

Article

Systematic review and meta-analysis of the violence in dating relationships in adolescents and young adults

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ABSTRACT

Objective: The objective was to analyze the different types of violence perpetrated and experienced as a function of gender in adolescents and young adults. **Method:** Systematic review with meta-analysis of observational studies. The search was carried out in the following databases: Web of Science, PubMed, SCOPUS, PsycInfo, and Gender Studies, in addition to a reverse search of relevant references. Publications published from 1st January 2015 to 23rd January 2021 were indexed. The search for articles was carried out by two independent investigators. A risk of bias analysis was then performed by two investigators using the STROBE reporting guidelines for observational studies. **Results:** Twelve studies were indexed involving a total of 21,924 men and 25,180 women. There were significant differences between men and women for the types of violence perpetrated and experienced. Due to the high degree of heterogeneity between studies, a sensitivity analysis was performed. **Conclusions:** Violence in dating relationships is bidirectional. Men and women perpetrate and experience different types of violence on the basis of their sex.

Revisión sistemática y meta-análisis de la violencia en las relaciones de noviazgo en adolescentes y adultos jóvenes

RESUMEN

Objetivo: El objetivo fue analizar los diferentes tipos de violencia perpetrada y sufrida en función del sexo en adolescentes y adultos jóvenes. **Método:** Revisión sistemática con meta-análisis de estudios observacionales. La búsqueda se realizó en las bases de datos: Web of Science, PubMed, SCOPUS, PsycInfo y Gender Studies, además de una búsqueda inversa de referencias relevantes. Se incluyeron artículos publicados desde el 1 de enero de 2015 hasta el 23 de enero de 2021. La búsqueda fue realizada por dos investigadores independientes. A continuación, dos investigadores realizaron un análisis de riesgo de sesgo utilizando las directrices de información de STROBE para estudios observacionales. **Resultados:** Se incluyeron doce estudios con 21.924 hombres y 25.180 mujeres. Hubo diferencias significativas entre hombres y mujeres en cuanto a los tipos de violencia perpetrada y experimentada. Debido al alto grado de heterogeneidad entre los estudios, se realizó un análisis de sensibilidad. **Conclusiones:** La violencia en las relaciones de pareja es bidireccional. Los hombres y las mujeres perpetran y experimentan diferentes tipos de violencia en función de su sexo.

Palabras clave:

Violencia de pareja
Adolescentes
Género
Perpetración
Victimización

Introduction

Dating violence (DV) has become a worldwide focus of political activity and demonstrations. This type of violence, whether among the young or adult population, exists in different parts of the world, being pervasive and independent of social class, country of origin, language, and culture (Smith et al., 2022). Recent research has highlighted the need to invest in developing further evidence on relationship violence, not only by analysing the types and levels of violence, but also by considering the complexities of this phenomenon, which is influenced by different variables, such as gender, age, nationality, culture, or individual characteristics (Joly & Connolly, 2016). Gender inequality is the greatest risk factor for violence.

Exposure to such violence is a major risk factor directly associated with serious health problems such as anxiety, drug use, depression, or suicide (Datta et al., 2020).

In recent years, the number of publications on DV has increased considerably (Paíno et al., 2020). The rise of observational research on this issue has led to an increase in the number of different tools capable of measuring violence in relationships, with each of these tools defining and identifying different types of violence. This range of different tools has had an impact on the published evidence, leading to an increase in the degree of heterogeneity among recent publications (Muñoz & Bandera, 2014; Yakubovich et al., 2019).

DV has reached alarming levels among the adolescent population and may be an important predictor of this type of violence in young adulthood and adulthood, as well as being associated with serious population health problems (Taquette, 2019). Previous research has already identified high rates of different types of violence experienced and perpetrated among the young population (Kliem et al., 2018). These figures range from 12% to 55% for the different types of violence experienced. Violence in relationships continues this trend, where a prevalence of between 8% and 48% can be found (Fernández-Fuertes et al., 2019). Other publications have found that the prevalence of this type of violence is even higher, with relationship violence victimisation rates of 94% for men and 88% for women (Pérez et al., 2020).

Some of the research focusing on DV addresses only unidirectional violence, thereby missing the broader perspective that would lead to a holistic understanding of this type of violence. It is therefore considered necessary to develop research that takes into account the dual nature of violence between young couples.

Different types of abuse are manifested in relationship violence, including physical, sexual, emotional, spiritual, and social violence (Wincentak et al., 2017). Although in the young adult and adolescent population there appears to be a particular trend in the perpetration and victimisation of DV. It has been identified that the most serious acts, such as sexual or serious physical violence, are experienced to a greater extent by women, while men are identified as the main victims of forms of violence deemed to be less serious, such as verbal-emotional or psychological violence (Fernández-Fuertes et al., 2019; Paíno et al., 2020). However, there are published studies that have found the opposite, suggesting that women perpetrate more physical violence than men (Taylor & Xia, 2022). There are also publications that found no significant differences between the types of violence perpetrated by men and women (Courtain & Glowacz, 2019). Some hypotheses to explain the differences point

to self-administered tests and the underestimation of violence received by women and perpetrated by men.

Publications focusing on the analysis of this type of violence have grown considerably in recent years (Martínez et al., 2016). It has also been noted that in the last five years new instruments or improved revisions of previously published instruments have been presented (Taquette, 2019; Yanez-Peñúñuri et al., 2019). It is therefore considered interesting and necessary to develop a systematic review with meta-analysis that integrates the latest evidence on this issue. The heterogeneity of the results illustrates the need to continue generating evidence that helps to clarify the types of violence that are perpetrated or experienced in young people's relationships. However, contradictory results persist, leading to gaps that limit the possibility of developing interventions which will adequately address this issue.

Having in mind the revised state of the literature a question following to be unsolved: ¿Are there gender differences in the violence perpetrated and experienced in dating relationships among adolescents and young adults? Thus, a research was planned to get the following objective: to analyse the different types of violence perpetrated and experienced in dating relationship as a function of gender in adolescents and young adults.

Method

Study design

A systematic review with meta-analysis was designed. The study followed the PRISMA guidelines for systematic reviews (Page et al., 2021). Before carrying out the study, a protocol was drawn up and registered in PROSPERO with registration code CRD42021170806, which can be consulted at the following link: <https://www.crd.york.ac.uk/PROSPERO/#recordDetails>.

Search of studies

The systematic search was carried out in the following databases: Web of Science, PubMed, SCOPUS, PsycInfo, and Gender Studies. A reverse search was also undertaken by analysing the bibliographic lists of the shortlisted articles and contacting the authors of articles of interest. Articles published after 1st January 2015 were indexed. The Gender Studies database was last searched on 23rd January 2021. The descriptors used were: interpersonal relationships, intimate partner violence, dating violence, adolescent, young adult, prevalence, epidemiology, incidence, occurrence, frequency, and gender difference. Annex 1.

Two independent researchers reviewed the title and abstract of all potentially references and established a list of eligible studies initially selected on the basis of a checklist previously drawn up around the research question and objective. In the second stage, both authors cross-checked their references and discrepancies were resolved by a third researcher. Subsequently, the articles that passed the previous stage were read in full text. The researchers independently created two lists of articles matching the inclusion criteria and analysed the references of articles read in full text to identify possible references of interest. Finally, the results were pooled and the studies to be included in the risk of bias analysis were identified (see the flow diagram in Figure 1, see search strings in annex 1).

Inclusion and exclusion criteria

Inclusions criteria: The studies had to have adolescents and young adults as the study population. DeCS descriptors were used to define an adolescent as a person aged 13-18 years old and a young adult as a person aged 19-24 years old (*DeCS - Descriptores en Ciencias de la Salud*, 2017).

Research would provide data on the prevalence or incidence of perpetration and victimisation for men and women in different types of violence perpetrated and experienced. Such information should have been identified through transparent and validated tools that can be consulted in the research literature.

Due to the observational nature of the research question, studies with a descriptive observational design were identified and selected.

Exclusions criteria: Studies that did not provide prevalence or incidence data for the study population were excluded. Secondary studies such as systematic or literature reviews, as well as experimental studies, were also excluded.

Coding of primary studies

The following study data were coded for meta-analysis: main study reference; title; number and characteristics of the participants (N); number of events of the total number of men and women who suffered and exercised dating violence for each of the types of violence analyzed (events and total); mean (M) and standard deviation (SD) for each type of violence perpetrated and suffered for men and women. Additionally, for the definition of the coding categories of the relevant moderators for dating violence in adolescents and young adults, men and women, a successive approach procedure was used (Vilariño et al., 2013). This consists of two researchers with scientific expertise in dating violence scanning all selected articles for moderators. The identified variables were discussed and the researchers reached a consensus on the moderators. No moderators found.

Two experienced and trained raters analysed independently the studies in these categories. After a week of the original analysis, each rater reanalysed 50% of the studies. The between- and within-rater concordance were estimated with true kappa (Fariña et al., 2002). This corrects the Cohen's kappa controlling a systematic source of error: the correspondence between coding (true kappa). Succinctly, if the exact correspondence was not verified, the two errors are encoded as an agreement. This correction is called true kappa. The results showed a total concordance. Additionally, codings were consistent with other studies i.e., in other contexts (Wincentak et al., 2017). Thus, between- and within-raters and inter-contexts true concordance was verified, and the coding accurately reflected the content of the categories i.e., the coding was reliable. Thus, another trained rater would find the same data set.

Quality appraisal

Following the full-text reading of the identified articles, a risk of bias analysis was conducted independently by two researchers. Due to the observational nature of the studies indexed in the review, the STROBE scale was chosen to analyse the methodological quality of the research (von Elm et al., 2008).

The cut-off point was set at 16 out of a possible 22 points in order to include the highest quality studies. A score of 1 was awarded if the study fully complied with the item, 0.5 points if it partially complied with the item and 0 points if it did not comply with any of the sections of the corresponding item. Finally, inter-rater reliability was assessed using an intra-class correlation analysis of the selected studies.

Data extraction

Once the articles had been selected, the most relevant information was extracted. This process was carried out by two independent researchers who completed a matrix previously prepared by the lead author. The extraction matrix collected the following data for each study: general characteristics, design, study duration, sample characteristics, objectives, instruments used, outcome measures, main results and conclusions, funding sources, and conflicts of interest.

A summary table of all the studies included in the review was then created in which the following sections are identified: title, authors, objectives, sample, instruments used, and outcome variables (see Table 1).

Due to the different methodologies used in the included studies, summary measures were analysed separately for studies of a continuous and categorical nature. For studies using variables of a continuous nature, Means and Standard Deviations were calculated. For studies using categorical variables, the number of events out of the total for each study variable was determined.

Data analysis

Since the included studies were measured with comparable results, it was possible to produce a meta-analysis for each of the study variables. However, this analysis was performed separately for research of a continuous and categorical nature. The meta-analysis was carried out using Review Manager 5.2.

Continuous studies: In order to identify whether there were significant differences between violence experienced and perpetrated in relationships on the basis of gender, the results for men and women were compared. The results of the comparison of both groups were analysed using a random effects model and expressed as the standardised mean difference (SMD) with a 95% confidence interval.

Categorical studies: The male and female groups were compared for the different types of violence experienced and perpetrated in dating relationships. The results of the comparison of both groups were analysed using a random effects model and expressed as the Odds Ratio (OR) with a 95% confidence interval, which analysed the total number of events for each type of violence identified.

To determine the influence of each of the studies on the overall estimate of the effect, a sensitivity analysis was performed repeating the calculations by extracting the studies one at a time. For each comparison, the heterogeneity of the results was calculated using the chi-square test with a significance level of 0.05. τ^2 and the I^2 index were also calculated. Finally, we included in the analysis a study of publication bias to determine whether this could be a threat to the validity of the results of the meta-analysis. RevMan 5.3 was used for calculations.

Table 1.
Characteristics of the studies included.

Author	Title	Objectives	Sample	Instrument	Outcome variables
(Quesada et al., 2018)	Sexting in adolescence: frequency and association with cyber bullying and dating violence victimisation	Frequency of sexting in adolescence and its relationship to different types of victimisation in dating violence	303 (146 men and 157 women)	-Sexting questionnaire -Revised cyber bullying questionnaire -Dating cyber bullying questionnaire -CADRI	Sexual cyber bullying, psychological cyber bullying, cyber dating harassment and dating violence Experienced
(Reyes et al., 2019)	Patterns of adolescent aggression and victimization: sex differences and correlates	To identify the involvement of violence in teenage dating relationships	3,068 (1,420 men and 1,648 women)	-The Safe Dates Dating Violence perpetration and victimization scales	Physical, verbal, sexual violence and controlling behaviours Experienced and perpetrated
(Karsberg, et al., 2018)	Prevalence and characteristics of three subtypes of dating violence among Danish seventh-grade students	To investigate the victimisation and perpetration of violence in relationships between young people and to analyse gender differences	2,910 (1,487 men and 1,386 women)	-Safe Date Psychological Abuse Victimisation -National Intimate Partner and Sexual Violence Survey	Emotional, physical and sexual violence. Experienced and perpetrated
(Fernández-González et al., 2018)	The role of emotional intelligence in the maintenance of adolescent dating violence perpetration	Analysing emotional intelligence and violence in relationships in a sample of adolescents	542 (259 men and 283 women)	-Trait Meta- Mood Scale (TMMS-24) -CADRI	Emotional intelligence, physical violence, threats, sexual, relational, verbal and emotional abuse. Experienced and perpetrated
(Ross et al., 2019)	Sexting coercion as a component of intimate partner poly victimization	Examining intimate partner violence and coercive sexting in a sample of young adults	885 (301 men and 584 women)	-SCIRS -Severity of Violence Against Women -SVAWS	Coercive sexting Sexual coercion IPV (intimate partner violence) Experienced
(Dosil et al., 2019)	Variables related to victimization and perpetration of dating violence in adolescents in residential care Settings	To analyse the prevalence of dating violence and related factors in adolescents	271 (148 men and 123 women)	-CADRI -S3 personality report -ISA (Inventory of Ambivalent Sexism for Adolescents)	Relational, verbal/emotional and physical violence. Experienced and perpetrated
(Taylor & Mumford, 2016)	A national descriptive portrait of adolescent relationship abuse: results from the national survey on teen relationships and intimate violence	Analysing partner abuse in adolescent relationships	1,804 (904 men and 900 women)	-CADRI	Moderate psychological abuse, severe psychological abuse, moderate threats/ physical violence, sexual abuse, severe threats and physical violence. Experienced and perpetrated
(Drouin, Ross, & Tobin, 2015)	Sexting: A new, digital vehicle for intimate partner aggression?	Examining coercive sexting and intimate partner violence for young adults	480 (160 men and 320 women)	-SCIRS -SVAWS	Sexting coercion, physical sexual coercion, physical violence, threats and sexual assault, anxiety, depression and trauma symptoms. Experienced
(Niolon et al., 2015)	Prevalence of teen dating violence and co-occurring risk factors among middle school youth in high-risk urban communities	To describe the prevalence of perpetration of violence in dating relationships among adolescents.	1,653 (788 men and 865 women)	-CADRI	Sexual abuse, threats, verbal/emotional, relational and physical violence. Perpetrated
(Dosil et al., 2020)	Teen dating violence, sexism, and resilience: a multivariate analysis	To investigate factors associated with dating violence in adolescents	268 (126 men and 142 women)	-CADRI -BACS-S3 -ISA,	Dating violence; relational, verbal-emotional, physical. Experienced and perpetrated
(Daff et al., 2018)	Australian adolescents' experiences of aggression and abuse by intimate partners	To analyse the frequency of perpetration and victimisation of dating violence among adolescents	423 (225 men and 189 women)	-CADRI	Sexual, emotional/verbal, physical, relational, threatening behaviour. Experienced and perpetrated
(Cortés-Ayala et al., 2015)	Intimate partner violence in the relationships of Mexican youth. Differential analysis by sex and level of schooling	Examining the prevalence of violent behaviour and partner abuse in adolescents and young adults	1,927 (850 men and 1,077 women)	-CUVINO	Detachment, humiliation, sexual victimisation, coercion, physical violence, gender-based violence, emotional punishment, and instrumental violence. Experienced

Results

The systematic search for articles initially located 4,627 potentially eligible studies. After reviewing the title and abstract and eliminating duplicates, only 64 studies were selected for full-text reading. After full-text reading and risk of bias analysis, 12 studies were ultimately included in the systematic review and meta-analysis (see [Figure 1](#)).

A meta-analysis was conducted for each of the outcome measures identified in the selected articles. Meta-analyses were conducted independently for studies of a continuous and categorical nature due to differing summary measures. The study population included adolescents and young adults aged 13-24 years. The sample included 21,924 men and 25,180 women.

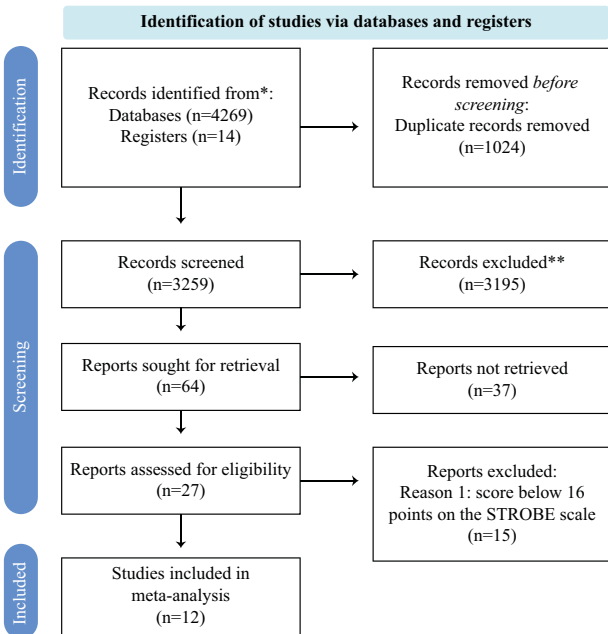


Figure 1. PRISMA flow diagram for selected references.

For continuous studies, a meta-analysis was conducted for the following outcome measures relating to the experienced violence dimension; physical violence, sexual violence, cyber sexual harassment, threats, and verbal-emotional violence. For the perpetrated violence dimension, it was only possible to conduct a meta-analysis for physical violence.

For categorical studies, a meta-analysis was conducted for each of the types of violence experienced and perpetrated. The outcome measures analysed were physical violence, sexual violence, and verbal-emotional violence (see Figure 3).

For the heterogeneity analysis of each of the variables, Chi², I² and Tau² values were obtained (see Tables 2 and 3).

Table 2. Heterogeneity analysis for continuous outcome measures.

	Tau ²	χ ²	I ²	p
Experienced physical violence	.05	43.19	88%	< .00001
Experienced sexual violence	.01	9.44	68%	.02
Experienced cyber sexual harassment	.01	4.44	55%	.11
Threats experienced	.03	14.89	87%	.0006
Experienced verbal-emotional violence	.57	121.81	98%	< .00001
Perpetrated physical violence	.00	.35	0%	.84

Note. I² = index of heterogeneity.

Table 3. Heterogeneity analysis categorical outcome measures.

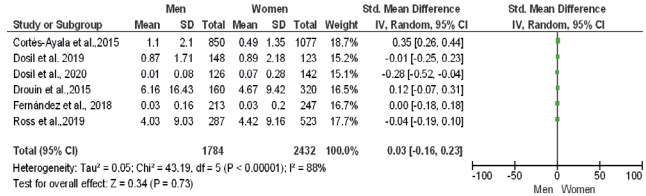
	Tau ²	χ ²	I ²	p
Experienced physical violence	.07	6.36	53%	.10
Experienced sexual violence	.15	17.73	83%	.0005
Experienced verbal-emotional violence	1.90	51.92	96%	< .00001
Perpetrated physical violence	1.03	88.47	95%	< .00001
Perpetrated sexual violence	.78	80.57	95%	< .00001
Perpetrated verbal-emotional violence	.04	6.47	69%	.04

Note. I² = index of heterogeneity.

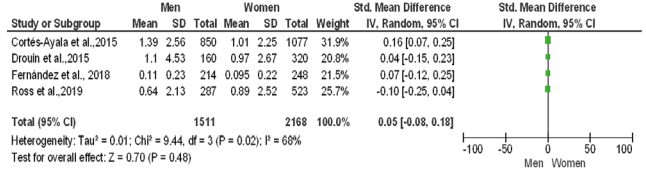
Meta-analysis for Continuous Studies

Experienced Physical Violence (EPV). Data were analysed from six studies examining this type of violence, involving 4,216 adolescent and young adult participants. No significant differences in EPV were found between men and women, *SMD* = 0.03[-0.16, 0.23], *p* = .73. Due to the high degree of heterogeneity in the studies included, $\chi^2 = 43.19$, *I*² = 88% (see figure 2) a sensitivity analysis was performed in which the results did not change significantly in terms of the direction of violence, *SMD* = -0.03[-0.14, 0.08], *p* = .59. Following the sensitivity analysis, the degree of heterogeneity decreased, $\chi^2 = 6.85$, *I*² = 42% (see Figure 4).

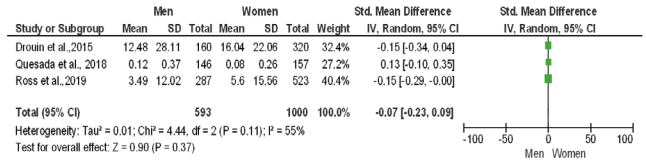
Physical violence suffered (PVS)



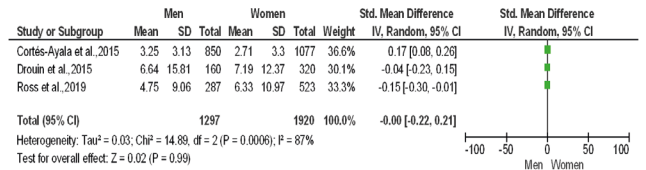
Sexual violence suffered (SVS)



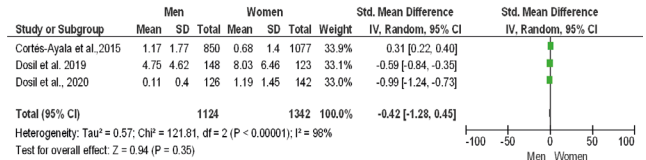
Cyber sexual harassment suffered (CS-HS)



Threats suffered (TS)



Verbal-emotional violence suffered (VE-VS)



Physical violence nonretated (PVP)

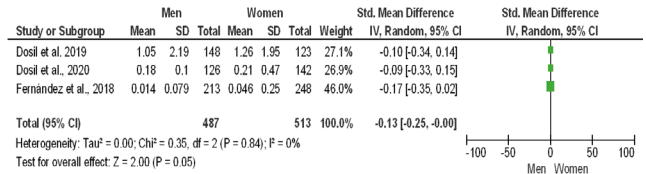


Figure 2. Effect size for outcome measure of a continuous nature.

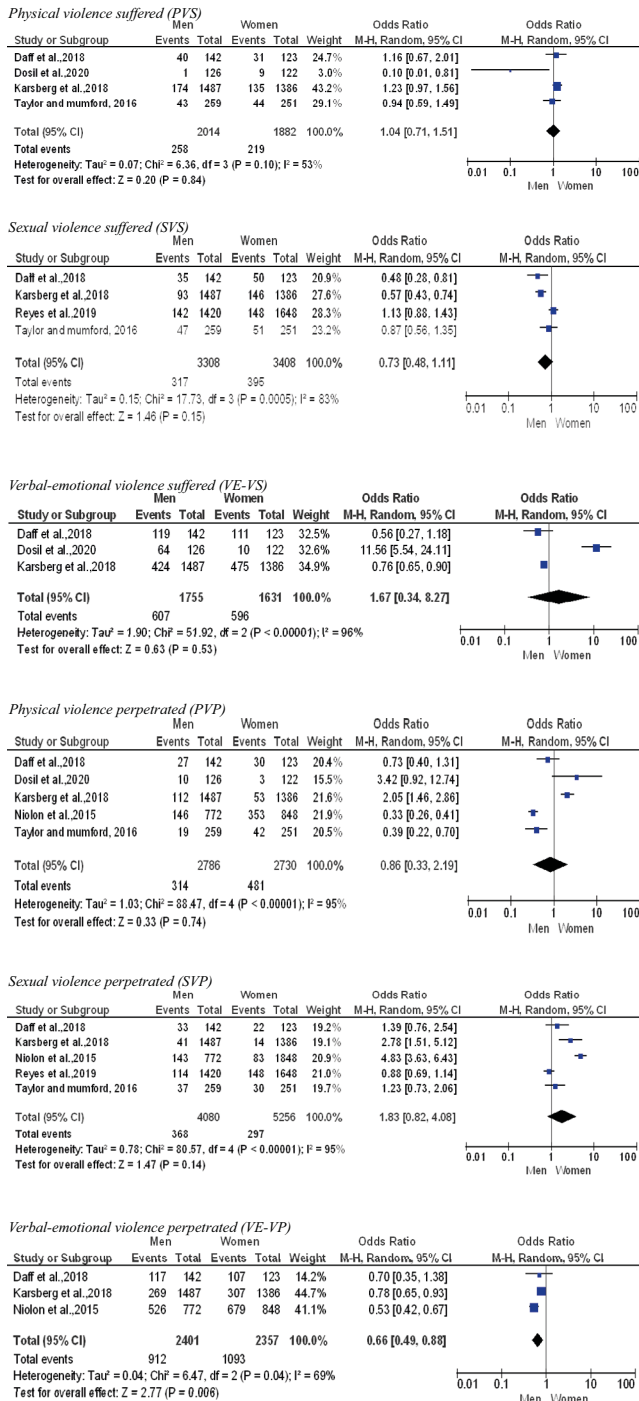


Figure 3. Effect size for outcome measure of categorical nature.

Experienced Sexual Violence (ESV). Data were available from four studies examining this type of violence, involving 3,679 adolescent and young adult participants. No significant differences in ESV were found between men and women, $SMD = .05[-0.08, 0.18]$, $p = .48$. Heterogeneity among the studies included was high, $\chi^2 = 9.44$, $I^2 = 68\%$ (see Figure 2). Hence, a sensitivity analysis was performed. The sensitivity analysis identified that women had experienced significantly more sexual violence than men, $SMD =$

$0.13[0.05, 0.20]$, $p < .05$. The sensitivity analysis reduced the degree of heterogeneity considerably, $\chi^2 = 1.74$, $I^2 = 0\%$ (see Figure 4).

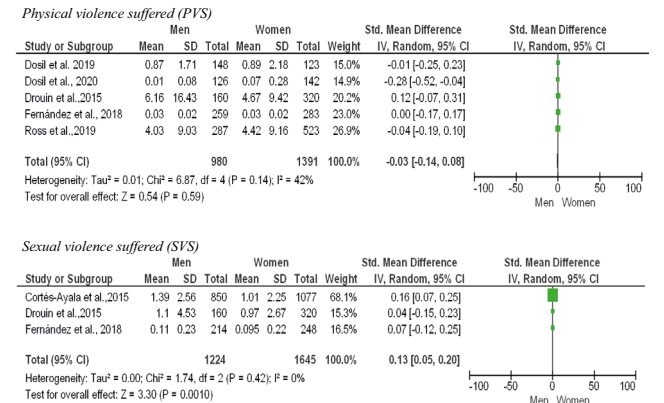


Figure 4. Sensitivity analysis for variables of a continuous nature.

Experienced Cyber Sexual Harassment (ECSH). Data from three studies involving 1,593 adolescent and young adult participants were analysed. No significant differences were found between men and women for ECSH, $SMD = -0.07[-0.23, 0.09]$, $p = .37$. The degree of heterogeneity among the included studies was acceptable, $\chi^2 = 4.44$, $I^2 = 55\%$ (see Figure 2).

Threats Experienced (TE). Data were obtained from three articles identifying the threats experienced for a sample of 3,217 adolescent and young adult participants. No significant differences were identified between men and women, $SMD = -0.00[-0.22, 0.21]$, $p = .99$. The degree of heterogeneity among the articles indexed in the meta-analysis was high, $\chi^2 = 14.89$, $I^2 = 87\%$. Due to the number of articles included in this meta-analysis no further sensitivity analysis was performed (see Figure 2).

Experienced Verbal-Emotional Violence (EVEV). Data from three articles examining EVEV in a sample of 2,466 adolescent and young adult participants were identified. No significant differences were found between men and women, $SMD = -0.42[-1.28, 0.45]$, $p = .35$. The heterogeneity index was high, $\chi^2 = 121.81$, $I^2 = 98\%$. It was not possible to perform a second sensitivity analysis due to the number of articles indexed in the meta-analysis for this variable (see Figure 2).

Perpetrated Physical Violence (PPV). Data were analysed from three articles examining PPV involving total of 1,000 adolescent and young adult participants. The main results found that physical violence was perpetrated significantly more by men, $SMD = -0.13[-0.25, -0.00]$, $p < .05$. The degree of heterogeneity in the studies was acceptable, $\chi^2 = 0.35$, $I^2 = 0\%$ (see Figure 2).

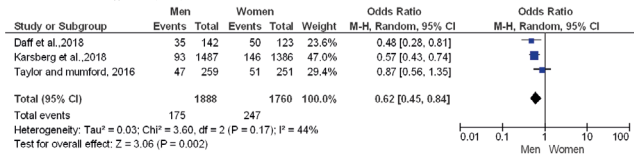
Meta-analysis for categorical studies

Experienced Physical Violence (EPV). Data were analysed for 3,896 adolescent and young adult participants in four studies examining EPV. No statistically significant differences were identified between men and women; $OR = 1.04[0.71, 1.51]$, $p = .84$. The degree of heterogeneity in these studies was acceptable, $\chi^2 = 6.36$, $I^2 = 53\%$ (see Figure 3).

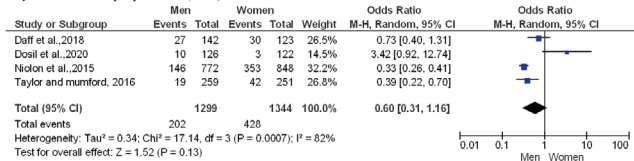
Experienced Sexual Violence (ESV). Data were analysed from four articles examining ESV in a sample of a sample of

6,716 adolescents and young adults. No statistically significant differences were initially identified between men and women; $OR = .73[.48, 1.11]$, $p = .15$. The degree of heterogeneity in the indexed studies was high, $\chi^2 = 17.73$, $I^2 = 83\%$ (see Figure 3). A sensitivity analysis was performed, and an acceptable degree of heterogeneity was obtained, $\chi^2 = 3.60$, $I^2 = 44\%$. The sensitivity analysis did identify significant differences for sexual violence between men and women, finding that women were at a higher risk of experiencing sexual violence; $OR = .62[0.45, 0.84]$, $p < .05$. For men, there was a 38% ($1-OR = 1 - 0.62 = 0.38$) decrease in the risk of sexual violence compared to women (see Figure 5).

Sexual violence suffered (SVS)



Physical violence perpetrated (PVP)



Sexual violence perpetrated (SVP)

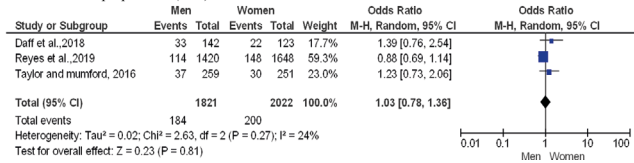


Figure 5. Sensitivity analysis for studies of a categorical nature.

Experienced Verbal-Emotional Violence (EVEV). Data were analysed from three articles examining this type of violence in a sample of 3,386 adolescent and young adult participants. No statistically significant differences were identified between men and women; $OR = 1.67[0.34, 8.27]$, $p = .53$. The heterogeneity in the studies was very high, $\chi^2 = 51.92$, $I^2 = 96\%$ (see Figure 3). Due to the scarcity of articles analysing EVEV it was not possible to perform a sensitivity analysis.

Perpetrated Physical Violence (PPV). Data were identified for 5,516 adolescent and young adult participants indexed in five articles examining PPV. No statistically significant differences were found between men and women; $OR = 0.86[0.33, 2.19]$, $p = .74$. The heterogeneity in the studies was high, $\chi^2 = 88.47$, $I^2 = 95\%$ (see Figure 3). A sensitivity analysis was then performed. Neither heterogeneity, $\chi^2 = 17.14$, $I^2 = 82\%$, nor PPV results differed from baseline, $OR = 0.60[0.31, 1.16]$, $p = .13$ (see Figure 5).

Perpetrated Sexual Violence (PSV). Data were analysed for 9,336 adolescent and young adult participants indexed in five articles examining PSV. No statistically significant differences were identified between men and women; $OR = 1.83[0.82, 4.08]$, $p = .14$. The heterogeneity in these studies was high, $\chi^2 = 80.57$, $I^2 = 95\%$ (see Figure 3), therefore a second sensitivity analysis was performed in which the degree of heterogeneity decreased, $\chi^2 = 2.63$, $I^2 = 24\%$.

The results did not differ from the above with regard to the direction of violence, $OR = 1.03[0.78, 1.36]$, $p = .81$ (See figure 5).

Perpetrated Verbal-Emotional Violence (PVEV). Data were analysed for 4,758 adolescent and young adult participants indexed in three articles. Statistically significant differences were identified between men and women for PVEV; $OR = 0.66[0.49, 0.88]$, $p < .05$. With men there was a 34% ($1-OR = 1 - 0.66 = 0.34$) decrease in the risk of perpetrating verbal-emotional violence versus not perpetrating verbal-emotional violence compared with women. The heterogeneity index among the studies included in the meta-analysis was high, $\chi^2 = 6.47$, $I^2 = 69\%$ (see Figure 3). Due to the number of articles indexed, a further sensitivity analysis could not be performed.

Analysis of Publication Bias

To assess the bias potential for this study, a funnel plot was performed for each of the meta-analyses (see annexe 2 and 3). For both measures, the distribution was symmetrical, so there could be no publication bias that would compromise the interpretation of effect sizes found.

Discussion

The main objective of the study was to analyse the existence of differences in violence perpetrated and suffered in dating or intimate partner relationships according to gender in a sample of adolescents and young adults.

The meta-analysis is composed of 12 observational studies, involving a total of 21,924 men and 25,180 women.

For the dimension of violence suffered, only significant differences were identified between the group of men and women in the ESV. Sexual violence suffered has been generally identified as one of the types of violence with the greatest differences between men and women, with a great deal of homogeneity among the evidence related to the subject, affirming that this type of violence is suffered to a greater extent and with greater severity by women (Courtain & Glowacz, 2021; Daff et al., 2018; Hebert et al., 2016; Kernsmith et al., 2018).

No significant differences were found between men and women with respect to EPV. These results may be a consequence of heterogeneity among recent publications, which identify men as the main victims of this type of violence (Courtain & Glowacz, 2019). Other research has found that the most severe acts of physical violence are experienced by women (Hebert et al., 2017). This discrepancy between published articles may be the cause of the difficulty in establishing the direction of EPV if the severity of the acts in prevalence studies is not taken into account (Chen & Chan, 2021; Rubio-Garay et al., 2017).

For ECSH a meta-analysis could only be performed for continuous studies. In this case, no significant differences were identified between men and women for victimisation by this type of violence. Some authors have identified that this type of violence represents a new version of sexual violence in younger generations, with greater victimisation of women (Kernsmith et al., 2018).

No differences were identified between men and women in terms of TE. The results for this type of violence are heterogeneous. Recent research has identified that there are no significant

differences between the threats experienced by men and women. However, differences were reported for the perpetration of threats in relationships, with women more likely to report having perpetrated this type of violence (Courtain & Glowacz, 2021; Medina-Maldonado et al., 2021). These results contradict those found by (Hebert et al., 2017), whose results show significant differences for TE in relationships, determining in this case that it is women who had experienced more threats.

In terms of the perpetrated violence dimension, significant differences were identified between men and women for PPV, with men having perpetrated more of this type of violence than women. PPV in relationships is one of the most controversial types of violence in the literature to date. Recent research reports that it is men who perpetrate more of this type of violence (Asscher et al., 2015; Singh et al., 2015). However, a systematic review published in 2017 concluded that women were more likely to perpetrate this type of violence (Wincentak et al., 2017). This heterogeneity appears to be due to a lack of specification in terms of the severity of aggression (Chen & Chan, 2021; Garcia-Carpintero et al., 2018; Rubio-Garay et al., 2017).

For PSV, no significant differences were found in the meta-analysis. These results should be treated with caution, as they are at odds with recent research that identifies men as being the main perpetrators of sexual violence (Courtain & Glowacz, 2021; Kernsmith et al., 2018). This discrepancy for PSV appears to be a consequence of the limitations of solely measuring violence in relationships using self-reported questionnaires which can easily be altered. In this case, men tend to mask their responses due to social desirability bias and the fear or rejection that would be generated by claims of having perpetrated sexual violence (Elmqvist et al., 2016; Medina-Maldonado et al., 2021; Ybarra et al., 2016).

In PVEV, women were found to be at higher risk of perpetrating verbal-emotional violence. The results presented here are in line with the latest research, recognising that verbal-emotional violence is perpetrated to a greater extent by women in dating relationships (Wincentak et al., 2017).

Violence in intimate partner relationships continues to present heterogeneity in some of its results, but one thing that is manifestly clear is the bidirectionality of this violence and the similarity of the literature in that the most severe forms of violence are carried out to a greater extent by males in dating or intimate partner relationships (Cascardi & Avery-Leaf, 2015; Ybarra et al., 2016).

Violence in intimate partner or dating relationships seems to present a difference in the perpetration, victimisation and severity of the acts suffered and perpetrated depending on the age range. Differentiating which types of violence are perpetrated or suffered depending on the age range is complex, mainly due to the characteristics of each of the samples used by the different authors. However, there is a clear tendency to identify a higher prevalence of the most serious acts of violence perpetrated and suffered by the young adult population (Courtain & Glowacz, 2021; Hebert et al., 2017).

Limitations

Approaching violence in relationships through observational methodologies using only self-administered questionnaires as the main data collection tool limits the possibility of understanding this phenomenon holistically. This generates heterogeneous results

mainly due to the different characteristics of each measurement instrument and the limited evidence from the questionnaires as a consequence of the response bias present, especially for the most severe forms of violence. This heterogeneity among the articles included in the review has led to increased heterogeneity indices in the meta-analysis for different types of violence. This limits the possibility of comparing certain studies. Another of the most relevant limitations of the study is its inclusion criteria, as only research published in the last five years was selected. This directly affects the number of articles included and the subsequent meta-analysis performed. However, this is also considered strength as only the most recent publications from the previous few years were indexed.

Conclusions

The research brings together the latest evidence analysing the different types of violence perpetrated and experienced in the adolescent and young adult population. The results show that, in intimate partner relationships, both men and women are involved in perpetration and victimisation depending on the type of violence analysed. In the case of the most serious violence such as sexual violence, women were identified as the main victims. In line with recent publications, women were identified as the main perpetrators of mild forms of violence such as verbal-emotional violence, while men perpetrated the most severe forms of violence such as physical violence.

The prevalence of dating violence among the adolescent and young adult population is alarmingly high. Understanding which types of violence are perpetrated or experienced most and whether there are sex or gender differences in the perpetration and victimisation of this type of violence can help in the development of better interventions and prevention programmes among young people. Based on the results, interventions should target both men and women addressing both the prevention of the phenomenon as well as working to detect active cases of violence in both educational and primary care settings.

Implications for future research

The development of a systematic review using meta-analysis, indexing observational studies that analyse violence in relationships, has succeeded in providing homogeneity for certain types of violence in an area hitherto with heterogeneous results. As future lines of research, there is interest in developing studies with a mixed theoretical-methodological approach in order to increase the understanding of the phenomenon and triangulate the trends observed in the meta-analysis. Experimental research may also be considered, looking at what types of factors may be protective and help develop more effective future interventions to reduce violence among young people.

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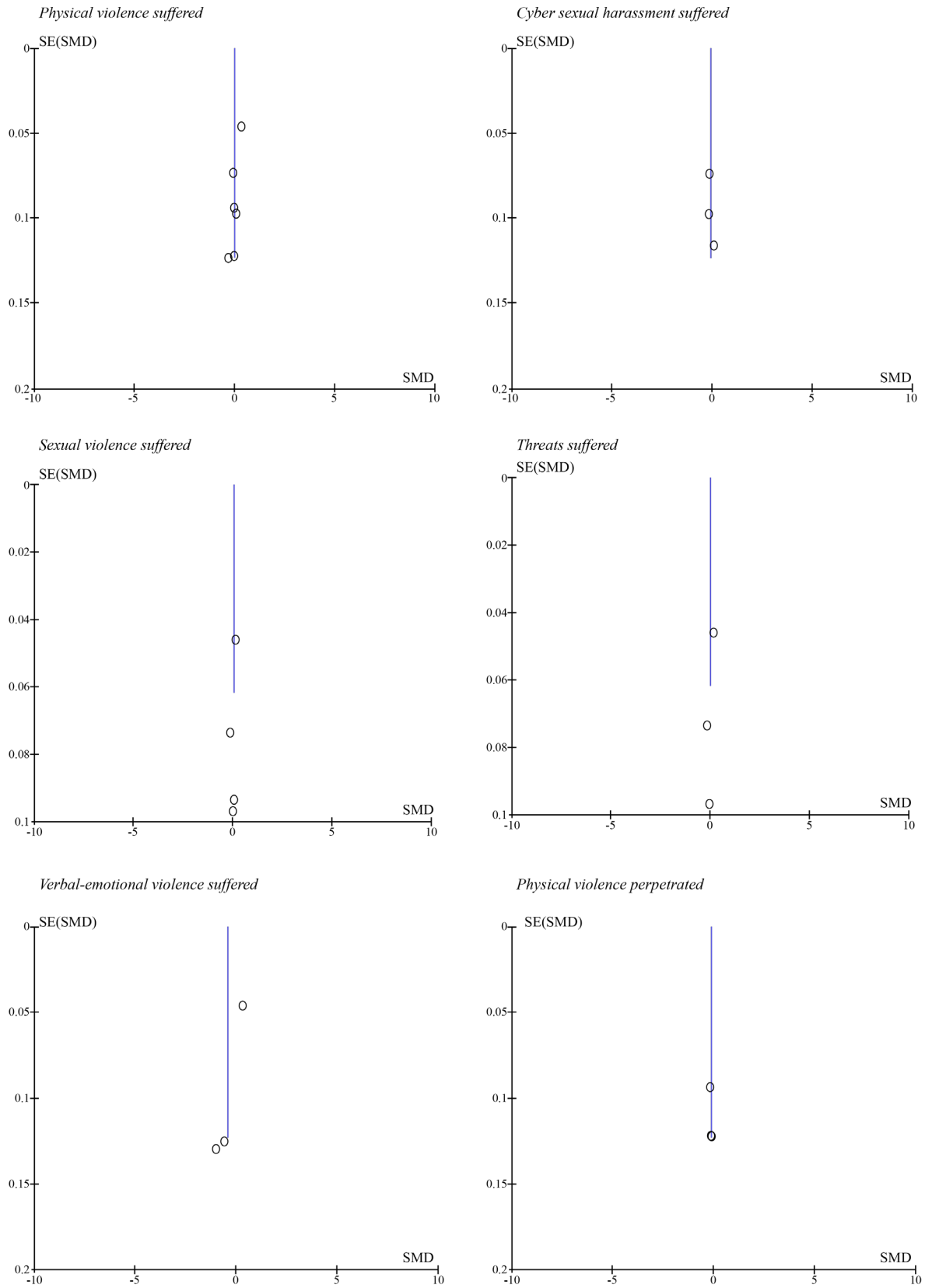
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Annexes

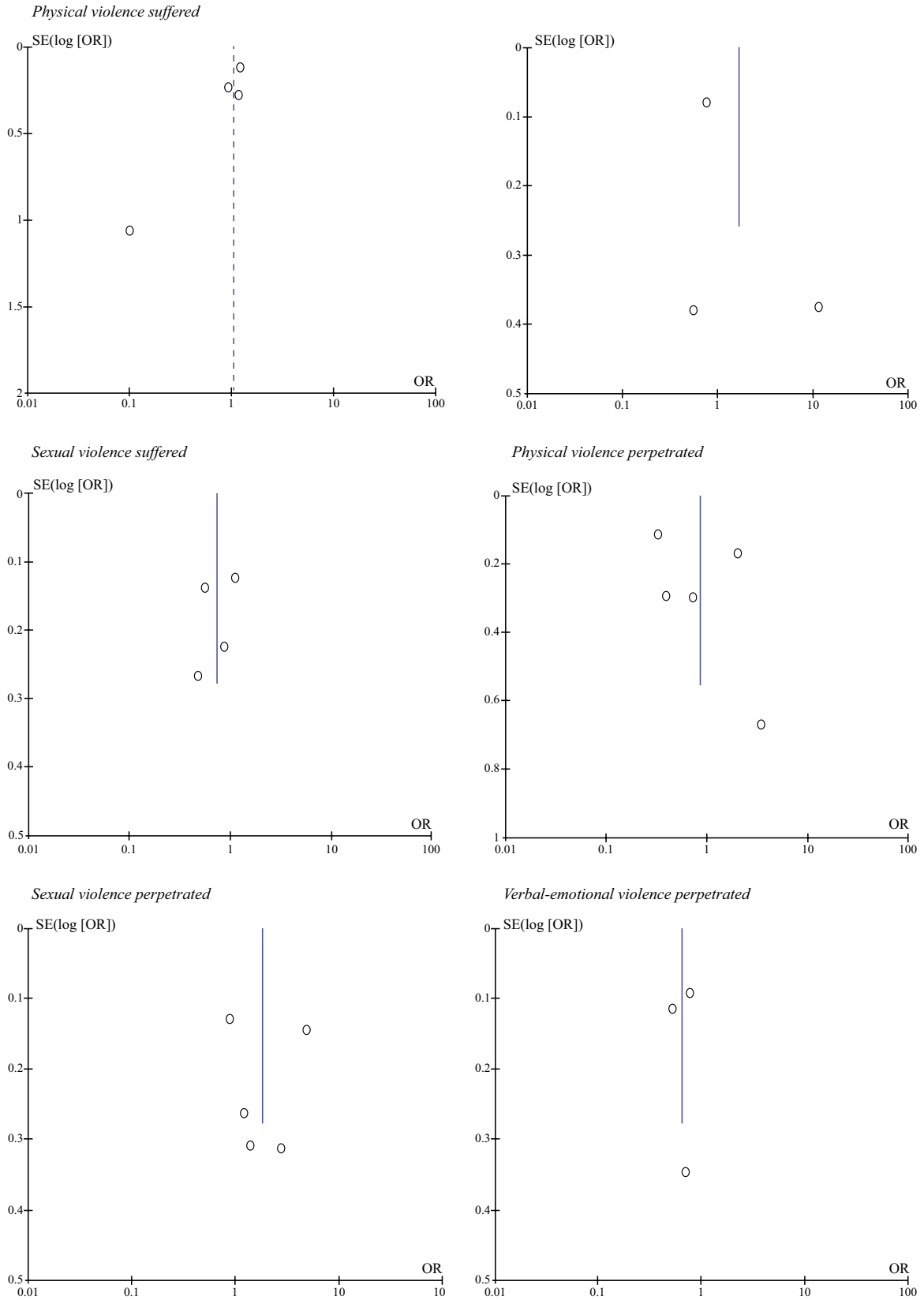
Annex 1.

Search strings

	Web of science	PubMed	SCOPUS	PsycInfo	Gender studies
#1	(gender difference) and (intimate partner violence) N = 666	(dating violence) and (gender difference) N = 194	(dating violence or intimate partner violence) and (adolescent or young adult) N = 291	(prevalence or incidence or epidemiology or frequency or occurrence) and (dating violence) and (adolescent or young adult) N = 147	(dating violence) and (adolescent or young adult) N = 17
#2	(prevalence or incidence or epidemiology or frequency or occurrence) and (dating violence) and (adolescent or young adult) N = 523	(sex offense*) and (interpersonal relations) N = 245	(gender difference) and (intimate partner violence) and (prevalence or incidence) N = 97	(gender difference) and (intimate partner violence or dating violence) N = 197	(intimate partner violence) and (prevalence) N = 56
#3	#1 OR#2 N = 1120	#1 OR#2 N = 268	#1 OR#2 N = 47	#1 OR#2 N = 329	#1OR#2 N = 72



Annexe 2.
 Publication bias analysis: Funnel-plot for each outcome measure. Continuous studies.
 Note. *SMD* = Standard Mean Difference; *SE* = Standard Error



Annexe 3.
 Analysis of publication bias: Funnel-plot for each outcome measure. Categorical studies.
 Note. OR= Odds Ratio; SE= Standard Error