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## Differences Between Men and Women in the Acceptance of Gender Roles and Stereotypes in Intimate Partner Violence

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### ARTICLE INFO

Received: 05/03/2023  
Accepted: 26/05/2023

#### Keywords:

Differential socialization  
Cognitive distortions  
Sexism  
Covert social violence  
Prevention

### ABSTRACT

**Background/Objective:** Intimate partner violence against women is a widespread form of gender-based violence present in societies of all types. Among the possible factors implicated in its existence are gender stereotypes and cognitive distortions of a sexist or violence-justifying nature. Thus, a general population survey was designed with the aim of studying gender differences in the acceptance of gender roles and stereotypes, and violence against women in intimate relationships. **Method:** A total of 391 participants from the general population (61.9% women) aged from 18 to 67, responded to measures of the internalization of gender norms or mandates based on differential socialization, distorted thoughts about women and the use of violence, beliefs about intimate partner violence, and social desirability. **Results:** Men scored higher on different types of sexism and stereotypes, on stereotypes related to motherhood, and romantic love generally attributed to women. Conversely, no gender differences in the justification of violence were observed. Likewise, no significant differences were found for the educational level factor. **Conclusions:** The implications of the results for the contents of prevention and intervention programmes are discussed.

## Diferencias Entre Hombres y Mujeres en la Aceptación de los Roles y Estereotipos de Género en la Violencia de Pareja

### RESUMEN

**Antecedentes/Objetivos:** La violencia de pareja contra las mujeres es una forma generalizada de violencia de género presente en sociedades de todo tipo. Entre los posibles factores implicados en su existencia se encuentran los estereotipos de género y las distorsiones cognitivas de carácter sexista o justificadoras de la violencia. Por ello, se diseñó una encuesta a población general con el objetivo de estudiar las diferencias de género en la aceptación de roles y estereotipos de género, y la violencia contra las mujeres en las relaciones íntimas. **Método:** Un total de 391 participantes de la población general (61.9% mujeres) con edades comprendidas entre los 18 y los 67 años, respondieron a medidas de interiorización de normas o mandatos de género basadas en la socialización diferencial, pensamientos distorsionados sobre la mujer y el uso de la violencia, creencias sobre la violencia en la pareja y deseabilidad social. **Resultados:** Los hombres puntuaron más alto en diferentes tipos de sexismo y estereotipos, en estereotipos relacionados con la maternidad y el amor romántico generalmente atribuido a las mujeres. Por el contrario, no se observaron diferencias de género en la justificación de la violencia. Tampoco se encontraron diferencias significativas en el factor nivel educativo. **Conclusiones:** Se discuten las implicaciones de los resultados para los contenidos de los programas de prevención e intervención.

#### Palabras clave:

Socialización diferencial  
Distorsiones cognitivas  
Sexismo  
Violencia social encubierta  
Prevención

## Introduction

Being a woman is the main risk factor in several criminal typologies, such as human trafficking (Hickle & Roe-Sepowitz, 2014; Salami et al., 2021), sexual violence (Fahlberg & Pepper, 2016; Turchik et al., 2015), and intimate partner violence (IPV) (Ferrer-Pérez & Bosch-Fiol, 2014; Ullman, 2023), including teen dating violence (Muñoz-Rivas et al., 2021). At the IV World Conference on Women held in Beijing in 1995, the need to intervene in eradicating the different forms of violence suffered by women in all countries became visible. This historic milestone highlighted the importance of investigating the possible relationship between structural inequality between men and women and the violence suffered by women in all areas, especially in intimate partner relationships. It is known that acceptance of gender roles influences the acceptance of IPV violence increasing the risk of violence and the perpetration (Reyes et al., 2016; You & Shin, 2022).

This form of victimization represents a very serious social problem, present worldwide, with different prevalence depending on the country, with heterogeneity being its most important characteristic, since it affects all types of women regardless of sociodemographic, individual, family, or social aspects. One extreme on IPV against women, sometimes the most visible, are homicides (López-Ossorio et al., 2018; Spencer & Stith, 2020), with a risk itself affecting the health and well-being of women and their children (Hernández, 2021; Juarros-Basterretxea et al., 2022).

In recent decades, research has focused on identifying those factors that increase the risk of IPV against women, especially in relation to explicit physical aggression, such as homicides and attempted homicides (Expósito-Álvarez et al., 2021; Matias et al., 2020; Spencer & Stith, 2020). Different IPV explanatory models have been developed considering both victim and offenders characteristics in relation to sociocultural aspects. Some of these theoretical models focus on the importance of differential socialization and the distribution of roles based on male and female stereotypes (Ferrer-Pérez & Bosch-Fiol, 2014). The presence of cognitive distortions related to women and the use of violence against them has been widely studied (Echeburúa et al., 2016; Loinaz, 2014), attitudes and thoughts that may sometimes be related to a low level of education (Guerrero-Molina et al., 2021). Education and social acceptance, therefore, are objectives to be faced in the prevention of IPV. Gender inequality is correlated with the prevalence of any form of IPV (Willie & Kershaw, 2019), and in those countries where gender stereotypes are less questioned, the prevalence of IPV against women is higher (Bonilla-Algovia & Rivas-Rivero, 2021, 2022). Individual beliefs regarding gender roles and masculinity influence the perceptions of IPV (Stanziani et al., 2020). This internalization of gender roles and stereotypes would also be at the basis of other forms of violence against women, such as sexual harassment and assaults (Kaiser et al., 2022; Lizzio-Wilson et al., 2022).

The relationship between attitudes and IPV is complex and differ for females and males (Nabors & Jasinski, 2009). Males endorsing higher levels of hegemonic masculinity may perceive IPV as less serious, while females who endorsed the same beliefs perceived the perpetrators as less likely to benefit from treatment (Stanziani et al., 2020). Boys also justify more attitudes of violence and agree more with sexist beliefs (Ferragut et al., 2014). Gender roles, as

submissive attitude, are associated with IPV in female students (Llano-Suárez et al., 2021). Research also shows less acceptance of these beliefs among women and people with prior IPV academic-training (Ferrer-Pérez et al., 2019).

Recent research analyzing the social perception of the seriousness of IPV against women show that, on average, men presented lower levels of perceived severity than women, and participants with higher levels of perceived severity also present lower levels of acceptability, victim-blaming attitudes, and hostile sexism, and higher levels of willingness to intervene in the event of witnessing an assault (Martín-Fernández et al., 2022). It has also been shown how in countries where traditional gender roles and mandates are more accepted, fewer prevention and intervention programs on intimate partner violence against women are carried out (Lowe et al., 2022). However, most of the research analyzing the possible relationship between acceptance of gender roles and stereotypes and IPV against women has focused specifically on the distortions presented by perpetrators, and the assessment of the general population has remained in the background.

The prevailing cultural variables in society play a role of great importance in the acceptance of IPV, and the existence of rigid gender stereotypes can act as a risk factor in the normalization and execution of the phenomenon (Bucheli & Rossi, 2019). Therefore, it is essential to understand the values and beliefs prevailing in society, not only for a better general understanding of the phenomenon, but also with the aim of developing more effective prevention and intervention programs. The present research aims to fill this gap in the literature analyzing individual differences between men and women in the acceptance of gender roles and stereotypes and violence towards women in intimate relationships. We hypothesize that: (a) men will present a greater internalization of gender mandates related to work projection, biological factors and neo-sexism; (b) women will present a greater internalization of gender stereotypes related to motherhood, romantic love and care; (c) men will present greater distorted beliefs towards IPV than women.

## Method

### Participants

The sample consisted of 391 participants, of whom 242 were women (61.9%). The mean age was 43.17 ( $SD = 10.33$ ), ranging from 18 to 67. Most were of Spanish nationality ( $n = 370$ , 94%) and had no children (52.7%). Most of the participants indicated that they did not consider themselves to be victims of any form of IPV ( $n = 335$ , 86.1%). Of the remaining 13.9%, 72.2% ( $n = 39$ ) were women. Other demographic characteristics of the participants are shown in Table 1. Inclusion criteria were: (a) signing the informed consent form; (b) being of legal age ( $\geq 18$  years); (c) completion of all instruments; and (d) scores between 6 and 13 on the M-C SDS (recommended criteria by Gutiérrez et al., 2016).

### Procedure

A snowball sampling survey design was used. The selected tests were adapted to Google Surveys, together with a brief questionnaire that collected sociodemographic variables, and an initial page where informed consent was presented, and the objectives of the study

were indicated. This initial page explicitly stated the anonymous and voluntary nature of the study. The survey was distributed through social networks as a study developed by the university of AMVG, during the months of April to September, with reminders every 20 days. For the design of the survey and distribution system, the indications of [Moreh \(2019\)](#) were followed.

This study was approved by by the Comité de Bioética of the Universidad Internacional de La Rioja [PI:89/2022] and followed the ethical considerations proposed by the [American Psychological Association \(2017\)](#).

### Measurement Instruments

*Inventory of Covert Social Violence against Women (IVISEM; Vinagre-González et al., 2020)*. The IVISEM is a self-report questionnaire designed to measure the internalization of gender norms or mandates based on differential socialization. It consists of 35 items, scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), which are grouped into seven subscales, each one composed of 5 items, to assess gender mandates related to Motherhood, Romantic Love and Couple, Caregiving, Work Projection, Attitudes and Submission, Biology and Neo-sexism. The following cutoff scores were proposed for the total score: 35-70 = Low internalization of gender mandates; 71-105 = Medium internalization of gender mandates; 106-140 = High internalization of gender mandates; 141-175 = Very high internalization of gender mandates. In the subscales, the higher the score, the greater the internalization of gender mandates. The internal consistency (reliability), Cronbach's  $\alpha$ , for the present study sample was:  $\alpha$  (total) = .91;  $\alpha$  (motherhood) = .62;  $\alpha$  (romantic love and couple) = .79;  $\alpha$  (caregiving) = .71;  $\alpha$  (labor projection) = .65;  $\alpha$  (attitudes and submission) = .63;  $\alpha$  (biology) = .72;  $\alpha$  (neo-sexism) = .92.

*Inventory of Distorted Thoughts about Women and the Use of Violence - Revised (IPDMUV-R; Echeburúa et al., 2016)*. This is a self-reported inventory that allow the identification of irrational beliefs that are related to gender roles and the supposed inferiority of women with respect to men, as well as the use of violence as an acceptable way to resolve conflicts. It consists of 21 items in true and false format and the score ranges from 0 to 21 points. The higher the scores, the greater the number of cognitive distortions about women and the use of violence, although a cutoff score of >8 has been proposed. Internal consistency (reliability) for this sample was  $\alpha = .60$ .

*Inventory of Beliefs about Intimate Partner Violence (IBIPV; García-Ael et al., 2017)*. The IBIPV is a self-reported questionnaire that measures general and specific attitudes toward violence against women within intimate partner relationships. It is composed of 22 items with Likert-type responses from 1 (*strongly disagree*) to 7 (*strongly agree*). It is divided into three factors: Justification of gender-based violence (6 items), Responsibility of the victim (9 items) and Responsibility of the abuser (7 items). Higher scores indicate higher justification, higher responsibility of the victim and lower responsibility of the abuser. Internal consistency for this sample was  $\alpha = .72$ .

*Marlowe-Crowne Social Desirability Scale* brief version (M-C SDS; [Gutiérrez et al., 2016](#)). M-C SDS is a self-report questionnaire with 18 true or false items. It is a test used in conjunction with

other instruments to measure social desirability bias. The authors recommend using the 10th and 90th quartiles (scores 5 and 14) to determine the risk of social undesirability and desirability, respectively. The reliability (internal consistency) for the present study sample was  $\alpha = .73$ .

### Data Analysis

Descriptive statistics were used to study the sociodemographic and relevant variables in the overall sample. Subsequently, differences in the scales included in the study according to educational level, perception of having been a victim and sex were analyzed using one factor ANOVA (Bonferroni correction) and Student's *t* test for independent samples. Effect size was analyzed using Cohen's *d* statistic, and the results were interpreted following as following: small,  $d = 0.20$ , an effect size larger than 55.6%; moderate,  $d = 0.50$ , an effect size larger than 63.7%, large  $d = 0.80$ , an effect size larger than 71.6%, or more than large,  $d > 1.20$ , an effect size larger than 80.2% ([Cohen, 2013](#); [Arce et al., 2015](#)). Complementary, the magnitude of the effect size was quantified in percentages of increase (+) or decrease (-) with *r* ([Arias et al., 2020](#); [Rosenthal & Rubin, 1982](#)). Finally, binary logistic regression was performed with sex (0 = *female* and 1 = *male*) as the dependent variable, and the scores on the IVISEM and IBIPV subscales, and the IPDMUV-R total score as predictive factors. Odds ratios from binary logistic regression analysis were examined to determine the association between each of the variables and the probability of belonging to the male or female category, controlling for the other variables in the model. Before performing the logistic regression analysis, correlational analyses were conducted to ensure that multicollinearity in the regression was avoided. A correlation coefficient  $> 0.8$  was used as a criterion for the existence of multicollinearity ([Midi et al., 2010](#)). No missing or outliers were identified in the sample.

### Results

Together with the sociodemographic characteristics, in [Table 1](#) the overall description of the variables studied are presented. The mean score for internalization of gender mandates (IVISEM-Total) was in the medium category ( $M = 71.01$ ,  $SD = 20.11$ ), with approximately half of the participants in that category ( $n = 166$ , 42.70%). On the other hand, low scores were obtained on the IPDMUV-R ( $M = 1.3$ ;  $SD = 1.5$ ), and only 2 participants (0.5%) scored above the cut-off point ( $> 8$ ). The mean scores obtained on the subscales of the IBIPV were also low (ranging from 1.1 to 2.1).

Comparing scores according to education level, no significant differences were found. However, the scores in all the three tools were lower among those with university level, followed by medium level studies (e.g., IVISEM Total Score for primary, medium and university studies:  $M = 82.73$ ,  $SD = 15.15$ ;  $M = 71.96$ ,  $SD = 17.75$ ;  $M = 70.24$ ,  $SD = 20.93$ , respectively). The higher the education the lower the stereotypes or distortion level in most of the scales. There were also no significant differences in the scores according to age. However, we found significant differences in the scores among people who perceived themselves as victims of gender-based violence. People who perceived themselves as victims scored significantly higher on the IVISEM subscales of caregiving [ $M = 9.81$ ,  $SD = 4.49$ ;  $t(387) = 2.44$ ,  $p = .015$ ], labor projection [ $M = 9.35$ ,

**Table 1**  
Demographic Characteristics and Results of the Main Study Variables of the Participants. (n = 391)

	n(%)
<b>Marital Status</b>	
Married	152(38.9)
Separated/divorced	44(11.3)
Single with stable partner not living together	29(7.4)
Single cohabitating with stable partner	84(21.5)
Widowed	1(0.3)
<b>Education level</b>	
Primary	5(1.3)
High school (Baccalaureate, FP...)	101(25.8)
University (graduate, bachelor, doctor...)	284(72.6)
<b>Employment Status</b>	
Unemployed	24(6.1)
Student	22(5.6)
Studying and working	31(7.9)
Retired/pensioner	13(3.3)
Working outside the home	280(71.6)
Works only in household chores	3(.8)
Other	17(4.3)
<b>Perception of being a victim of IPV</b>	
Yes	54(13.8)
No	335(86.12)
<b>IVISEM – Total</b>	
Low interiorization	201(51.7)
Medium interiorization	166(42.7)
High interiorization	22(5.7)
	<b>M(SD)</b>
IVISEM – Total	71.0(20.1)
IVISEM – MH	12.7(4.0)
IVISEM – RL	10.8(4.2)
IVISEM – C	8.7(3.5)
IVISEM – WP	8.4(3.0)
IVISEM – AS	9.4(3.5)
IVISEM – B	11.7(4.1)
IVISEM –NS	9.0(5.2)
IPDMUV – Total	1.3(1.5)
IBIPV - IPV Justification	1.1(0.4)
IBIPV - Victim responsibility	1.1(0.2)
IBIPV - Abuser responsibility	2.1(1.0)

$SD = 4.00$ ;  $t(387) = 2.33$ ,  $p = .018$ ] and submission [ $M = 11.06$ ,  $SD = 4.30$ ,  $t(387) = 3.57$ ,  $p = .001$ ], than those who did not perceive themselves as victims ( $M = 8.54$ ,  $SD = 3.37$ ;  $M = 8.30$ ,  $SD = 2.86$ ;  $M = 9.20$ ,  $SD = 3.38$ , respectively).

The results (see Table 2) exhibited significant differences by the sex factor. Succinctly, men revealed higher scores than women in internalization of gender mandates ( $M = 78.10$  and  $M = 66.40$ , respectively) in general being the effect size moderate; and,

specifically, in those related to romantic love and couple ( $M = 13.44$  and  $M = 9.17$ , respectively) with a more than large effect, to biology ( $M = 13.00$  and  $M = 10.95$ , respectively) with a moderate effect, and to neo-sexism ( $M = 10.90$  and  $M = 7.80$ , respectively) with a moderate effect. Quantitatively, men report, in general, a 29.6% ( $r = .296$ ) more internalization of gender mandates; and a 51.8% ( $r = .518$ ) more internalization of gender mandates of romantic love and couple, a 24.7% ( $r = .247$ ) more internalization of gender mandates of biology, and a 30.0% ( $r = .300$ ) more internalization of gender mandates of neo-sexism.

Table 3 shows the results of the logistic regression model proposed, with sex as the dependent variable. The complete model with the eleven independent variables was statistically significant,  $\chi^2(11) = 134.63$ ,  $p < .001$ , Cox-Snell's  $R^2 = .30$ , Nagelkerke's  $R^2 = .40$ . It correctly classified 77% of the cases. Three of the variables introduced (IVISEM romantic love, caregiving and neo-sexism) made a statistically significant contribution to the model. These findings suggest that high scores on romantic love-related stereotypes and neo-sexism are, respectively, 41% and 10% higher in men ( $OR = 1.41$ , 95% CI 1.29-1.55) and ( $OR = 1.10$ , 95% CI 0.98-1.16), whereas high scores on care-related stereotypes are 19% higher in women ( $OR = 0.81$ , 95% CI 0.72-0.91).

Finally, Table 4 shows the bivariate correlations between the study variables. No evidence of multicollinearity was observed. However, we identified significant positive correlations between the IVISEM subscales and the IPDMUV total score ( $r$ s between .288 and .364), between the IVISEM caring and work promotion subscales and the IBIPV victim responsibility subscale ( $r = .130$  and  $r = .101$ , respectively), between the IVISEM neo-sexism subscale and the IBIPV justification subscale ( $r = .127$ ) and between the IPDMUV total score and the IBIPV justification subscale ( $r = .133$ ). Significant negative correlations were also identified between the IVISEM motherhood and caregiving subscales and the IBIPV Batterer Responsibility subscale ( $r = -.156$  and  $r = -.131$ , respectively).

## Discussion

Gender stereotypes are widespread in all societies and related to different forms of violence and women discrimination. Although literature has showed differences between countries with variants of patriarchy (Grzyb, 2023), and even some changes among generations, for instance in the Spanish society (Moya & Moya-Garófano, 2021), gender stereotypes still exist and influence our daily life leading to unequal access and distribution of resources such as education, employment, and healthcare (Willie & Kershaw, 2019). Gender differences and stereotypes, indeed, influence also the implication of women in different types of violent behaviour (Loínaz, 2016; Loínaz et al., 2020). Research suggest that promotion of legal reforms can improve social awareness and gender equality attitudes, which in turn changes public attitudes toward IPV against women (Yang et al., 2021). Therefore, we need to measure the state of gender roles and stereotypes among men and women to allocate and adjust the necessary measures that allow greater awareness of violence against women and its prevention.

The current paper aimed to analyze individual differences between men and women in the acceptance of gender roles and stereotypes and violence towards women in intimate relationships.

**Table 2**  
Mean, Standard Deviation, Student's t-Test and Effect Size of the Main Study Variables (n = 391)

	Women		Men		t	p	d[95% CI]
	M	SD	M	SD			
IVISEM – MH	12.04	4.07	13.86	3.82	4.36	.001	-0.45[-0.68, -0.22]
IVISEM – RL	9.17	3.05	13.44	4.65	9.90	.001	1.21[-1.45, -0.97]
IVISEM – C	8.82	3.60	8.55	3.56	-0.70	.482	-0.08[-0.15, 0.30]
IVISEM – LP	8.34	2.82	8.6	3.41	0.76	.422	0.09[-0.31, 0.14]
IVISEM – AS	9.27	3.70	9.76	3.41	1.30	.192	-0.13[-0.36, .009]
IVISEM – B	10.95	4.00	13.00	4.12	4.84	.001	0.51[-0.74, -0.28]
IVISEM – NS	7.80	4.50	10.90	6.0	5.44	.001	0.63[-0.86, -0.40]
IVISEM – Total	66.40	18.20	78.10	21.02	5.80	.001	0.62[-0.85, -0.39]
IPDMUV – Total	1.25	1.33	1.60	1.90	1.92	.056	0.23[-0.46, -0.01]
IBIPV -Justification	1.16	0.34	1.16	0.50	-0.91	.914	-0.00[-0.20, 0.20]
IBIPV - Victim responsibility	1.10	0.21	1.09	0.20	-0.54	.545	-0.05[-0.15, 0.25]
IBIPV - Abuser responsibility	2.21	1.00	2.14	0.96	-0.52	.529	-0.07[-0.13, 0.27]
Social desirability	8.78	2.67	8.98	2.64	0.75	.453	0.07[-0.04, 0.12]

Note. d(387); MH: motherhood; RL: romantic love; C: caregiving; LP: labor projection; AS: attitudes & submission; B: biology; NS: neo-sexism; IBIPV - IPV Justi: IBIPV Justification of gender-based violence; IBIPV - Victim res.: IBIPV Responsibility of the victim; IBIPV - Abuser res.: IBIPV Responsibility of the abuser.

**Table 3**  
Binary Logistic Regression Model With Sex as the Dependent Variable (n = 391)

	β	SE	Wald	p	OR[95% CI]
IVISEM – MH	0.03	0.04	0.68	.412	1.04[0.95, 1.12]
IVISEM – RL	0.34	0.05	53.48	.001	1.41[1.29, 1.55]
IVISEM – C	-0.21	0.06	11.96	.001	0.81[0.72, 0.91]
IVISEM – LP	-0.10	0.06	2.37	.125	0.91[0.80, 1.03]
IVISEM – AS	0.01	0.05	0.02	.882	1.01[0.91, 1.12]
IVISEM – B	0.06	0.05	2.00	.161	1.10[0.98, 1.16]
IVISEM – NS	0.08	0.03	5.97	.013	1.10[1.02, 1.15]
IPDMUV – Total	-0.08	0.09	0.83	.361	0.92[0.77, 1.10]
IBIPV - IPV Justification	-0.29	0.37	0.61	.435	0.75[0.36, 1.55]
IBIPV - Victim responsibility	-0.58	0.72	0.65	.421	0.56[0.14, 2.29]
IBIPV - Abuser responsibility	0.11	0.15	0.55	.468	1.11[0.84, 1.48]
Constant	-2.73	0.92	8.86	.001	0.07

Note. MH: motherhood; RL: romantic love; C: caregiving; LP: labor projection; AS: attitudes & submission; B: biology; NS: neo-sexism; IBIPV - IPV Justi: IBIPV Justification of gender-based violence; IBIPV - Victim res.: IBIPV Responsibility of the victim; IBIPV - Abuser res.: IBIPV Responsibility of the abuser.

**Table 4**  
Pearson Correlations Between the Variables Analyzed

	1	2	3	4	5	6	7	8	9	10	11
IVISEM – MH	-										
IVISEM – RL	.475**	-									
IVISEM – C	.479**	.357**	-								
IVISEM – LP	.491**	.353**	.659**	-							
IVISEM – AS	.371**	.352**	.638**	.536**	-						
IVISEM – B	.538**	.458**	.502**	.480**	.494**	-					
IVISEM – NS	.389**	.420**	.258**	.431**	.163**	.455**	-				
IPDMUV – Total	.296**	.305**	.288**	.315**	.304**	.323**	.364**	-			
IBIPV - IPV Justi.	.044	.045	.014	.040	.021	.046	.127*	.133**	-		
IBIPV - Victim res.	.054	.072	.130*	.101*	.044	.012	.147**	.081	.220**	-	
IBIPV - Abuser res.	-.156**	-.123*	-.131*	-.095	-.085	-.059	.004	-.081	.166**	.256**	-

Note. MH: motherhood; RL: romantic love; C: caregiving; LP: labor projection; AS: attitudes & submission; B: biology; NS: neo-sexism; IBIPV - IPV Justi: IBIPV Justification of gender-based violence; IBIPV - Victim res.: IBIPV Responsibility of the victim; IBIPV - Abuser res.: IBIPV Responsibility of the abuser; \*\* = p < .01; \* = p < .05

As expected according to the literature, men had the highest scores on different types of sexism and stereotypes (Ferragut et al., 2014; García-Díaz et al., 2018), also on stereotypes related to motherhood and romantic love usually attributed to women. Despite this, there were no differences in the justification of violence, with the same level for both. Men and women had a more similar cognitive pattern than expected. This may reflect a social change, were learned stereotypes still exist buy social awareness about the severity of violence against women has increased. There may be also an influence of social desirability, seeing stereotypes or gender roles as more subtle and more socially acceptable, but violence as more reprehensible due to the influence of public, political and media campaigns against gender violence.

Although differences were not statistically significant, the higher the education the lower the stereotypes or distortion level in most of the scales, confirming previous research (Guerrero-Molina et al., 2021). Specifically, Ferrer-Pérez et al. (2019) found less acceptance of stereotypes and distortions among women and people with prior IPV academic-training, so the more the education level and the

access to trainings and information on gender equality and IPV may help in the reduction of violence against women.

There are some limitations that should be taken into account. The study did not have an IPV indicator, such as the CTS-2 (Loinaz et al., 2012), used in other studies. For this reason, it was not possible to confirm whether the level of stereotypes or acceptance or justification of violence were related to IPV perpetration or victimization in a quantitative way. This research line is of special interest in the youth population where the greatest preventive educational efforts should be invested. Gender roles and acceptance of violence has been shown to be related to dating violence perpetration, mainly among boys (Reyes et al., 2016; You & Shin, 2022). In addition, a collection of tools with the same style was used. It could be of interest to incorporate more indirect measures of distortions, stereotypes, or acceptance of violence that allow to measure distortions or cognitions in a more subtle way, like using vignettes (Wilson & Smirles, 2020), specific and different violence behaviors (Dardis et al., 2016; Wagers et al., 2017) or of qualitative type (Zidenberg et al., 2022), or developing new tools (Toplu-Demirtaş et al., 2020).

One of the problems when investigating stereotypes and cognitive distortions is the measurement of the construct. Not only can there be differences in the way of manifesting or expressing themselves within the same culture (Grzyb, 2023; Ruiz-Hernández et al., 2020), but it is also known that the measure is not consistent or convergent with other objective indicators such as behaviors, as research on cognitive distortions has shown comparing partner violent men and the general population (Loinaz, 2014). On the other hand, issues such as the education or age of the participants in these studies do not have a clear direct reflection in the results, since these variables also depend on social, historical and generational changes that are difficult for studies to categorize (for example, knowing if the participant has been educated in a more egalitarian educational model or more macho classic values; to know if the family environment was also educated and has transmitted egalitarian values or perpetuated stereotypes, and so on). Stereotypes evolve and change between generations, as evidenced by opinion polls over decades (Eagly et al., 2020; Scarborough et al., 2019), but it is very difficult to address these differences in cross-sectional studies. We know that gender ideologies are multidimensional (Begall et al., 2023). Moreover, the concept of “gender” has evolved substantially in the last decades (for instance, as a nonbinary spectrum), something with implication for psychological research (Cameron & Stinson, 2019), so it can be expected that the measure of the “gender” stereotypes no longer conform to classic patterns. Also, stereotypes of masculinity and femininity in young people can allude to differentiated personal or social spheres, which affect the expression of abusive behavior in a different way, for example at school (Morales et al., 2016), or the acceptance of these abuse (Rosen & Nofziger, 2019) maintaining inequalities. The challenge, therefore, is to design measures of stereotypes and gender roles, as well as cognitive distortions about the acceptance of violence, that are sensitive to this multidimensionality, social change, and population differences.

## References

American Psychological Association. (2017). *Ethical principles for psychologists and code of conduct*. Author. <https://www.apa.org/ethics/code>

- Arce, R., Fariña, F., Seijo, D., & Novo, M. (2015). Assessing impression management with the MMPI-2 in child custody litigation. *Assessment*, 22(6), 769-777. <https://doi.org/10.1177/1073191114558111>
- Arias, E., Arce, R., Vázquez, M. J., & Marcos, V. (2020). Treatment efficacy on the cognitive competence of convicted intimate partner violence offenders. *Anales de Psicología/Annals of Psychology*, 36(3), 427-435. <https://doi.org/10.6018/analesps.428771>
- Begall, K., Grunow, D., & Buchler, S. (2023). Multidimensional gender ideologies across Europe: Evidence from 36 countries. *Gender & Society*, 37(2), 177-207. <https://doi.org/10.1177/08912432231155914>
- Bonilla-Algovia, E., & Rivas-Rivero, E. (2021). Intimate partner violence against women: A study on the beliefs of trainee teachers in Spain and Latin America. *International Journal of Psychological Research*, 14(2), 18-29. <https://doi.org/10.21500/20112084.5103>
- Bonilla-Algovia, E., & Rivas-Rivero, E. (2022). Papel del sexismo, los mitos románticos y los eventos vitales adversos en la violencia de género: Un estudio con agresores de pareja [Influence of sexism, romantic myths and adverse life events on gender-based violence: A study with partner aggressors]. *Revista Iberoamericana de Psicología y Salud*, 13(2), 112-119. <https://doi.org/10.23923/j.rips.2022.02.057>
- Bucheli, M., & Rossi, M. (2019). Attitudes toward intimate partner violence against women in Latin America and the Caribbean. *SAGE Open*, 9(3), 2158244019871061. <https://doi.org/10.1177/2158244019871061>
- Cameron, J. J., & Stinson, D. A. (2019). Gender (mis)measurement: Guidelines for respecting gender diversity in psychological research. *Social and Personality Psychology Compass*, 13(11), e12506. <https://doi.org/10.1111/spc3.12506>
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (Rev. ed.) Academic Press.
- Dardis, C. M., Edwards, K. M., Kelley, E. L., & Gidycz, C. A. (2016). Perceptions of dating violence and associated correlates: A study of college young adults. *Journal of Interpersonal Violence*, 32(21), 3245-3271. <https://doi.org/10.1177/0886260515597439>
- Eagly, A. H., Nater, C., Miller, D. I., Kaufmann, M., & Sczesny, S. (2020). Gender stereotypes have changed: A cross-temporal meta-analysis of U.S. public opinion polls from 1946 to 2018. *American Psychologist*, 75, 301-315. <https://doi.org/10.1037/amp0000494>
- Echeburúa, E., Amor, P. J., Sarasua, B., Zubizarreta, I., & Holgado-Tello, F. P. (2016). Inventario de Pensamientos Distorsionados sobre la Mujer y el Uso de la Violencia - Revisado (IPDMUV-R): Propiedades psicométricas [Inventory of Distorted Thoughts about Women and the Use of Violence-Revised (IPDMUV-R): Psychometric properties]. *Anales de Psicología*, 32(3), 837-846. <https://doi.org/10.6018/analesps.32.3.231901>
- Expósito-Álvarez, C., Lila, M., Gracia, E., and Martín-Fernández, M. (2021). Risk factors and treatment needs of batterer intervention program participants with substance abuse problems. *European Journal of Psychology Applied to Legal Context*, 13(2), 87 - 97. <https://doi.org/10.5093/ejpalc2021a9>
- Fahlberg, A., & Pepper, M. (2016). Masculinity and sexual violence: Assessing the state of the field. *Sociology Compass*, 10(8), 673-683. <https://doi.org/10.1111/soc4.12397>
- Ferragut, M., Blanca, M. J., & Ortiz-Tallo, M. (2014). Analysis of adolescent profiles by gender: Strengths, attitudes toward violence and sexism. *Spanish Journal of Psychology*, 17, E59. <https://doi.org/10.1017/sjp.2014.60>
- Ferrer-Pérez, V. A., & Bosch-Fiol, E. (2014). Gender violence as a social problem in Spain: Attitudes and acceptability. *Sex Roles*, 70(11), 506-521. <https://doi.org/10.1007/s11199-013-0322-z>

- Ferrer-Pérez, V. A., Bosch-Fiol, E., Sánchez-Prada, A., & Delgado-Álvarez, C. (2019). Beliefs and attitudes about intimate partner violence against women in Spain. *Psicothema*, 31(1), 38-45. <https://doi.org/10.7334/psicothema2018.206>
- García-Ael, C., Recio, P., & Silván-Ferrero, P. (2017). Psychometric properties of the Inventory of Beliefs about Intimate Partner Violence (IBIPV). *Anales de Psicología*, 34(1), 135-145. <https://doi.org/10.6018/analesps.34.1.232901>
- García-Díaz, V., Lana-Pérez, A., Fernández-Feito, A., Bringas-Molleda, C., Rodríguez-Franco, L., & Rodríguez-Díaz, F. J. (2018). Actitudes sexistas y reconocimiento del maltrato en parejas jóvenes [Sexist attitudes and recognition of abuse in young couples]. *Atención Primaria*, 50(7), 398-405. <https://doi.org/10.1016/j.aprim.2017.04.001>
- Grzyb, M. (2023). The Polish variant of patriarchy? Explaining the relationship between gender inequality and violence against women in Poland. *Violence against Women*. Advance online publication. <https://doi.org/10.1177/10778012231159415>
- Guerrero-Molina, M., Moreno-Manso, J. M., Guerrero-Barona, E., García-Baamonde, M. E., Cruz-Márquez, B., & Bueso-Izquierdo, N. (2021). Aggressors condemned for intimate partner violence: Sexist attitudes and distorted thoughts about women and the use of violence. *Current Psychology*, 42, 560-570. <https://doi.org/10.1007/s12144-021-01473-5>
- Gutiérrez, S., Sanz, J., Espinosa, R., Gesteira, C., & García-Vera, M. P. (2016). La Escala de Deseabilidad Social de Marlowe-Crowne: Baremos para la población general española y desarrollo de una versión breve [The Marlowe-Crowne Social Desirability Scale: Norms for the Spanish general population and development of a short version]. *Anales de Psicología*, 32, 206-217. <https://dx.doi.org/10.6018/analesps.32.1.185471>
- Hernández, W. (2021). Violence with femicide risk: Its effects on women and their children. *Journal of Interpersonal Violence*, 36(11-12), NP6465-NP6491. <https://doi.org/10.1177/0886260518815133>
- Hickle, K. E., & Roe-Sepowitz, D. E. (2014). Putting the pieces back together: A group intervention for sexually exploited adolescent girls. *Social Work with Groups*, 37(2), 99-113. <https://doi.org/10.1080/01609513.2013.823838>
- Juarros-Basterretxea, J., Ocampo, N. Y., Herrero, J., and Rodríguez-Díaz, F. J. (2022). Dyadic analysis of emotional intimate partner violence: An estimation of dyadic patterns and influencing individual, family, and couple factors. *European Journal of Psychology Applied to Legal Context*, 14(2), 105-111. <https://doi.org/10.5093/ejpalc2022a10>
- Kaiser, C. R., Bandt-Law, B., Cheek, N. N., & Schachtman, R. (2022). Gender prototypes shape perceptions of and responses to sexual harassment. *Current Directions in Psychological Science*, 31(3), 254-261. <https://doi.org/10.1177/09637214221078592>
- Lizzio-Wilson, M., Klas, A., & Clarke, E. J. R. (2022). When “good guys” do bad things: Evaluations of sexual harassment allegations against male allies. *Group Processes & Intergroup Relations*. Advance online publication. <https://doi.org/10.1177/13684302221094432>
- Llano-Suárez, A., Lana, A., Gasch-Gallén, Á., & Fernández-Feito, A. (2021). Gender roles and intimate partner violence among female university students in Spain: A cross-sectional study. *PloS One*, 16(11), e0259839. <https://doi.org/10.1371/journal.pone.0259839>
- Loinaz, I. (2014). Distorsiones cognitivas en agresores de pareja: Análisis de una herramienta de evaluación [Cognitive distortions among partner-violent men: analyzing an assessment tool]. *Terapia Psicológica*, 32(1), 5-17. <https://doi.org/10.4067/S0718-48082014000100001>
- Loinaz, I. (2016). Cuando “el” delincuente es “ella”: intervención con mujeres violentas [When “the” offender is “she”: Intervention with violent women]. *Anuario de Psicología Jurídica*, 26, 41-50. <http://dx.doi.org/10.1016/j.apj.2016.04.006>
- 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. [https://www.psicothema.com/ico/pdf\\_ico.png](https://www.psicothema.com/ico/pdf_ico.png)
- Loinaz, I., Barboni, L., & Ma de Sousa, A. (2020). Gender differences in child-to-parent violence risk factors. *Anales de Psicología*, 36(3), 408-417. <https://doi.org/10.6018/analesps.428531>
- López-Ossorio, J. J., Carbajosa, P., Cerezo-Domínguez, A. I., González-Álvarez, J. L., Loinaz, I., & Muñoz, J. M. (2018). Taxonomía de los homicidios de mujeres en las relaciones de pareja [Taxonomy of homicides of women in intimate partner relationships]. *Psychosocial Intervention*, 27(2), 95-104. <https://doi.org/10.5093/pi2018a11>
- Lowe, H., Brown, L., Ahmad, A., Daruwalla, N., Gram, L., Osrin, D., Panchal, K., Watson, D., Zimmerman, C., & Mannell, J. (2022). Mechanisms for community prevention of violence against women in low- and middle-income countries: A realist approach to a comparative analysis of qualitative data. *Social Science & Medicine*, 305, 115064. <https://doi.org/10.1016/j.socscimed.2022.115064>
- Martin-Fernández, M., Gracia, E., & Lila, M. (2022). Measuring perceived severity of intimate partner violence against women (IPVAW) among the general population and IPVAW offenders. *Psychosocial Intervention*, 31, 109-119. <https://doi.org/10.5093/pi2022a8>
- Matias, A., Gonçalves, M., Soeiro, C., & Matos, M. (2020). Intimate partner homicide: A meta-analysis of risk factors. *Aggression and Violent Behavior*, 50, 101358. <https://doi.org/10.1016/j.avb.2019.101358>
- Midi, H., Sarkar, S. K., & Rana, S. (2010). Collinearity diagnostics of binary logistic regression model. *Journal of Interdisciplinary Mathematics*, 13(3), 253-267. <https://doi.org/10.1080/09720502.2010.10700699>
- Morales, J. F., Yubero, S., & Larrañaga, E. (2016). Gender and bullying: Application of a three-factor model of gender stereotyping. *Sex Roles*, 74(3), 169-180. <https://doi.org/10.1007/s11199-015-0463-3>
- Moreh, C. (2019). *Online survey design and implementation: Targeted data collection on social media platforms*. SAGE. <https://doi.org/10.4135/9781526479709>
- Moya, M., & Moya-Garófano, A. (2021). Evolution of gender stereotypes in Spain: From 1985 to 2018. *Psicothema*, 33(1), 53-59. <https://doi.org/10.7334/psicothema2020.328>
- Muñoz-Rivas, M., Ronzón-Tirado, R. C., Zamarrón, M. D., & Redondo, N. (2021). Cross-cultural analysis of teen dating victimization: Typologies, correlates, and implications for intervention. *Psicothema*, 33(1), 103-110. <https://doi.org/10.7334/psicothema2020.248>
- Nabors, E. L., & Jasinski, J. L. (2009). Intimate partner violence perpetration among college students: The role of gender role and gendered violence attitudes. *Feminist Criminology*, 4(1), 57-82. <https://doi.org/10.1177/1557085108325235>
- Reyes, H. L. M., Foshee, V. A., Niolon, P. H., Reidy, D. E., & Hall, J. E. (2016). Gender role attitudes and male adolescent dating violence perpetration: Normative beliefs as moderators. *Journal of Youth and Adolescence*, 45(2), 350-360. <https://doi.org/10.1007/s10964-015-0278-0>
- Rosen, N. L., & Nofziger, S. (2019). Boys, bullying, and gender roles: How hegemonic masculinity shapes bullying behavior. *Gender Issues*, 36(3), 295-318. <https://doi.org/10.1007/s12147-018-9226-0>

- Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experimental effect. *Journal of Educational Psychology*, 74(2), 166-169. <https://doi.org/10.1037/0022-0663.74.2.166>
- Ruiz-Hernández, J. A., Pina, D I., Puente-López, E., Luna-Maldonado, A., & Llor-Esteban, B. (2020). Attitudes towards School Violence Questionnaire, Revised Version: CAHV-28. *European Journal of Psychology Applied to Legal Context*, 12(2), 61-68. <https://doi.org/10.1016/10.5093/ejpalc2020a8>
- Salami, T., Gordon, M., Babu, J., Coverdale, J., & Nguyen, P. T. (2021). Treatment considerations for foreign-born victims of human trafficking: Practical applications of an ecological framework. *Transcultural Psychiatry*, 58(2), 293-306. <https://doi.org/10.1177/1363461520983950>
- Scarborough, W. J., Sin, R., & Risman, B. (2019). Attitudes and the stalled gender revolution: Egalitarianism, traditionalism, and ambivalence from 1977 through 2016. *Gender & Society*, 33(2), 173-200. <https://doi.org/10.1177/0891243218809604>
- Spencer, C. M., & Stith, S. M. (2020). Risk factors for male perpetration and female victimization of intimate partner homicide: A meta-analysis. *Trauma, Violence, & Abuse*, 21(3), 527-540. <https://doi.org/10.1177/1524838018781101>
- Stanziani, M., Newman, A. K., Cox, J., & Coffey, C. A. (2020). Role call: Sex, gender roles, and intimate partner violence. *Psychology, Crime & Law*, 26(3), 208-225. <https://doi.org/10.1080/1068316X.2019.1652746>
- Toplu-Demirtaş, E., Öztür, G., & Fincham, F. D. (2020). Perceptions of dating violence: Assessment and antecedents. *Journal of Interpersonal Violence*, 37(1-2), NP48-NP75. <https://doi.org/10.1177/0886260520914558>
- Turchik, J. A., Hebenstreit, C. L., & Judson, S. S. (2015). An examination of the gender inclusiveness of current theories of sexual violence in adulthood: Recognizing male victims, female perpetrators, and same-sex violence. *Trauma, Violence, & Abuse*, 17(2), 133-148. <https://doi.org/10.1177/1524838014566721>
- Ullman, S. E. (2023). Correlates of social reactions to victims' disclosures of sexual assault and intimate partner violence: A systematic review. *Trauma, Violence, & Abuse*, 24(1), 29-43. <https://doi.org/10.1177/15248380211016013>
- Vinagre-González, A., Aparicio-García, M., & Alvarado-Izquierdo, J. (2020). IVISEM, una medida de la violencia social encubierta hacia las mujeres [IVISEM, a measure of covert social violence towards women]. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 57(4), 149-163. <https://doi.org/10.21865/RIDEP57.4.11>
- Wagers, S. M., Wareham, J., & Boots, D. P. (2017). College students' beliefs about domestic violence: A replication and extension. *Journal of Interpersonal Violence*, 36(3-4), NP1482-1511NP. <https://doi.org/10.1177/0886260517747606>
- Willie, T. C., & Kershaw, T. S. (2019). An ecological analysis of gender inequality and intimate partner violence in the United States. *Preventive Medicine*, 118, 257-263. <https://doi.org/10.1016/j.ypmed.2018.10.019>
- Wilson, J. M., & Smirles, K. (2020). College students' perceptions of intimate partner violence: The effects of type of abuse and perpetrator gender. *Journal of Interpersonal Violence*, 37(1-2), 172-194. <https://doi.org/10.1177/0886260520908025>
- Yang, M., Beybutyan, A., Pina Ríos, R., & Soria-Verde, M. A. (2021). Public attitudes towards intimate partner violence against women and influential factors in China and Spain. *Anuario de Psicología Jurídica*, 31, 101-108. <https://doi.org/10.5093/apj2021a13>
- You, S., & Shin, K. (2022). Influence of patriarchal sex-role attitudes on perpetration of dating violence. *Current Psychology*, 41(2), 943-948. <https://doi.org/10.1007/s12144-020-00632-4>
- Zidenberg, A. M., Wielinga, F., Sparks, B., Margeotes, K., & Harkins, L. (2022). Lost in translation: A quantitative and qualitative comparison of rape myth acceptance. *Psychology, Crime & Law*, 28(2), 179-197. <https://doi.org/10.1080/1068316X.2021.1905810>

**Funding:** This study did not receive specific funding from public sector agencies, the commercial sector, or non-profit bodies.

**Institutional Review Board Statement:** This study was approved by the Comité de Bioética of the Universidad Internacional de La Rioja [PI:89/2022].

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The raw data supporting the conclusions of this article will be made available by the correspondence author, without undue reservation.

**Conflicts of Interest:** The authors declare that there is no conflict of interest.