RESEARCH REPORT

Acceptability of domestic violence against women in the European Union: a multilevel analysis

Enrique Gracia, Juan Herrero

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Correspondence to:
Professor E Gracia,
Departamento de
Psicología Social, Facultad
de Psicología, Universidad
de Valencia, Avda Blasco
Ibañez, 21, 46010
Valencia, Spain; enrique.
gracia@uv.es

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Study objective: The acceptability of domestic violence against women (DVAW) plays an important part in shaping the social environment in which the victims are embedded, which in turn may contribute either to perpetuate or to reduce the levels of DVAW in our societies. This study analyses correlates of the acceptability of DVAW in the European Union (EU).
Design: Three level ordinal logistic regression of 13 457 people nested within 212 localities (cities), nested within 15 countries of the EU. Sampling is multistage with random probability. All interviews were face to face in people's homes. The outcome variable was acceptability of DVAW. Multiple correlates at the individual, locality, and country level were analysed.
Setting: European Union, 1999.
Participants: National data were used of residents 15 years old and above of all member states in 1999 (n = 13 457). Average response rate was 47%, although it varied across countries (23%–73%).
Main results: Higher levels of acceptability were reported by those who perceived DVAW as less severe and less frequent. Acceptability is higher among men who know a perpetrator and lower among men who know a victim. Victim blaming attitude is associated with higher levels of acceptability. In countries with higher gender empowerment measure the difference in acceptability among those who blame and those who do not blame the victim is greater.
Conclusions: There are still widespread attitudes in the EU such as victim blaming that condone DVAW, contributing to a climate of social acceptability of DVAW. Further efforts to reduce the acceptability of DVAW are still needed.

T he extent of domestic violence against women (DVAW) worldwide, which in western countries affects about 25% of women at some point in their lives,[1–5] its impact on their physical and mental health, both in the short and long term, and the wider outcomes of DVAW for families, communities, and society, makes it a public health priority.[6–10]

A public health approach to DVAW, as the one proposed by the World Health Organisation,[10] considered that among the larger societal factors that influence rates of violence are those that create an acceptable climate for violence, and those that reduce inhibitions against violence. Although the influence of contextual factors in DVAW has been theoretically acknowledged, research examining these effects has been scarce. A small number of multilevel studies showed that social and community level factors such as neighbourhood poverty and disadvantage, are related to higher rates of DVAW.[11–16] However, to our knowledge, no multilevel study has analysed the individual and social factors associated with public attitudes toward DVAW. Clearly, a better understanding of the factors influencing public attitudes toward DVAW would add relevant knowledge to the literature on the social conditions that foster or discourage DVAW, and would be useful to orientate public education and prevention efforts.

Domestic violence is always rooted in a social and cultural context, and public attitudes about what is or is not acceptable in intimate relationships reflect these social and cultural norms.[17–23] As it has been emphasised by a number of scholars, without a fundamental change in the social attitudes that foster, condone, and perpetuate DVAW we will not be able to respond effectively to this problem, by substantially reducing its alarming rates.[17–19 24 25]

Public attitudes about DVAW play an important part in shaping the social environment in which the victims are embedded, which in turn may contribute either to perpetuate or to reduce the levels of DVAW in our societies.[6 17–19] Family, neighbours, friends, coworkers, and even acquaintances, are an important part of this social environment that may act as potential guardians whose intervention to help victims of domestic violence may depend on public perceptions of the unacceptability of all or only certain types of incidents.[26] If DVAW is considered as such only when it involves extreme, severe, or repeated violence, it is more likely that some violence towards women in intimate relationships may be acceptable under some conditions.[27 28] A social environment that accepts or even supports domestic violence in some circumstances contributes to create a climate of tolerance that makes it easier for perpetrators to persist in their violent behaviour, and makes it more difficult for women to disclose domestic violence.[6 17 25 29]

If primary prevention is a cornerstone of a public health approach, reducing the acceptability of all forms of DVAW becomes one of its fundamental goals. In this effort, public education and media campaigns challenging social attitudes towards DVAW are basic tools to approach social levels of acceptability to zero.[6] However, little research attention has been directed to explore public levels of acceptability of DVAW and to examine its correlates in our societies so that primary prevention efforts can be better informed. Prevention policies would indeed benefit from data monitoring the epidemiology of the acceptability of DVAW in our societies to design and evaluate the outcome of public education efforts.[17]

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Abbreviations: DVAW, domestic violence against women; EU, European Union; GEM, gender empowerment measure

The aim of this paper is to address this gap in our knowledge by analysing the acceptability of DVAW and its correlates in a representative sample of Europeans of all member states of the European Union in 1999. Using a multilevel approach, individual, locality, and country level correlates of the acceptability of DVAW will be analysed. At the individual level, sociodemographic factors will be explored as they have been found to be related to DVAW.[30–33] The influence of individual perceptions of the frequency and severity of DVAW, knowledge of victims and perpetrators of DVAW, and victim blaming attitudes will also be explored as they may affect levels of acceptability.[6 17 27 28] At the locality and country level, we analyse socioeconomic indicators as multilevel studies have shown that socioeconomic characteristics at the aggregate level are related to DVAW.[11 13 14] Also, at the country level, gender inequality will be analysed as research has found that low egalitarianism as well as changes in gender norms toward a higher status of women in society are associated with higher rates of DVAW.[34–37]

METHODS

Data from the Eurobarometer 51.0 ''Europeans and their views on domestic violence against women'' was used for this study. It was carried out in 1999 and covered the population of residents 15 years and over in each of the member states of the EU at that time.[38] Sample design applied in all member states is multistage with random probability. In each EU country, localities (cities) were drawn with probability proportional to population size (for a total coverage of the country) and to population density. In each locality, a starting address was drawn at random and further addresses were selected by standard random route procedures from the initial address (that is, taking alternate left and right hand turns for selecting blocks and apartment buildings and selecting households randomly calling at every Nth household). In each household, the respondent was drawn at random. All interviews were face to face in people's homes and in the appropriate national language. Data are from 13 457 Europeans of 212 localities (cities) of all member states of the EU at the time of the survey (year 1999). Table 1 shows country, response rates for each country, final sample, number of localities sampled per country, and average number of respondents per locality.

Although the survey did not provide a general definition of DVAW, it was presented to respondents as comprising five different types of which they were asked their opinion: sexual violence, physical violence, psychological violence, restricted freedom, and threats.

Outcome variable

The outcome variable is acceptability of DVAW, measured with the following question: In your opinion, is domestic violence against women…? Possible responses were: 1, unacceptable in all circumstances and always punishable; 2, unacceptable in all circumstances and not always punishable; 3, acceptable in certain circumstances; and 4, acceptable in all circumstances.

Predictors

Subjects

Sex (1 = male, 0 = female). Knows a victim of DVAW (1 = yes, 0 = no) and knows a perpetrator of DVAW (1 = yes, 0 = no) in respondents' social circle of work, studies, family, neighborhood and friends. Perceived frequency of DVAW (1 = very common or fairly common, 0 = not very common or not at all common). Perceived lack of severity of DVAW evaluates how the respondent considers the five different forms of DVAW (1 = very serious, 2 = fairly serious, 3 = not very serious, and 4 = not at all serious). We summed up scores of every form of DVAW to compute a unique score for each person's perception of lack of severity of DVAW (range 5 to 20). Cronbach's α value for this scale was 0.80. Victim blaming attitude (1 = yes, 0 = no) (see table 3 for a complete description of questions).

Countries

We used the gender empowerment index (GEM) to capture gender inequality in three key areas: political participation and decision making power, as measured by women's and men's percentage shares of parliamentary seats; economic participation, and decision making power, as measured by women's and men's percentage shares of positions as legislators, senior officials and managers, and women's and men's percentage shares of professional and technical positions; and power over economic resources, as measured by women's and men's estimated earned income. A higher value indicates a higher level of gender empowerment. GEM

Table 1 Response rates and final sample by country. Eurobarometer 51.0, European Union, 1999

Country	Response rate (%)*	Sample	Number of localities sampled	Average number of respondents per locality
Austria	73	766	9	85
Belgium	49	899	11	81
Denmark	36	852	4	213
Finland	34	971	18	53
France	53	844	21	40
Germany†	69	1503	31	48
Greece	38	937	9	104
Ireland	51	806	9	89
Italy	44	849	19	44
Luxemburg	68	487	4	121
Portugal	67	862	7	123
Spain	49	861	17	50
Sweden	54	866	6	144
Netherlands	26	845	12	70
United Kingdom†	34	1109	35	31
Total	47	13457	212	63

*Response rates are expressed as the number of completed interviews relative to the number of effective contacts. The difference between completed interviews and effective contacts include both refusals to participate as well as interrupted interviews. †East and West Germany (for Germany), Northern Ireland and Great Britain (for United Kingdom), were sampled separately. For this study we aggregated both subsamples to represent the overall population of each country.

Table 2 Frequency of selected sociodemographic, outcome, and predictor variables of the Eurobarometer 51.0, European Union, 1999

Variable	Number	%
Sex		
Male	6370	47.3
Age		
15–24 years	2206	16.4
25–39 years	4095	30.4
40–54 years	3317	24.6
55+ years	3839	28.5
Marital status		
Married/living with partner	7953	59.1
Unmarried. Having never lived with a partner	2503	18.6
Divorced/separated	1762	13.1
Widowed	1116	8.3
Missing	123	1.9
Education (age when you stopped full time education)		
Up to 15 years	3528	26.2
16–19 years	5043	37.4
20+ years	4647	34.5
Missing	239	1.7
Household income (in quartiles within countries)		
1	2342	17.4
2	2562	19.0
3	2477	18.4
4	2372	17.6
Missing	3704	27.5
Domestic violence against women is		
Unacceptable in all circumstances and always punishable	8114	60.2
Unacceptable in all circumstances and not always punishable	4938	36.9
Acceptable in certain circumstances	288	2.1
Acceptable in all circumstances	117	0.8
I know a victim of DVAW	5465	40.6
I know a perpetrator of DVAW	4742	35.2
Perceived frequency of DVAW		
Very common or fairly common	10279	71.3
Victim blaming attitude		
A cause of DVAW is the provocative behavior of women (yes)	7331	54.4

DVAW, domestic violence against women.

indices are published by the United Nations Development Programme.[39]

Because of the model selection strategy implemented in this study (see below, analytical strategy and model selection) variables at the individual, locality, and country level that did not significantly reduce model deviance were not retained in the final model and are not presented in the results section. For the interested reader, these variables were the following:

Individual level: age, education, household income, marital status (married, never married, divorced/separated, and widowed), knowledge of special laws to combat domestic violence in their country (regarding both the victim and the perpetrator of domestic violence), job status (employed, unemployed; white collar, blue collar), main household earner (whether respondent is the person in the household who contributes most to the household income), main household worker (whether respondent is the person in the household mainly responsible for ordinary shopping and looking after the home), political ideology (how would you place your political views from 1 = left to 10 = right?). Locality level: all individual variables aggregated at the locality level. Country level: unemployment, education, rates of divorces and gross national product, retrieved from international databases for each country.

All explanatory variables were centred on their grand mean (for continuous variables) and their grand mode (for categorical variables) to ease interpretation of the parameter estimates.

From the initial 16 179 people surveyed, 4% (n = 490) did not express an opinion to the interviewer about acceptability of DVAW (or other missing values in variables of interest—that is, sex and age of interviewer). Also, as ''do not know'' and ''no answer'' responses were hard to interpret, we treated them as missing values and excluded them for the analysis. This led to the final sample reported here (n = 13 457), which equals 85% of respondents. Given this loss of sample, we also recoded variables of the study so that higher values (''1'') reflected high levels of each variable (that is, high perceived frequency) and low values (''0'') reflected either low levels or ''do not know'' responses, thus increasing final sample size to 15 684 (96% of those initially surveyed). This was the upper limit of sample size that we could reach because missing values on sex and age of interviewer and acceptability of DVAW could no be imputed. Next, we calculated the final model reported in this research and results were virtually the same. Although this strategy increased sample size (n = 15 684), it posed serious problems of interpretation. Mainly, ''do not know'' responses have no intrinsic meaning and could be an important source of error (that is, disinterested or uncooperative respondent, etc). Because of this, we decided to restrict the final sample size thus gaining in interpretability of results. Below we present results for complete cases (n = 13 457).

Analytical strategy and model selection

Data present a clear multilevel structure with subjects (level 1) nested within localities (level 2) nested within countries (level 3). We used multilevel modelling that permits the inclusion of additional error terms that reflect the complex pattern of variation introduced by the hierarchical structure of the data (random effects).[40] Because the scoring system of the outcome variable was arbitrary, information could be lost or distorted in the conversion to a continuous variable.[41] Therefore, we treated the four responses as ordered categorical and conducted three level ordinal logistic regression

Table 3 Distribution of DVAW related variables by sex. Eurobarometer 51.0, European Union, 1999

Variable	Question	Men	Women	Test of significance
Knows victim	Do you know of a woman who was a victim of a form of domestic violence? (yes)	36%	45%	$\chi^2 = 112.65$, $p<0.001$
Knows perpetrator	Do you know of someone who subjected a woman to a form of domestic violence? (yes)	32%	38%	$\chi^2 = 70.71$, $p<0.001$
Victim blaming	A cause of DVAW is the provocative behavior of women (yes)	56%	53%	$\chi^2 = 14.92$, $p<0.001$
Acceptability	In your opinion, is domestic violence against women?			$\chi^2 = 40.27$, $p<0.001$
	1 = Unacceptable in all circumstances and always punishable	57%	62%	$p<0.001$
	2 = Unacceptable in all circumstances and not always punishable	38%	43%	$p<0.001$
	3 = Acceptable in certain circumstances	2.7%	1.7%	$p<0.001$
	4 = Acceptable in all circumstances	1.0%	0.8%	non-significant
Perceived frequency	In general, do you think that the frequency of DVAW is in our country? (very common or fairly common)	70%	82%	$\chi^2 = 262.63$, $p<0.001$
Perceived lack of severity*	Please tell me whether you consider each of the following forms of DVAW to be very serious, fairly serious, not very serious, or not at all serious (psychological violence, physical violence, sexual violence, threats of violence, restricted freedom).	6.23 (1.71)	6.77 (2.11)	$F = 260.94$, $p<0.001$

*For perceived lack of severity, means and, in parentheses, standard deviations. DVAW, domestic violence against women.

analyses using the HLM3 module of the statistical package HLM 6.01.[42]

We checked for multicollinearity problems among predictors examining the variance inflation factor (VIF), all off diagonal elements in the variance-covariance (τ) matrix for correlations close to 1 or −1, and the diagonal elements for any elements close to zero, with no indication of multicollinearity.[42]

The multilevel analysis was performed in steps. The starting point was an empty model without explanatory variables in which the total variance of acceptability of DVAW was partitioned into a component at each level (model 1). In the next step we explored fixed effects (main as well as interaction) of variables at the individual, locality, and country level (model 2). At this step, we explored possible interactions between all predictor variables. In the last step random slopes between localities and between countries were examined for DVAW related variables and characteristics of interviewer. This final model (model 3) is therefore an extension of model 2 and the only difference between these two models is that model 3 incorporates random effects. Full penalised quasi-likelihood (PQL) was used to estimate parameters in the model.[42] For model selection, models with smaller deviance (likelihood function) were selected.

RESULTS

Table 2 shows descriptive statistics. For perceived lack of severity of DVAW, descriptives are: range 5–20; mean, 6.49; and standard deviation, 1.93. Table 3 presents the distribution of DVAW related variables by sex. Women knew more victims and more perpetrators, perceived more frequency, more severity, and accepted DVAW less than men. Men considered more frequently than women that the provocative
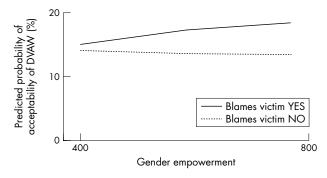

Figure 1 Graphical representation of significant interaction from three level multilevel analysis of the Eurobarometer 51.0, European Union.

behaviour of women is a cause of DVAW. Beyond these sex differences, victim blaming attitudes seem to be widespread in the sample (about 56% of men and 53% of women).

Table 4 presents parameter estimates for the three models. Model 1 shows that there is significant variability of acceptability of DVAW across localities (0.26, SE = 0.04) and countries (0.26, SE = 0. 11). Model 2 reduces the variation of intercepts between countries although there is still significant variation between localities (0.26, SE = 0.04) that is not accounted for by the model. This may show that differences in acceptability between localities are hidden by their individual composition.[40] In model 3, the inclusion of random effects at level 2 reduces both the variation of intercepts between localities (0.21, SE = 0.03) and between countries (0.19, SE = 0.08). These random effects were: sex and age of interviewer, and perceived frequency of DVAW. Also, deviance is smaller for model 3 than for the other two models (the smaller, the better). The relative reduction of variance from model 1 to 3 is 20.7% in level 2 and 26.0% in level 3, as indicated by PCV (proportional change variance).[43]

The intercept (γ_{000}) captures the overall log-odds of accepting DVAW after controlling for all the predictors at the grand mean level. For easier interpretation, the log-odds can be transformed to a probability scale as follows: $p = \exp(\gamma_{000})/(1+\exp(\gamma_{000}))$. This formula gives the probability of being in the category 1 (acceptable in all circumstances), which is 0.004 (0.4%) in model 3. Threshold $\delta(2)$ is the difference in the log-odds of category 2 versus 1 and threshold $\delta(3)$ is the difference in the log-odds between categories 3 compared with 1 and 2, holding constant the fixed and random effects of the model. Adding the threshold $\delta(2)$ (see bottom of table 4) gives the probability of categories ⩽2 (always accepting DVAW or only in certain circumstances). For model 3: $p = \exp(-5.29+1.28)/(1 + \exp(-5.29+1.28)) = 0.017$ (1.7%). Finally, adding threshold $\delta(3)$ gives $p = 0.354$ (35.4%), which is the probability of category ⩽ 3. This probability minus 0.017 ($p = 0.354–0.017 = 0.337$) is the probability of category 3 (unacceptable and not always punishable). Likewise, the probability of category 4 (unacceptable and always punishable) equals 0.646 ($1−0.354 = 0.646$). This means that respondents had 1.7% probability of accepting DVAW (categories ⩽ 2), 33.7% of being in category 3 (unacceptable and not always punishable), and a probability of 64.6% of being in category 4 (unacceptable and always punishable), after adjusting for all the covariates in the study. These percentages sharply contrast with the probability of acceptability for a man who blames the victim, perceived that DVAW is rather uncommon and non-severe, does not know a victim, and knows an aggressor of DVAW. For this person, the probability of

Table 4 Estimates, standard errors and 95% confidence intervals for fixed and random effects from three level multilevel analysis of the Eurobarometer 51.0, European Union, 1999†

	Regression coefficients (SE)			Odds ratio	95% CI
	Model 1	Model 2	Model 3‡	Model 3‡	
Fixed effects					
Intercept (γ_{000})	−4.98(0.17)***	−5.11(0.17)***	−5.29(0.16)***	0.00	0.00,0.01
Level 1					
Main effects					
Male (γ_{100})		0.04(0.06)	0.04(0.06)	1.04	1.01,1.23
Knows victim (yes)(γ_{200})		0.08(0.08)	0.08(0.08)	1.07	0.96,1.31
Knows aggressor (yes) (γ_{300})		0.03(0.09)	0.04(0.09)	1.04	0.87,1.20
Victim blaming (yes) (γ_{400})		0.18(0.04)***	0.18(0.04)***	1.19	1.09,1.26
Perceived frequency (high) (γ_{500})		−0.33(0.05)***	−0.39(0.06)***	0.67	0.65,0.80
Perceived lack of severity (γ_{600})		0.21(0.01)***	0.22(0.01)***	1.24	1.22,1.27
Interaction effects					
Man × knows victim (γ_{700})		−0.30(0.12)**	−0.31(0.12)**	0.73	0.57,0.93
Man × knows aggressor (γ_{800})		0.33(0.13)**	0.33(0.13)**	1.38	1.08,1.78
Level 3					
Main effects					
GEM (γ_{001})		−0.00(0.00)	0.00(0.00)	1.00	0.99.1.00
Cross level interactions levels 1 and 3					
Victim blaming × GEM (γ_{401})		0.00(0.00)*	0.00(0.00)*	1.00	1.00,1.00
Random effects					
Level 2 intercepts	0.26(0.04)***	0.26(0.04)***	0.21(0.04)***		
Perceived frequency (slopes)			0.22(0.06)***		
Perceived frequency (covariance intercepts slopes)			0.14(0.04)***		
Level 3 intercepts	0.26(0.11)*	0.24(0.10)*	0.19(0.08)*		
Threshold ($\delta2$)	1.26	1.27	1.28		
Threshold ($\delta3$)	4.43	4.60	4.70		
Likelihood	−35949.15	−37441.41	−38657.03		

*p<0.05, **p<0.01, ***p<0.001. †Outcome variable=acceptability of DVAW coded (1) acceptable in all circumstances, (2) acceptable in certain circumstances, (3) unacceptable in all circumstances but not always punishable, and (4) unacceptable in all circumstances and always punishable. Coefficients express the change in the log-odds of acceptability because of a unit change in the predictor after adjusting for all other predictors. ‡Model 3 coefficients are adjusted for all predictors in the table plus interviewer's sex and age, which also varied at random across localities. GEM, gender empowerment measure.

accepting DVAW is 7% (categories 1 and 2), about five times above the average person of the EU. Likewise, his probability of being in category 4 (unacceptable and always punishable) is 21% (about one third of the probability of the average person).

As for the fixed effects, blaming women for DVAW and perceiving lack of severity are positively and significantly associated with acceptability of DVAW, whereas perceived frequency is significantly and negatively associated with acceptability. Sex has an interaction effect with knowing a victim and knowing a perpetrator of DVAW: men who know a

victim of DVAW have lower probability of accepting DVAW whereas in men who know a perpetrator this probability increases. At the country level, differences in acceptability for those who blame and do not blame the victim of DVAW are greater in countries with higher levels of GEM (fig 1).

Random effects show that the effect of perceived frequency on acceptability (random slopes) was not the same in all localities (0.22, SE = 0 .06), being greater in those localities with higher levels of acceptability (0.14, SE = 0.04) (covariance intercepts slopes). It suggests that the locality context modifies the association between perceived frequency and acceptability, the slope being steeper in localities where acceptability is higher. Also, we controlled for the effect of interviewer modeling age and sex of interviewer as a random effect. Although not shown in table 4, respondents had a lower probability of accepting DVAW (β = −0.07, SE = 0.03) to older interviewers and this effect varied across localities (0.09, SE = 0.02). Also, the effect of sex of interviewer varied randomly across localities (0.43, SE = 0.09).

What this paper adds

Reducing the acceptability of all forms of domestic violence against women is one of the fundamental goals of a public health approach to prevent domestic violence. Monitoring the epidemiology of the acceptability of domestic violence against women in our societies is crucial to evaluate outcomes of public education efforts and to design future initiatives. However, almost no research attention has been directed to explore public levels of acceptability of DVAW and to examine its correlates in our societies so that primary prevention efforts can be better informed. After analysing the acceptability of DVAW and its correlates in a representative sample of Europeans of all member states of the EU in 1999, we found that there are still widespread attitudes in the EU, such as victim blaming, which condone domestic violence against women contributing to a climate of social acceptability. Clearly, further efforts to reduce the acceptability of domestic violence against women in the EU are still needed.

DISCUSSION

This study aimed to analyse through three level multilevel analysis the correlates of acceptability of DVAW in the EU, using national representative data of all member states in 1999 (n = 13 457). At the individual level, those who blame the victim of DVAW because of her provocative behaviour present higher levels of acceptability. Results from this survey show there is a high prevalence of victim blaming attitudes in the EU. Blaming the victims may lead to further portray some violence against women as more tolerable.[6 27 44] According to social psychological theory, when victims are believed to cause their own troubles or to get what they deserve the chances for the victims of receiving help or moving away from violence are significantly reduced.[17 45 46] These results

Policy implications

- Public policies aiming to reduce the prevalence of domestic violence against women in our societies need to target the levels of social acceptability of different forms of domestic violence as an important factor that contributes either to reduce or to condone and perpetuate violence.
- Public policies aiming to reduce the acceptability of domestic violence against women are clearly needed. These public education efforts need to transmit the idea that all forms of violence are wrong, and must not be accepted under any circumstances. Reaching zero tolerance must be the final aim.
- Challenging victim blaming attitudes is a main target for public education initiatives aiming to reduce levels of acceptability of domestic violence against women. Blaming the victims implies acceptance of violence under some circumstances, and reduces the victims' chances of receiving help.
- Policies achieving a significant reduction of the social acceptability of all forms of domestic violence against women would increase the social costs for perpetrators and contribute to the social control of domestic violence against women.
- Monitoring changes in levels of social acceptability of domestic violence and its correlates can be an important tool to evaluate public education efforts outcomes, and to help design future prevention initiatives.

suggest the need for public education efforts to target prevalent victim blaming attitudes.[6][47][48]

Perceived frequency of DVAW is negatively associated with its acceptability. As Klein *et al* argued, social and personal accountability to take action against DVAW comes from believing that the problem is widespread and of sufficient threat to the community fabric that affects one's own life.[6] It follows that an important target for public education campaigns directed to reduce social tolerance towards DVAW is to increase awareness of the alarming pervasiveness of DVAW in our society.

We also found that men who know victims present lower levels of acceptability whereas men who know aggressors present higher levels. The latter is somehow worrisome and suggests the existence of certain acceptance or sympathy for the offender. These positive attitudes towards the perpetrator of DVAW among men may lead to perpetuate, approve or even encourage men's violent acts against women. In this study, 32% of men knew a perpetrator of DVAW in their social circle. Within this group of men DVAW is more acceptable or ''understandable'', contributing to condone DVAW in some circumstances and reducing the probability of a known incident to be reported, or help to be offered to the victim. These results controlled for age of interviewer, with respondents having a lower probability of accepting DVAW to older interviewers. Clearly, public education efforts that challenge these attitudes of tolerance and transmit the idea of social responsibility concerning issues of domestic violence are necessary. Breaking the climate of social tolerance would increase the costs for perpetrators and contribute to the informal social control of DVAW.

At the country level, the differences in acceptability of DVAW among those who blame and those who do not blame the victim were greater in countries with higher levels of

GEM. According to these results, victim blaming attitudes are pervasive in the EU and become particularly conspicuous in differentiating citizens who tend to accept DVAW from those who do not. Also, this effect is particularly salient in countries more advanced in terms of gender equality, which may help to better understand research showing that societies undergoing changes toward higher egalitarianism often exhibit higher rates of DVAW.[34–37] It follows that challenging victim blaming attitudes emerges as a main target for public education initiatives, comparatively independent of the country's level of gender equality. In summary, a public education effort aiming to reach zero tolerance towards DVAW needs to transmit the clear message that DVAW is wrong, no matter what the reason is, and must not be accepted under any circumstances.[49] Reduction of DVAW rates are thought to be related to changing the cultural norms that approve violence.[18][19][25] However, as our analysis showed, there are still widespread attitudes in the EU such as victim blaming that condone DVAW, contributing to a climate of social tolerance.[17]

Finally, the study presents several limitations. Response rates considerably varied between countries and no information is provided by the survey about the characterisation of non-responders to ensure that non-response bias does not threaten the validity of the findings. However, additional analyses constrained to countries with a response rate of 40% or more did not substantially change the results presented in this paper. Also, analyses were restricted to valid cases (85% of those initially surveyed), which threatens the generalisability of the study. None the less, recoding variables of interest to increase sample size did not change the results, although it made interpretation of coefficients harder. Also, the survey does not provide information about other potential correlates of acceptability of DVAW such as personal experience of violence and crime. Finally, theoretically meaningful social area aggregations (census tracts, neighbourhoods) and contextual description of these areas (rates of domestic assaults reported to the police, poverty, and other structural conditions) were not available from the survey.[50] Clearly, this additional information would help to more accurately estimate the effects seen in this study.

Authors' affiliations
E Gracia, University of Valencia, Valencia, Spain
J Herrero, University of Oviedo, Oviedo, Spain

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