event (it affects at least 3.6-9.6% of women over 18 years of age in Spain) that takes on different modalities (physical and psychological, sexual, or only psychological) and different levels of severity (blows, bruises, severe injuries, and homicide), and likewise has different prognoses. Actually 60-70 women are yearly killed by their partners in Spain (Echeburúa & Fernández-Montalvo, 2007). Male batterers do not present symmetrical profiles: in some cases they are affected by mental disorders such as addictions or psychotic disorders (Echeburúa, Fernández-Montalvo, & Amor, 2003); in others, by personality disorders such as psychopathy (Echeburúa & Fernández-Montalvo, 2007); in other cases (the most frequent), by cognitive distortions, lack of control over anger, deficits in communication skills and problem solving, low self-esteem, and pronounced machismo (Fernández-Montalvo, Echeburúa, & Amor, 2005); and, lastly, there are many perpetrators who are ordinary and relatively conventional guys, without mental disorders (Dobash, Dobash, Cavanagh & Lewis, 2004).

Consequently, it is not a homogeneous phenomenon. Thus, for example, femicide or episodes of severe violence are dramatic, but relatively infrequent, events. In fact, less than 1% of battered women are severely injured or murdered by their intimate partners or ex-partners (Websdale, 1999).

That is to say, partner violence is a frequent phenomenon, but severe partner violence is not however so frequent. It is, therefore, important to determine whether there are some distinctive characteristics (i.e. stalking,

forced sex and prior domestic violence arrest) that differentiate them, such as several studies have suggested (Campbell, Webster, Koziol-McLain *et al.*, 2003; Campbell, Glass, Sharps *et al.*, 2007; Fernández-Montalvo *et al.*, 2005). Likewise, if severe violence or homicide, when they occur, are the last link in a chain of violent behaviors (Campbell, 1995; Stark & Flitcraft, 1996), then it is important to determine the predictors of such severe behavior. This way, specific and individualized protection measures for the victims could be adopted the first time the violent situation is detected as a function of the degree of estimated risk. Judges, the police, social workers, or offices that attend the victims could make decisions about protection, of more or less intensity, on the basis of empirical data and not merely using intuitive criteria (Heilbrun, 1997; Litwack & Schlesinger, 1999).

In this sense, it is important to have instruments that allow one to assess danger in the setting of intimate partner violence, especially because many women are not aware of the risk they run (Heckert & Gondolf, 2004). Violence risk assessment instruments do not assess psychological constructs, with precise psychometric properties, but instead are oriented toward decision making (Campbell, Sharps, & Glass, 2000; Dutton & Kropp, 2000; Kropp, 2004). Predicting risk of intimate partner violence and calculating intimate danger, even with the problems involved, facilitates awareness of the problem and searching for solutions both in the victim and in the people who are in charge in the police force or in the judicial or social institutions (Douglas & Kropp, 2002; Trone, 1999). A list of the main instruments described to date is presented in *Table 1*.

## INSERT TABLE 1 ABOUT HERE

The first scale developed, based on data of domestic homicides, was the *Danger Assessment (DA)* (Campbell, 1995), the goal of which is to assess the risk of homicide in battered women, but it can also be used to predict future violence. The limitation of this instrument is that the information is provided exclusively by the victims. Another later instrument is the *Femicide Scale* (Kerry, 1998), based on information from men who killed their partners, and its goal is to identify the characteristics of the homicides including type of violence and attitudes towards women. The limitation of this scale is that it only takes into account the most extreme type of violence (the murder of the victim).

The *Spousal Assault Risk Assessment (SARA)* (Kropp, Hart, Webster, & Eaves, 1999, 2000) is a 20-item scale that uses empirically established risk markers that are related to the aggressors' criminal history, social functioning, and mental health. Its goal is to facilitate professionals' decision making in regard to partner violence. The information is provided by different sources (victim, aggressor, police files, clinical record, etcetera). The *Brief Spousal Assault Form for the Evaluation of Risk (B-SAFER)* is a reduced version of the *SARA*, developed by the same authors (Kropp & Hart, 2004). It was created mainly for use by the police and judges and, therefore, it omits the assessment of mental health (mental and personality disorders). Some limitations of these scales, more focused on the marriage relationship than on the couple

relationship, are that they do not assess the relationship status and that, being not self-reported scales, they are prone to disagreement among observers.

The scale proposed in our research differs from the *SARA* and the *B*-*SAFER* in that it focuses on the prediction of the risk of homicide or severe violence (not only violence), it is not limited to the risk of aggression directed at the wife, and it is the first tool adapted to the cultural situation of Europe because the most relevant instruments come from North America (where, for example, the use of weapons and the family context are somehow different).

The purpose of this paper is to determine the characteristics of severe intimate partner violence against women and to predict the victims' risk for lethal or severe violence. It is not a scale aimed at creating a psychological construct, but at the process of decision making within a specific context. Thus, going beyond intuitive criteria, it helps non-clinical professionals (judges, members of the police force, forensic psychologists, social workers, etc.) in police, judicial, or social service settings to adopt protection measures for the victims just when the first charges take place, which are appropriate to their specific needs and based on empirical criteria.

#### METHOD

#### Participants

The sample of this study is made up of 1,081 male batterers, distributed in 2 groups: an experimental group of severe cases (N=269) and a control group of less severe cases (N=812). The individuals studied proceed from the charges registered in the Basque Country (Spain) between October 2005 and August 2006.

With regard to the experimental group, it comprises 269 individuals who committed a homicide or severe violent acts against their female partner or expartner. The sample of this group was selected according to one or several of the following criteria: a) having committed or attempted to commit homicide against their partner; b) having used weapons or dangerous objects against their partner; or c) having caused severe or repeated injuries that had required, not only professional first-aid, but hospitalization or continued medical assistance.

In contrast, the control group is made up of 812 individuals who had committed non-severe violence against their female partner or ex-partner. The sample of this group comprises men who were reported for this offense and do not comply with any of the above-mentioned criteria for the experimental group.

## Assessment instrument

In the first phase, the risk prediction scale was elaborated from the components that seem to be more closely related to severe partner violence, according to the authors' clinical experience and the review of previous studies in the literature. In the second phase, the instrument was enriched by the suggestions made by officers of the Police Force, according to their knowledge and professional experience. The initial scale had 58 items (*cfr.* Echeburúa, Fernández-Montalvo, & Corral, 2008).

Lastly, the assessment tool was refined and simplified on the basis of the results obtained in this research, in order to propose a brief, easy-to-use scale that is practical for use by the police, social workers, forensic psychologists and judges in their decision-making process.

Therefore, the assessment tool that was finally proposed has only 20 items, which were selected because of their higher capacity to predict severe violence. The items were grouped into four sections (personal data, relationship status of the couple, type of violence, male batterer's profile, and victim's vulnerability), of which two sections (type of violence and batterer's profile) take up the majority of the items because of their higher predictive capacity. The proposed scale is presented in the *Appendix*.

#### Procedure

All the participants were interviewed by members of the police just at the time when the victims brought the charges. The assignment of partner aggressors to both groups was made by the police by interviewing perpetrators and victims and taking into account the crime scene. Once all the questionnaires had been completed, comparative analyses between the two groups were carried out in order to calculate the capacity of each item to differentiate between severe and non-severe aggressors. The 20 items that make up the questionnaire were thus obtained. The final items are those that presented a higher capacity to differentiate between the two groups.

The analyses were carried out with the SPSS computer program (version 13.0 for Windows). Descriptive statistical analyses were conducted to determine sample characteristics (percentages, means, and standard deviations). Likewise, the groups were compared by means of the chi square test in the case of categorical variables, and Student's *t* in the case of quantitative variables.

## RESULTS

## Sample profile

Regarding the severity of the charges, the number of cases of severe violence (N=269) comprise 25% of the sample; the cases of non-severe violence (N=812) make up 75% of the total sample.

With regard to the demographic profile, there are some differences between the groups. Nationality is the most significant aspect. Thus, as shown in Table 2, foreign immigrant perpetrators, especially Latin Americans and Africans, committed more frequently (35,7%) severe offenses than non-severe offences (25,9%) ( $X^2=8.9$ ; p<.01).

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#### INSERT TABLE 2 ABOUT HERE

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#### Reliability of the instrument

The internal consistency index, obtained by Cronbach's alpha in the total sample of participants (severe and non-severe aggressors, N=1,081), is .71. The partial coefficients are .69 in the subsample of severe perpetrators and .66 in the non-severe aggressors subsample.

#### Validity of the instrument

First, we attempted to determine whether the scale was valid to *globally* differentiate severe perpetrators from non-severe ones. Thus, the severe aggressors (M=9.2, SD=3.6) scored significantly higher than the less severe ones (M=6.3, SD=3.2) in the total score of the assessment tool. These differences were statistically significant (t=12.4, p<.001).

Second, the discriminative capacity of each of the items that make up the instrument was determined. The results are presented in *Table 3*.

## INSERT TABLE 3 ABOUT HERE

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As can be observed, this scale differentiates adequately between severe and non-severe perpetrators, and it does so both in the global score and in each one of the proposed items. Moreover, there are 5 items that are particularly significant, as the two groups present a difference of more than 19.5 points in them (*d* index): items 8 (weapons), 9 (intentional injuries), 11 (jealousy), 17 (justification of violence), and 18 (danger of death).

#### Diagnostic efficacy of the assessment tool

In order to establish the diagnostic efficacy of the scale, several cut-off scores were tested (*Table 4*). We wanted to find the cut-off score that would combine the sensitivity and specificity of the instrument most effectively.

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## INSERT TABLE 4 ABOUT HERE

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From this viewpoint, after testing all the possible cut-off scores, a calculation of three levels of severe violence risk was established: low (0-4), moderate (5-9), and high (10-20). These cut-off scores were selected as a function of the higher or lower risk of committing severe violent behaviors against the partner in the near future (*Table 5*). Thus, for example, a total score of 10, considered high risk, includes 48% of the severe batterers, which means that one half obtain lower scores, and only 18% of the less severe batterers obtain this score (false positives). If a stricter cut-off score had been chosen (for example, 12), this

would comprise 29% of the severe cases and there would be a much lower number of false positives (6%), but at the cost of leaving out many severe batterers (71%) (false negatives). In contrast, if a lower cut-off score had been chosen (8 or 9), it would include a higher number of severe batterers, but also a large number of non-severe cases (false positives), which would limit the predictive capacity of the instrument.

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#### INSERT TABLE 5 ABOUT HERE

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Therefore, the proposed cut-off scores represent a reasonable equilibrium between the need to adequately detect the severe batterers and the suitability of not extending this label to an unnecessarily high number of men who have behaved violently against their partner, and who, even though they committed an offense, present a moderate or low risk of carrying out severe behaviors that can place their partner's life at risk.

## DISCUSSION

The distinction between severe and non-severe intimate partner violence may be relevant. It is not easy to establish the distinction between lethal and serious violence with non serious violence, but we opted for defining them in operational terms. Intimate partner femicide or severe violence are infrequent compared to general intimate partner violence (Echeburúa *et al.*, 2008; Websdale, 1999). In Spain about 60-70 women are yearly killed by their partners, but about 50.000 battered women go the court to claim for their situation.

The scale proposed to predict severe violence risk against a partner seems effective (with satisfactory psychometric properties) and efficient (short and easy to apply) for the goal sought: to adopt *ad hoc* protection orders for each victim as a function of the risk assessment of new and more severe aggressions. This scale can be easily applied by personnel from the police, judicial, or social service settings, providing they are sufficiently trained in its administration.

In any case, the proposal of this instrument, with the established cut-off scores, is associated with the establishment of a level of probability of risk and prediction of the future in an extraordinarily complex topic (intimate partner violence). Therefore, being a not self-reported scale, it has added value providing the interviewers are well trained, the scale is completed by two or more people (achieving interrater reliability), it is re-assessed 24-72 hours later (taking into account the new data), and it is contrasted with other sources of information: victim, neighbors, antecedents, police statement, etc. (Weisz, Tolman, & Saunders, 2000).

In this sense, the scale is only a photograph of a situation at a specific moment and should be completed with all the available data from the reality. Thus, it is advisable to apply the scale again when there are new charges, when considerable time has elapsed (the value of the prediction gets weaker with the passing of time since the assessment), or when the circumstances with regard to the initial assessment have changed. Thus, the evolution of the case allows one to make the appropriate decisions at each moment (McFarlane, Campbell, & Watson, 2002).

There are some scale items which should receive special attention because of their higher discriminative capacity. We refer specifically to the items that denote the clear intentionality of causing severe injury (item 8) or that indicate the use of threatening with dangerous objects (item 9), as well as the items that reflect the existence of intense jealousy or controlling behaviors (item 11) or the justification of the violent behavior carried out (item 17). The victim's perception of being in danger of death in the last few weeks (item 18) also has great predictive capacity (Heckert & Gondolf, 2004). Only some of these items, such as those referring to extreme jealousy or the use of weapons or dangerous objects, coincide with studies conducted in other contexts (Browne, Williams, & Dutton, 1999; Campbell *et al.*, 2003; Grann & Wedin, 2002; Riggs, Caulfield, & Street, 2000; Schumaker, Feldbau-Kohn, Slep, & Heyman, 2001). The type of samples used and the different socio-cultural family and couple relationship context may account for these discrepancies.

Three risk levels were established with this scale: low (0-4), moderate (5-9), and high (10-20). In case of doubt (for example, when the scale shows a score of 9, bordering on high risk, or when some of the above-mentioned items are present), it is advisable to apply higher ranking protection measures. In these cases, one goes beyond the strictly quantitative interpretation of the scale, but, obviously, the victim protection is the first priority.

Lastly, some comments on this research are appropriate. One of its positive characteristics is the large size of the sample, as well as its representative nature in the setting of the Basque Country. However, the investigation has some limitations. Firstly, it is a study of reported partner

violence, not of partner violence in general. And secondly, the research is based on a scale filled out by several assessors, who may have used different criteria about completing some of the items and the assignation of the reported subjects to one of the two groups. However, we tried to minimize this limitation by means of a training course to homogenize assessors' criteria, conducted by the investigators. In any case, despite these limitations, the data obtained allow us to empirically establish some risk markers of severe injuries and homicide in intimate partner violence.

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## Principal Risk Assessment Instruments in Intimate Partner Violence

Authors	Instrument	Items
Campbell, 1995	Danger Assessment Tool (DA)	20 items
Kerry, 1998	Femicide Scale	
Kropp, Hart, Webster,	Spousal Assault Risk Appraisal	20 items
& Eaves, 1999, 2000	Guide (SARA)	
Kropp & Hart, 2004	Brief Spousal Assault Form for	10 items
	the Evaluation of Risk	
	(B-SAFER)	

## Profile Comparison of Male Batterers Studied

	Severe Cases	Non-severe	
Variables	(N=269)	Cases (N=812)	t
	M (SD)	M (SD)	
Mean age of aggressor	37.3 (10.4)	38.2 (11.2)	1.1
Variables	Severe Cases (N=269)	Non-severe Cases (N=812)	X <sup>2</sup>
	N (%)	N (%)	
Age groups ( <i>N</i> =1,067) 17-20 years 21-30 years 31-40 years 41-50 years 51-60 years Over 60 years	(n=266) 7 (2.6%) 58 (21.8%) 114 (42.8%) 58 (21.8%) 22 (8.2%) 7 (2.6%)	(n =801) 18 (2.2%) 189 (23.5%) 284 (35.4%) 202 (25.2%) 74 (9.2%) 34 (4.2%)	5.85
Nationality ( <i>N</i> =1,078) Spanish Latin American African European Asian United States	(n=269) 173 (64.3%) 45 (16.7%) 29 (10.7%) 19 (7.1%) 2 (0.7%) 1 (0.3%)	( <i>n</i> =809) 599 (74.1%) 112 (13.8%) 51 (6.3%) 43 (5.3%) 4 (0.5%) 0	13.5*
Profession ( <i>N</i> =991) No professional activity Unqualified laborer Qualified laborer Businessman Liberal profession Professor	( <i>n</i> =252) 78 (30.9%) 101 (40.1%) 55 (21.8%) 10 (3.9%) 7 (2.8%) 1 (0.4%)	( <i>n</i> =739) 222 (30.1%) 274 (37.1%) 180 (24.4%) 33 (4.5%) 26 (3.5%) 4 (0.5%)	1.5
Cultural level ( <i>N</i> =886) Without primary education Primary education Secondary education Professional training University education	( <i>n</i> =222) 45 (20.3%) 116 (52.3%) 30 (13.5%) 28 (12.6%) 3 (1.4%)	( <i>n</i> =664) 111 (16.7%) 316 (47.5%) 121 (18.2%) 113 (16.9%) 3 (0.5%)	8.4
Socioeconomic level ( <i>N</i> =987) Low Medium High	( <i>n</i> =247) 154 (62.3%) 83 (33.6%) 10 (4.1%)	( <i>n</i> =740) 428 (57.8%) 285 (38.5%) 27 (3.6%)	1.91

\**p* <.05.

Rate of affirmative responses in the Scale Items

Variables	Total Sample ( <i>N</i> =1,081)		Severe Cases (N = 269)	Non-severe cases (N =812)		
	N	(%)	N (%)	 N (%)	X <sup>2</sup>	d
Foreign immigrant	381	(35.2%)	113 (42%)	268 (33%)	6.7**	9.0
Separation	458	(42.4%)	130 (48.3%)	328 (40.4%)	4.8*	7.9
Harassment	373	(34.5%)	110 (40.9%)	263 (32.4%)	6.1*	8.5
Physical violence	812	(75.1%)	235 (87.4%)	577 (75.1%)	27.8***	12.1
Physical violence in front of relatives	385	(35.6%)	127 (47.2%)	258 (31.8%)	20.3***	15.4
Increased violence	430	(39.8%)	10 (52%)	290 (35.7%)	21.8***	16.3
Severe threats	421	(38.9%)	131 (48.7%)	290 (35.7%)	13.7***	13.0
Weapons	254	(23.5%)	112 (41.6%)	142 (17.5%)	64.2***	24.1
Intentional injuries	255	(23.6%)	123 (45.7%)	132 (16.3%)	95.7***	29.4
Sexual aggression	125	(11.6%)	55 (20.4%)	70 (8.6%)	26.4***	11.8
Jealousy	660	(61.1%)	206 (76.6%)	454 (55.9%)	35.4***	20.7
Previous violence (partner)	191	(17.7%)	59 (21.9%)	132 (16.3%)	4.1*	5.6
Previous violence (others)	349	(32.3%)	110 (40.9%)	239 (29.4%)	11.6***	11.5
Alcohol/drugs	609	(56.3%)	186 (69.1%)	423 (52.1%)	23.1***	17.0
Mental illness	288	(26.6%)	87 (32.3%)	201 (24.8%)	5.5*	7.5
Cruel behaviors	342	(31.6%)	123 (45.7%)	219 (27%)	31.9***	18.7
Justification of violence	404	(37.4%)	140 (52%)	264 (32.5%)	32.1***	19.5
Danger of death	224	(20.7%)	100 (37.2%)	124 (15.3%)	57.6***	21.9
To forgive the aggressor	439	(40.6%)	129 (48%)	310 (38.2%)	7.6**	9.8
Victim's vulnerability	218	(20.2%)	66 (24.5%)	152 (18.7%)	3.9*	5.8

\*p < .05. \*\*p < .01. \*\*\*p < .001.

Cut-off scores	Sensitivity	Specificity	Diagnostic efficacy
0	100%	0%	24,9%
1	99,63%	1,11%	25,6%
2	99,26%	4,80%	28,3%
3	97,77%	11,08%	32,7%
4	95,54%	19,95%	38,8%
5	88,48%	33,13%	46,9%
6	83,27%	45,32%	54,8%
7	73,98%	55,42%	60,0%
8	65,80%	65,64%	65,7%
9	57,25%	74,38%	70,3%
10	47,96%	81,40%	73,1%
11	36,80%	87,68%	75,0%
12	29,37%	93,60%	77,6%
13	21,19%	96,06%	77,4%
14	13,75%	98,40%	77,3%
15	7,06%	99,51%	76,5%
16	2,60%	100%	75,8%
17	1,49%	100%	75,5%
18	0,74%	100%	75,3%

Sensitivity, Specificity and Diagnostic Efficacy with different cut-off scores

Diagnostic groups		Groups predicted by the discriminant function			
		Severe	Non-severe	Total	
Severe cases		129	140	269	
Non-severe cas	ses	151	661	812	
Sensitivity =	True positives Total severe cases		$\frac{129}{269} \times 100 = 47.$	9%	
Specificity = $100 - \frac{\text{False positives}}{\text{Total non-severe cases}} \times 100 = 100 - \frac{151}{812} \times 100 = 81.4\%$					
Diagnostic efficacy = $\frac{\text{Total correctly classified}}{\text{Global total}}$ x 100 = $\frac{790}{1,081}$ x 100 = 73.1%					

# Diagnostic Efficacy of the Scale (Cut-off Score = 10)

## APPENDIX Severe Intimate Violence Partner Risk Prediction Scale (SIVIPAS)

Name: File: Date: Assessor:	
I. Personal data	Assessment (0 or 1)
1. Male batterer or victim is a foreign immigrant	
II. Couple relationship status	Assessment (0 or 1)
2. Recently separated or in the process of separation	
3. Recent harassment of victim or breaking the restraining orders	
III. Type of violence	Assessment (0 or 1)
4. Existence of physical violence which can cause injuries	
5. Physical violence in the presence of the children or other relatives	
<ol><li>Increase in the frequency and severity of the violent incidents in the last month</li></ol>	
7. Severe threats or threatening to kill in the last month	
8. Threatening with dangerous objects or with weapons of any kind	
9. Clear intention of causing severe or very severe injuries	
10. Sexual aggressions in the couple relationship	
IV. Male batterer's profile	Assessment (0 or 1)
11. Very intense jealousy or controlling behaviors toward partner	
12. History of violent behaviors with previous partner	
13. History of violent behaviors with other people (friends, work mates, etc.)	
14. Abuse of alcohol and/or drugs	
15. Antecedents of mental illness and dropping out of psychiatric or psychological treatments	
16. Cruel, disparaging behaviors directed at the victim and lack of remorse	
<ol> <li>Justification of violent behavior due to aggressor's own state (alcohol, drugs, stress) or to victim's provocation</li> </ol>	
V. Victim's vulnerability	Assessment (0 or 1)
18. Victim's perception of danger of death in the last month	
19. Attempts to drop prior charges or going back on the decision to leave or report the aggressor to the police	
20. Victim's vulnerability because of illness, solitude, or dependence	

SEVERE VIOLENCE RISK ASSESSMENT			
Low (0-4)	Moderate (5-9)	High (10-20)	