



# Internalization of the Romantic Love Myths as a Risk Factor for Gender Violence: a Systematic Review and Meta-Analysis

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## Abstract

**Introduction** Violence against women is a global health problem, and gender violence is a multifactorial phenomenon generally attributed to the fact of living in a patriarchal culture setting.

**Methods** A systematic review and meta-analysis conducted in the following databases: PubMed, CINAHL, PsycINFO, Scopus, LILACS, MEDES, Web of Science, CUIDEN, ENFISPO, IBECS, Dialnet and Cuidatge. Inclusion criteria: quantitative design, Spanish population, Spanish, English, Portuguese and/or French language, no time restriction and use of the Myths about Love Scale. Data was collected and analysed from July to October 2020. A total of 146 records were identified, of which, after applying the eligibility criteria, 12 studies were included, and 6 met the criteria for the meta-analysis. The descriptive and prevalence analysis was performed by means of StatsDirect. In all the analyses, statistical significance was considered at  $p < 0.05$  and the CIs, at 95%.

**Results** The most accepted myths were those related to love idealization: the *eternal passion*, *marriage*, *omnipotence* and *perfect match* myths. The least accepted myths were those of the *couple*, *jealousy* and *love-maltreatment link*. Men and women accepted the myths in a similar manner, although the former showed more participation in *jealousy* and in *love-maltreatment link*.

**Conclusions** The study contributes a current perspective about the beliefs regarding the love myths that can be a conditioning factor in love relationships and a risk factor for gender violence. The bet is on preventive education and socialization at all levels, as well as on the deconstruction of the concept of romantic love and its myths to foster healthy and egalitarian relationships.

**Keywords** Gender Violence · Romantic love · Myths of Romantic Love · Myths about Love Scale · Meta-analysis

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## Introduction

Violence against women is a global public health problem, as well as a violation of human rights (World Health Organization, 2019). Of the multiple forms of violence against women, the concept of Gender Violence (GV) is defined as any and all actions of physical, sexual, psychological and/or economic violence against women by their partners or ex-partners or by those who were in affective relationships with them, with the objective of establishing a relationship of inequality, control and domination over them (Spanish Government, 2004). According to the World Health Organization, GV is the most common form of violence (30%); 38% of the femicides are perpetrated in this context, and it is estimated that, globally, 1 out of 3 women have experienced physical and/or sexual violence by their intimate partners, with the age group between

15 and 49 years old being the most prevalent (World Health Organization, 2019). In Spain, 29,215 women were victims of GV in 2020, considered as physical or psychological violence (including assaults on sexual freedom, threats, coercion or arbitrary deprivation of liberty) exercised against a woman by the man who is or has been her spouse or is or has been linked to her by a similar relationship of affection even without living together. This number increased by 3.2% in the last 5 years. The rate of victims was 1.4 for every 1000 women aged over 14 years old, and 48.3% of the women were aged between 30 and 44 years old (Instituto Nacional de Estadística, 2019). According to the National Gender-based Violence Observatory, 253 women have died because of GV in the last 5 years, leaving 170 orphan children. In 2020, 150,804 police report regarding GV were registered, and the government's telephone service for information and legal advice on gender-based violence answered 79,201 relevant calls (Delegación del Gobierno contra la Violencia de Género, 2020).

Although GV is a multifactorial phenomenon, that is, there is no single cause or factor triggering it, it is generally attributed to the fact of living in a patriarchal culture setting where the main risk factor is being a woman (Díaz et al., 2018). Common risk factors associated with being a GV aggressor or victim have been identified, such as low schooling level, exposure to maltreatment during childhood, family violence experiences, harmful alcohol consumption, antecedents of violence, having attitudes and rules that accept violence and gender inequalities, mental health problems, conflicts and/or marital dissatisfaction, and communication difficulties in the couple (World Health Organization, 2019). The first signs of maltreatment usually emerge at the beginning of love relationships in the form of restrictive, controlling and psychological abuse behaviours to minimize the woman's autonomy and which increase over time, hindering rupture of the toxic relationship (Giordano et al., 2010).

Among the factors that increase the risk of GV are love and its conception modalities. This is one of the most intense and desirable emotions for human beings, and the ways to express it, understand it and live it are a sociocultural construction (Pascual-Fernández, 2016). In many cases, men and women are socialized in different affective styles linked to the traditional roles associated with their gender and with the stereotypes about femininity and masculinity (Bonilla-Algovia & Rivas-Rivero, 2018). This differential socialization has repercussions on the human life aspects and on the conceptions about love relationships, generating gender inequalities (Ferrer & Bosch, 2013).

According to Sternberg's Triangular Theory of Love (1986), it has three basic components: intimacy, passion and commitment. Intimacy is closeness and the affection bond that involves sharing emotions, feelings and ideas. Passion is the physical and emotional attraction, which includes intense sexual desire. Commitment refers to the decision and effort to foster and maintain the love relationship fulfilling the couple's agreement

and everyday life. The various combinations of these three elements generate eight kinds of love: affection, whim, empty love, romantic love, social love, fatuous love, consummated love and absence of love. Romantic love is defined as intimacy and passion without any commitment to willingness to giving it all without expecting anything and where the actions only benefit the other person (Sternberg, 1986).

Romantic love is a way of love idealization based on power and dependence, which contemplates different rules and mandates for men and women (Karandashev, 2015). The conception of romantic love is frequent in women, generating low self-esteem, submission, unconditional dedication and dependence on the partner; they exchange the real man for the ideal one they dream about and want to feel loved, protected and respected (Bosch et al., 2007). Therefore, in this idealized view of romantic love, women are considered as a symbol of passivity, submission, instability and affectivity, an inferior being who dreams about finding true love and attaining marriage as a proof of love (Palacios-Navarro & Rodríguez-Vidal, 2012; Rodríguez-Castro et al., 2013). On the other hand, men are related to being the super heroes that manage to attain the impossible, rule-breakers and high-resilience survivors (Ferrer & Bosch, 2013). They are considered as a symbol of authority, strength, reason and in the role of seducer, protector, saver, dominator and receiver (Palacios-Navarro & Rodríguez-Vidal, 2012; Rodríguez-Castro et al., 2013).

The characteristics of romantic love promote believing in myths linked to this type of love, that is, beliefs that are socially shared and approved regarding the nature of love and which are usually fictitious, deceitful and difficult to accomplish, culminating in disappointments and frustrations (Pascual-Fernández, 2016). Ten myths of romantic love have been described (Yela-García, 2003): perfect match, couple, exclusivity, fidelity, jealousy, equivalence, omnipotence, free will, marriage and eternal passion. These myths foster discrimination and gender inequalities in a couple, leading to the risk of toxic relationships and increasing the chances of becoming a GV aggressor or victim (Caro-García & Monreal-Gimeno, 2017). In addition, they can exert an influence on the justification and tolerance of violence in love relationships (Bonilla-Algovia et al., 2017), as well as on its invisibilization (Gómez et al., 2014). Accepting the romantic love model and the myths resulting thereof hinders the establishment of healthy relationships, fosters the risk of thinking and living love relationships according to idealized and non-realistic love that can lead to justifying, accepting, normalizing or tolerating clearly abusive and offensive behaviours, as well as situations which, under normal circumstances, would not be acceptable but are allowed in love (Caro-García & Monreal-Gimeno, 2017). Irrational beliefs about GV have been described, both in victims and in aggressors (Bosch et al., 2007). In the victims' role, the romantic love beliefs and myths hinder the women's reaction to put an end to the relationship or to file a police report. In the aggressors' role, it hinders awareness regarding the

harm imposed on the women precluding the possibility of stopping and directing their behaviour towards a healthy and egalitarian relationship (Ferrer & Bosch, 2013; Melgar et al., 2010).

Therefore, it is important to recapitulate on the current scientific evidence available about the romantic love model found in the Spanish culture, as well as the myths associated with it. Deepening on the knowledge about acceptance of the romantic love myths linked to GV can drive the socializing agents (family, school and communication means, among others) to deconstruct the conception of romantic love to eliminate inequalities in love relationships. In addition, the development of tools, strategies and interventions that promote new love models based on equality and respect could be driven by political and health organizations, contributing to reducing the risk of becoming GV victims or aggressors or, if that is not possible, assisting in the identification of cases for diagnosis, treatment and rehabilitation.

The objective of this study is to review the scientific evidence published to the present day in order to disclose the prevalence, in the Spanish general population, of the romantic love myths and to describe the existing relationships between the sociodemographic variables and those of interest and the internalization of the romantic love myths.

## Method

The study design was a systematic review and meta-analysis following the PRISMA (Preferred reporting items for systematic review and meta-analysis) recommendations (Moher et al., 2009).

## Search Sources and Strategy

A search was conducted in the PubMed, CINAHL, PsycINFO, Scopus, LILACS, MEDES, Web of Science, CUIDEN, ENFISPO, IBECS, Dialnet and Cuidatge databases. The search was included in other resources located through the articles or the lists of references of the studies selected or sensitive to the theme. The following search strategy was employed: (“Surveys and Questionnaires” OR Scale) AND Myths AND (Love OR Romantic).

## Eligibility Criteria

Studies with the Spanish general population were included, with no limitation regarding age, gender or other sociodemographic variables. No restrictions were applied on publication date, and original studies submitted to peer review and with quantitative designs were included. Those papers evaluating acceptance of the romantic love myths assessed with the Myths about Love Scale were selected. This scale was designed based on the study by Bosch et al. (2007) with the purpose of valuing the participants’ beliefs about love.

Specifically, the scale assesses the acceptance level of seven romantic love myths, namely: (i) the *perfect match myth* involves the belief that we choose our predestined partner, and that it has been the only or best choice possible; (ii) the *couple myth*, which supposes the belief that the couple, heterosexuality and monogamy are essential, natural and universal; (iii) the *jealousy myth*, which implies considering and accepting jealousy as a sign of love and even as an indispensable requirement of true love; (iv) the *omnipotence myth*, in which it is assumed that love is omnipotent and can overcome any obstacle or adversity; (v) the *marriage myth*, which consists in believing that love must lead to the couple’s stable union through marriage as the maximum expression of true love; (vi) the *eternal passion myth*, which consists in believing that the passionate love of the first months can and must last forever; and (vii) the *love-violence compatibility myth*, which involves accepting and tolerating violent behaviours in the couple (Rodríguez-Castro et al., 2013).

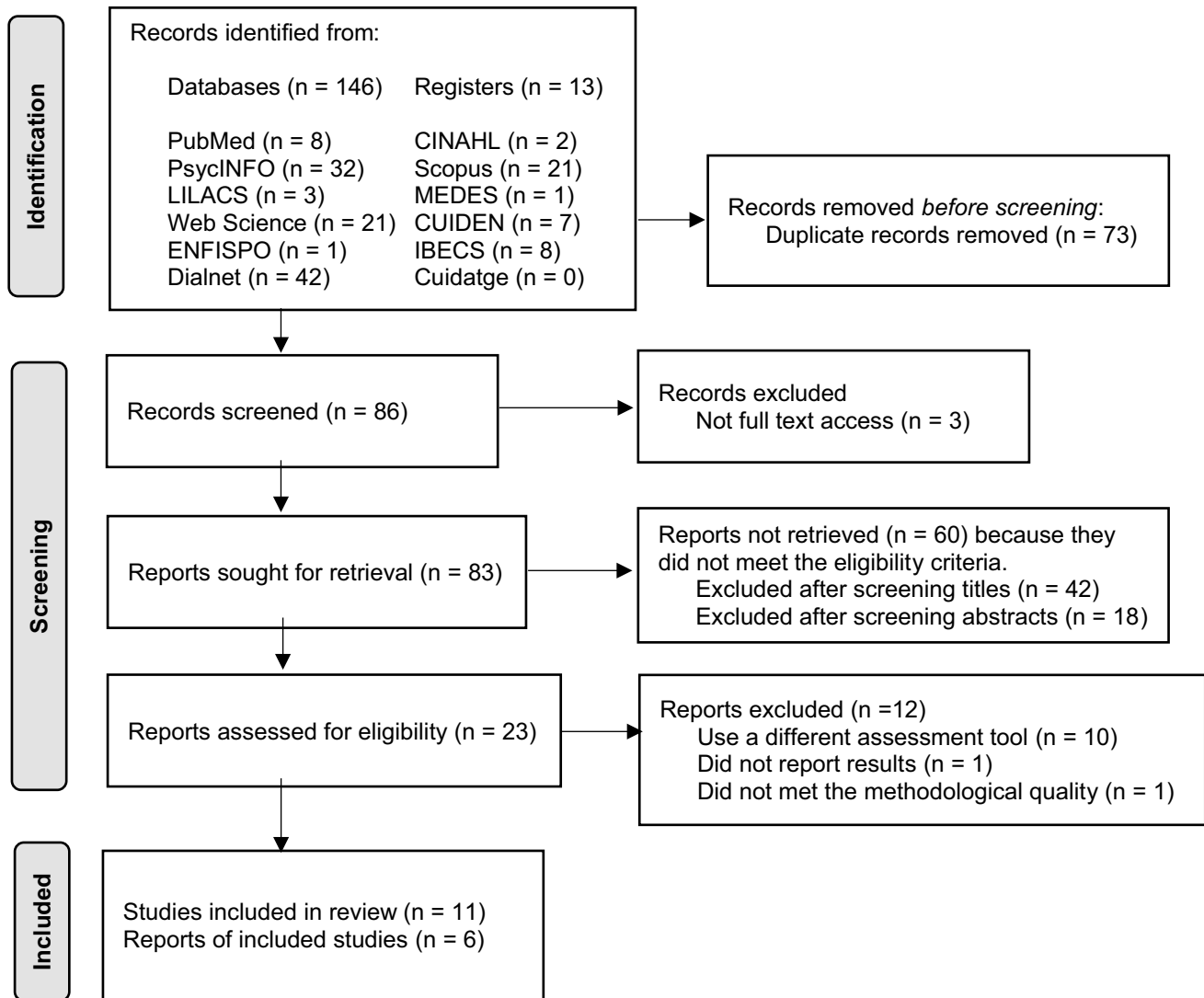
Initially, the scale has 10 items grouped into two factors: *Love idealization* factor (8 items) and *Love-maltreatment link* factor (2 items). The items consist of a description of the myths or of a set phrase in relation to them. The participants assess the agreement level with the assertion set forth in a 5-point Likert-type scale, where 1 is Totally disagree and 5, Totally agree. In other words, the higher the score, the higher the acceptance level of the myth in question will be, except for items 4 and 5, which are inversely scored. The scale’s reliability by Cronbach’s alpha is 0.506 (*Love idealization*: 0.525 and *Love-maltreatment link*: 0.645) (Bosch et al., 2007). A number of reduced versions of the scale with better psychometric properties have been subsequently adapted (Rodríguez-Castro et al., 2013).

## Study Selection

The search was conducted by two independent female researchers on March 21<sup>st</sup>, 2020. Both of them conducted the search in the databases simultaneously. Individually, they examined 159 records, removed 73 duplicates, read the titles and abstracts and, after applying the eligibility criteria, they reached consensus on the 23 records for full-text reading. They independently reviewed these records, and a third researcher was called upon to solve any and all discrepancies. The final sample consisted of 11 studies that were included in the review, of which 6 were also considered for the meta-analysis (Fig. 1).

## Data Extraction

One of the reviewers was in charge of extracting the data by employing an ad hoc data extraction form, data which were later verified by another reviewer. The form gave rise to a summary table that included the main characteristics



**Fig. 1** Flowchart based on PRISMA with the number of reports examined and included in the review and meta-analysis

of the studies: reference, main objective and method of the study, that is, design, sample, variables and data collection instrument of the main variable and statistical analysis. The findings were extracted and conceptually organized meeting the specific objectives. For the meta-analysis, the prevalence rates were directly obtained from each study, and they were presented in tables.

### Methodological Quality and Risk of Bias of Individual Studies

The methodological quality and risk of bias of each study selected for the meta-analysis were evaluated using the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) checklist for the critical reading

of observational studies (Von Elm et al., 2008), in order to assess if the studies included in the review presented adequate and transparent descriptions and communication. This is a checklist for cross-sectional studies containing 22 essential items related to the title, abstract and introduction, as well as to the Methods, Results and Discussion sections, in addition to other relevant sections of the articles. One point was awarded for each item met by the study, and zero points for any unmet item. Therefore, the score obtained for each article could range between 0 and 22 points. The research team considered a score of at least 11 points as acceptable methodological quality, that is, those articles that fulfilled at least 50% of the items. Studies with a score below 11 were excluded. Both reviewers carried out the verification process independently.

## Statistical Analysis and Meta-Analysis

A descriptive analysis of the main characteristics of the studies was performed. The StatsDirect statistical software (version 3.0.0, StatsDirect Ltd, Cheshire, UK) was employed for the meta-analysis. The effects and proportions of the individual studies were evaluated with a 95% confidence interval (CI). The sample heterogeneity test was performed by using Cochran's Q with an error level below 10%, and its value was calculated by means of the inconsistency degree (I<sup>2</sup>) of the studies included in the meta-analysis. In index I<sup>2</sup>, the presence of heterogeneity was considered significant when I<sup>2</sup> > 50% (Huedo-Medina et al., 2006). Due to the heterogeneity across the studies, the meta-analysis random effects model was employed, using the DerSimonian Laird method with a 95% CI, instead of the fixed effects model in the analysis of combined effects (Higgins, 2003). Heterogeneity was represented by means of Forest Plot graphs presenting proportions of individual studies and general prevalence. The proportionality and 95% CIs of the combined studies were presented. Publication bias was assessed with Egger's linear regression test. A *p* value < 0.1 indicates significant bias; even so, it was assessed by means of direct observation of the funnel graph. Prevalence was estimated for each individual myth of the Myths about Love scale. In all the analyses, statistical significance was considered at *p* < 0.05 and the CIs, at 95%.

## Results

### Main Characteristics of the Studies Retrieved

A total of 11 studies were included in the review. The number of publications retrieved is higher than that of single studies because the results in Bosch et al. (2007) and Ferrer-Pérez et al. (2010) come from the same database. The studies were mostly published in 2012 (*n* = 3, 27.3%) and in 2019 (*n* = 3, 27.3%). The global mean of the samples is 652 individuals, with the highest being *n* = 1657 and the lowest, *n* = 121, also highlighting the number of women over men (*n* = 8, 72.7%). All the studies are cross-sectional, descriptive and of the survey type. More than half describe the prevalence in acceptance of the romantic love myths (*n* = 7, 63.6%). The gender variable was contemplated in 100% of the studies, although only half of them relate it to the scale scores. Different versions of the Myths about Love Scale are employed, namely: 7 items (*n* = 5, 45.4%), 10 items (*n* = 4, 45.4%) and 7, 8 or 10 items (*n* = 2, 18.2%). Both the reliability analysis and the confirmatory factor analysis indicate that the 7-item version is the one that presents the best psychometric properties. Table 1 summarizes the main characteristics of the studies included.

In relation to the methodological quality of the studies reviewed, the appraisal of the essential elements that must be described in publications of observational studies based on the STROBE statement is collected in Table 2, with a maximum of 22 points. The research conducted by Marroquí et al. (2014) scored 5 points, so it was excluded from the review.

### Acceptance of the Romantic Love Myths by the Spanish General Population

Regardless of the version employed, either 7- or 10-item, most of the studies reflect that the Spanish population presents higher percentages regarding the belief in the myths from the *Love idealization* factor such as *perfect match*, *eternal passion* and *omnipotence*, whereas they believe less in the *marriage* and *jealousy* myths. Regarding the *couple* myth, there is disagreement among several articles, as some conclude that the population believes in this myth, whereas, in others, lower acceptance percentages are obtained. Most of the population does not seem to believe in the *Love-maltreatment link* factor. Table 3 shows the prevalence of the myths, that is, the number of people that, in a given study, agree or totally agree with the myths to which they allude, except for those inversely scored (items 4 and 5), where totally disagreeing or disagreeing corresponds to accepting the myth. These data were employed in the meta-analysis.

### Relationship Between the Romantic Love Myths and Other Sociodemographic Variables or of Interest

Based on the gender variable, higher levels of beliefs were observed among the women in the first factor, *Love idealization*, and among the men, in the second factor, *Love-maltreatment link*. The women stated believing more in the *perfect match*, *eternal passion* and *couple myths*, whereas the men believed more in the *marriage*, *jealousy* and *love-maltreatment link* myths (Bosch et al., 2007).

A relationship was identified between the belief in the love myths and age (*r* = −0.17; *p* < 0.001) (Borrajó et al., 2015). In addition, differences were described by age group, although in all ages, the *Love idealization* factor was more accepted than the *Love-maltreatment link* factor. The most accepted myths were *eternal passion*, *omnipotence*, *perfect match* and *marriage*, whereas the least accepted were *couple*, *jealousy* and *love-maltreatment link* (Bosch et al., 2007; Gómez-Perea & Viejo, 2020).

Regarding the schooling level, the individuals with fewer years of study accepted more the *omnipotence* and *couple* myths, and those with higher schooling levels were more in disagreement with all of the romantic love myths (Cerro & Vives, 2019).



**Table 1** Main characteristics of the studies included in the systematic review

Reference	Aim	Methods: (a) design, (b) sample, (c) variables (d) assessing tools, (e) data analysis	Main findings
(Bonilla-Algovia & Rivas-Rivero, 2018)	To evaluate the beliefs in myths of romantic love in a sample of teaching students	(a) Quantitative, descriptive, transversal (b) $N = 433$ students (76.7% women 23.3% men) (c) Gender and myths about love (d) Myths about Love Scale (7 items) (e) Descriptive, Student's $t$ , skewness and kurtosis	The most accepted myths were eternal passion, omnipotence and perfect match Statistically significant differences were identified between men and women in the acceptance of myths of romantic love
(Borrajó et al., 2015)	To analyse the relationship between the beliefs that justify violence and the myths of love in two forms of online dating abuse	(a) Quantitative, descriptive, cross-sectional (b) $N = 656$ young people (79.5% women 20.5% men) (c) Age, sex, control, direct aggression, psychological violence, justification for online dating abuse and myths about love (d) Myths about Love Scale (7 items) (e) Descriptive, Pearson's correlation and multiple regression	Myths of romantic love were related to a higher probability of perpetration of online control. This relationship was stronger among the younger ones
(Bosch et al., 2007)	Evaluate acceptance of the romantic love model and associated myths; and its relationship with gender violence	(a) Quantitative, descriptive, prevalence, cross-sectional (b) $N = 1351$ participants (51.2% women 48.8% men) (c) Gender, age, attitudes towards violence against women in the couple, attitudes and myths about love (d) Myths about Love Scale (7–8–10 items) (e) Descriptive, Chi-square, Student's $t$ , Welch's test, Pearson's correlation, skewness and kurtosis	Women were more in agreement with the myths of the perfect match, eternal passion, omnipotence and couple Men showed a higher level of agreement with the myths of jealousy, marriage and with the love-maltreatment link A positive and significant relationship between age and acceptance of many of these myths was identified
(Cerro & Vives, 2019)	Analyse the prevalence of myths of romantic love in youth	(a) Quantitative, descriptive, prevalence, cross-sectional (b) $N = 168$ young people (50% women 50% men) (c) Sex, studies completed or in progress, educational branch and myths about love (d) Myths about Love Scale (10 items) (e) Descriptive of prevalence	The myths of romantic love that obtained widest acceptance were the better perfect match, eternal passion and omnipotence The marriage myth showed a significant link to gender. It was identified a significant link between jealousy myth and omnipotence and the courses being taken
(Ferrer-Pérez et al., 2010)	Analyse the acceptance of romantic myths among the Spanish population and its relation to sociodemographic variables	(a) Quantitative, descriptive, prevalence, cross-sectional (b) $N = 1351$ participants (51.2% women 48.8% men) (c) Age, sex, educational level, cohabitation, satisfaction with relationships, current relationship, and myths about love (d) Myths about Love Scale (7 items) (e) Descriptive, Pearson's correlational and Chi-square	The results revealed that most of the participants agreed with the myths of perfect match, eternal passion, omnipotence and marriage and disagreed with the myth of couple A relationship was observed between the acceptance of these myths and the sociodemographic and relationship variables considered, since the participants tended to accept to a greater extent those myths that coincide with and/or justify their own relationship situation
(Gómez Perea & Viejo, 2020)	Analyse the relationship between myths of love and the quality of first relationships and their involvement in violence	(a) Quantitative, descriptive, cross-sectional (b) $N = 583$ (49.6% women 50.4% men) (c) Sex, age, romantic relationships, myths about love and involvement in violence (d) Myths about Love Scale (7 items) (e) Descriptive, Student's $t$ , ANOVA and cluster analysis	Significant differences were found in relation to the sex and age of the participants The girls were more in agreement with the myths referring to the duration of the passion of the first moments and to blind love, while the boys, with the myths referring to jealousy as proof of love and the omnipotence of true love The degree of acceptance of the myths increased with the age of the adolescents

**Table 1** (continued)

Reference	Aim	Methods: (a) design, (b) sample, (c) variables (d) assessing tools, (e) data analysis	Main findings
(Juárez, 2019)	Analyse the sexting phenomenon in adults and its relationship with the myths of love	(a) Quantitative, descriptive, prevalence, cross-sectional (b) <i>N</i> = 236 participants (80.5% women 19.5% men) (c) Sex, coercion experiences and sexting (d) Myths about Love Scale (10 items) (e) Descriptive, Student's <i>t</i> and Chi-square	Results indicated a relationship between the normalization of the experience of sexual coercion and their degree of acceptance to the romantic love myths, age and sex of the participants
(Larrañaga et al., 2012)	Analyse the relationship between machismo and romantic myths with sexual attitudes	(a) Quantitative, descriptive, prevalence, cross-sectional (b) <i>N</i> = 262 university student (78% women 22% men) (c) Sex, sexual attitude and myths about love (d) Myths about Love Scale (10 items) (e) Descriptive, correlational, inferential and Chi-square	The results indicated that sexual attitudes are linked to machismo and romantic love myths, with no significant difference according to gender Most university students believe in eternal passion, omnipotence and the myth of the perfect match
(Rodríguez-Castro et al., 2013)	Validate the Scale of Myths towards Love in adolescents and analyse the differences based on gender	(a) Quantitative, descriptive, cross-sectional (b) <i>N</i> = 800 students (52.1% women 47.9% men) (c) Gender, sexism and myths about love (d) Myths about Love Scale (7–8–10 items) (e) Descriptive, confirmatory factor analysis and Pearson correlation	The girls presented a more idealized vision of love that was related to benevolent sexism, while the boys who presented their greatest acceptance of the myth of the love-abuse link were the most hostile sexists
(Valledor, 2012)	Analyse the relationship between romantic myths and the risk of gender violence in intimate relationships	(a) Quantitative, descriptive, prevalence, cross-sectional (b) <i>N</i> = 121 students (73.6% women 26.4% men) (c) Myths about love and non-physical violence (d) Myths about Love Scale (10 items) (e) Descriptive, correlational, variance and reliability	The results indicated the presence of the romantic love myths of eternal passion, omnipotence and marriage, as well as the love styles Eros and Agape
(Villora et al., 2019)	Analyse the relationship between the chronicity of online dating abuse and the myths of romantic love	(a) Quantitative, descriptive, cross-sectional (b) <i>N</i> = 1657 university students (62% women 38% men) (c) Age, sex, online dating abuse, mobile phone abuse, acceptance of dating violence and myths about love (d) Myths about Love Scale (7 items) (e) Descriptive, multiple regression, Student's <i>t</i> and Welch's test	A significant relationship was identified between online dating abuse with myths of romantic love, and acceptance of violence

**Table 2** Methodological quality assessment according to STROBE guidelines

Item	(Bonilla-Algovia & Rivas-Rivero, 2018)	(Borrajó et al., 2015)	(Bosch et al., 2007)	(Cerro and Vives, 2019)	(Ferrer-Pérez et al., 2010)	(Gómez Perea & Viejo, 2020)	(Juárez, 2019)	(Larrañaga et al., 2012)	(Marroquí & Cervera, 2014)	(Rodríguez-Castro et al., 2013)	(Valledor, 2012)	(Villora et al., 2019)
1	<b>Title and abstract</b>											
	(a) Study's design			X		X				X	X	X
	(b) Informative and balanced summary	X	X	X		X	X	X	X	X	X	X
2	<b>Introduction</b>											
	Background and rationale	X	X	X	X	X	X	X	X	X	X	X
3	<b>Introduction</b>											
	Specific objectives, hypotheses	X	X	X	X	X	X	X	X	X	X	X
4	<b>Methods</b>											
	Study design			X		X	X			X		
5	<b>Methods</b>											
	Setting, locations, relevant dates	X	X	X	X	X		X		X		X
6	<b>Methods</b>											
	Eligibility criteria, sources and methods of selection of participants	X	X	X	X	X	X			X	X	X
7	<b>Methods</b>											
	Variables	X	X	X	X		X	X	X	X	X	X
8	<b>Methods</b>											
	Data sources/measurement		X	X	X	X	X			X	X	X
9	<b>Methods</b>											
	Efforts to address potential sources of bias			X								
10	<b>Methods</b>											
	Study size			X	X							X
11	<b>Methods</b>											
	Quantitative variables analysis	X	X	X	X	X	X	X	X	X	X	X



Table 2 (continued)

Item	(Bonilla-Algovia & Rivas-Rivero, 2018)	(Borrajó et al., 2015)	(Bosch et al., 2007)	(Cerro and Vives, 2019)	(Ferrer-Pérez et al., 2010)	(Gómez Perea & Viejo, 2020)	(Juárez, 2019)	(Larrañaga et al., 2012)	(Marroquí & Cervera, 2014)	(Rodríguez-Castro et al., 2013)	(Valledor, 2012)	(Villora et al., 2019)
12	<b>Statistical methods</b>											
(a) Control for confounding	X	X	X								X	
(b) Examine subgroups and interactions	X		X	X	X	X	X					
(c) Missing data			X									X
(d) Analytical methods (sample strategy)	X		X	X	X							
(e) Sensitivity analyses	X		X	X	X					X		
13	<b>Results. Participants</b>											
(a) Numbers of individuals at each stage of study	X	X	X	X	X	X	X			X	X	X
(b) Reasons for non-participation		X	X		X							
(c) Flow diagram			X									
14	<b>Results. Descriptive data</b>											
(a) Characteristics of study participants, exposures and potential confounders	X	X	X	X	X	X	X	X		X	X	X
(b) Participants with missing data for each variable	X	X	X	X	X		X			X	X	
15	<b>Results</b>											
Numbers of outcome events or summary measures	X	X	X	X	X	X	X	X	X		X	X
16	<b>Main results</b>											
(a) Unadjusted estimates and confounder-adjusted	X	X	X	X	X	X		X		X		X

Table 2 (continued)

Item	(Bonilla-Algovia & Rivas-Rivero, 2018)	(Borrajó et al., 2015)	(Bosch et al., 2007)	(Cerro and Vives, 2019)	(Ferrer-Pérez et al., 2010)	(Gómez Perea & Viejo, 2020)	(Juárez, 2019)	(Larrañaga et al., 2012)	(Marroquí & Cervera, 2014)	(Rodríguez-Castro et al., 2013)	(Valledor, 2012)	(Villora et al., 2019)
(b) Category boundaries when continuous variables	X	X	X		X							X
(c) Estimates of relative risk and absolute risk		X	X	X	X							
17 <i>Other analyses</i>	X	X	X	X						X		X
18 <i>Discussion</i>												
Summarize key results	X	X	X	X	X	X	X	X	X	X	X	X
19 <i>Discussion</i>												
Limitations of the study, potential bias		X	X	X		X	X	X				X
20 <i>Discussion</i>												
Overall interpretation of results	X	X	X	X	X	X	X	X		X	X	X
21 <i>Discussion</i>												
Generalizability of the results	X	X	X	X	X	X		X		X		X
22 <i>Other information</i>												
Funding		X			X					X		
<b>Total score</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>5</b>	<b>18</b>	<b>12</b>	<b>19</b>

**Table 3** Descriptive analysis of the myths that make up the Myths about Love Scale. Prevalence, mean and standard deviation of accepted myths

Item	Myth	(Bonilla-Algovia & Rivas-Rivero, 2015a) 2018)	(Borrajó et al., 2015a) 2018)	(Bosch et al., 2007) 2007)	(Cerro & Vives, 2019) 2019)	(Gómez Perea & Viejo, 2020a) 2020a)	(Juárez, 2019a) 2019a)	(Larrañaga et al., 2012) 2012)	(Marroquí & Cervera, 2014) 2014)	(Rodríguez-Castro et al., 2013) 2013)	(Valledor, 2012a) 2012a)
1	Perfect match myth	<i>n</i>	711	69	43	223	99	43			
		<i>M</i>	3.31	3.28		3.17		3.43			3.09
		<i>SD</i>	1.15	1.44				1.28			1.16
2	Eternal passion myth	<i>n</i>	978	110	111	229		102			
		<i>M</i>	3.85	3.97		4.01		4.12			4.14
		<i>SD</i>	1.06	1.29				1.07			0.89
3	Omnipotency myth	<i>n</i>	820	82	86	224	45	67			
		<i>M</i>	3.52	3.48		3.4		3.62			3.50
		<i>SD</i>	1.21	1.41				1.27			1.07
4	Marriage myth	<i>n</i>	963	104	190	160		89			
		<i>M</i>	1.95					1.97			1.97
		<i>SD</i>	1.25					1.02			1.02
5	Couple myth	<i>n</i>	145	5	8	79	132	14			
		<i>M</i>	3.85					3.96			3.96
		<i>SD</i>	1.28					1.08			1.08
6	Jealousy myth	<i>n</i>	270	14	6	58	76	29			
		<i>M</i>	1.66			1.97		2.86			2.53
		<i>SD</i>	0.91					1.32			1.17
7	Marriage myth	<i>n</i>	451	9	12	160		13			
		<i>M</i>	2.57					2.14			2.14
		<i>SD</i>	1.51					1.06			1.06
10	Omnipotency myth	<i>n</i>	987	81	65	224	112	70			
		<i>M</i>	3.32			3.39		3.92			3.55
		<i>SD</i>	1.23					1.16			1.08
<b>Factor 1 Love idealization</b>		<i>n</i>	665					53			
		<i>M</i>	3.13	2.33				3.13			3.13
		<i>SD</i>	0.70	0.51				1.28			1.28
8	Love-maltreatment link	<i>n</i>	72	9	1		1	7			
		<i>M</i>	1.34			1.21		1.47			1.51
		<i>SD</i>	0.80					0.99			0.91

Table 3 (continued)

Item	Myth		(Bonilla-Algovia & Rivas-Rivero, 2018)	(Borrajó et al., 2015a)	(Bosch et al., 2007)	(Cerro & Vives, 2019)	(Gómez Perea & Viejo, 2020a)	(Juárez, 2019a)	(Larrañaga et al., 2012)	(Marroquí & Cervera, 2014)	(Rodríguez-Castro et al., 2013)	(Valledor, 2012a)
9	Love-maltreatment link	<i>n</i>			89	1		1		8		4
		<i>M</i>	1.32		1.38		1.12			1.34		1.36
		<i>SD</i>	0.82		0.87					0.86		0.76
Factor 2	Love-maltreatment link	<i>n</i>			40							5
		<i>M</i>	1.33	2.33	1.34							1.43
		<i>SD</i>	0.71	0.51	0.72							0.85
Sample ( <i>N</i> )			433	704	1351	168	583	236	262	153	800	121

Having a partner or not, number of partners in life, having lived or not with them and satisfaction were also variables correlated to the romantic love myths. Consequently, even with a small effect size, there are significant differences: those who have a partner agreed more with the *marriage* and *couple* myths than those without a partner, who accepted more the *perfect match*, *eternal passion* and *omnipotence* myths, rejecting *marriage* and *couple*. When they have lived with some of their partners, the individuals who had one co-living relationship agreed more with the myths than those who had at least 2 co-living experiences, who are in disagreement. Finally, regarding satisfaction in love relationships, the individuals with high satisfaction levels were more in agreement with these myths than those who reported low levels: *perfect match*, *eternal passion*, *omnipotence*, *marriage* and *couple* myths.

Another of the variables related to the love myths was the love styles. The *Love-maltreatment* factor was significantly associated with the *Ludus* love style (low emotional involvement, no stable or lasting relationships are sought), whereas the *Love idealization* factor was associated with the other love styles. Positive correlations were established between the *Love idealization* factor and the *Maniac* love style (obsessive love, with significant dependence, jealousy and possessiveness) and the need that the partner's feelings or love are constantly shown, although only in women and in people over 65 years old. Accepting the *eternal passion* and *marriage* myths tended to reinforce and foster *Eros* (passionate love with intimacy and physical attraction), and accepting *omnipotence* is related to *Agape* (more altruist love and with absolute dedication to the partner) (Bosch et al., 2007; Rodríguez-Castro et al., 2013; Valledor, 2012).

Benevolent sexism was related to the *Love idealization* factor ( $r=0.41$ ;  $p<0.01$ ) and hostile sexism, to the *Love-maltreatment link* factor ( $r=0.19$ ;  $p<0.01$ ) (Rodríguez-Castro et al., 2013). Regarding the use of contraceptive methods, young men and women who advocated love idealization were more opposed to using them in their relationships (Larrañaga et al., 2012).

Acceptance of the romantic love myths was related to control ( $r=0.24$ ;  $p<0.001$ ), direct aggression ( $r=0.08$ ;  $p<0.05$ ), psychological violence ( $r=-0.18$ ;  $p<0.001$ ) and with justifying control ( $r=-0.25$ ;  $p<0.001$ ), both online and via cell phones (Borrajó et al., 2015). The study by Villora et al. (2019) also related the myths to direct victimization, control victimization, direct aggression and control aggression. Finally, the study by Juárez (2019) explained that certain degree of agreement and acceptance regarding the love myths predispose to suffering certain types of violence and coercive experiences, exerting an influence on justification when perpetrating or experiencing it.

## Results of the Prevalence Meta-Analysis

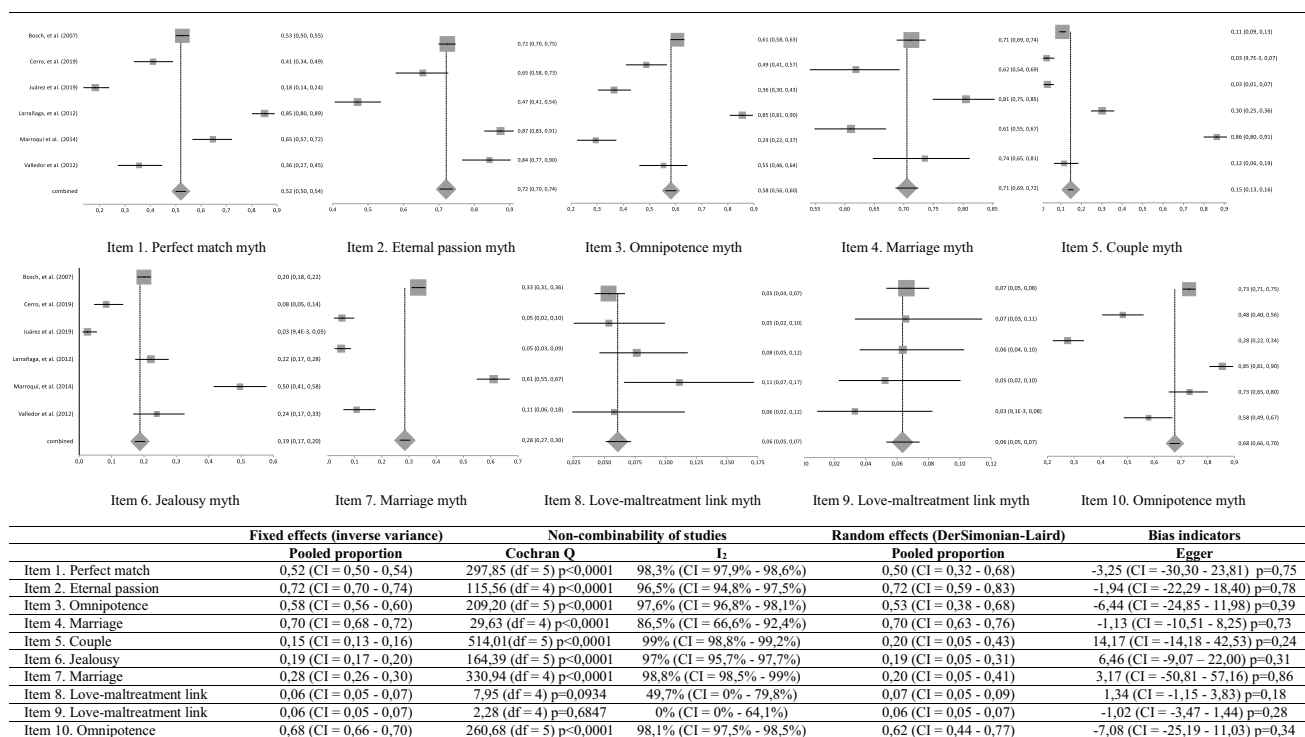
The prevalence data of the romantic love myths are retrieved from 6 studies with combined sample sizes of 2029, 2138 or 2291, according to the items from the Myths about Love Scale. Among these studies, the prevalence of accepting the romantic love myths ranged between 6.1% and 72% with a 95% CI both in the individual and global calculations. The heterogeneity test showed a significant Cochran's  $Q$  value with  $p < 0.001$  for all the items in the first factor of the scale, except for items 8 ( $Q = 7.95$ ; DoF = 4;  $p = 0.093$ ) and 9 ( $Q = 2.27$ ; DoF = 4;  $p = 0.684$ ), which link love and maltreatment and whose value was not significant. This data was confirmed with  $I^2$ , which was above 50% for the first factor items and below 50% for items 8 and 9. This corroborated heterogeneity of the former in comparison to that of the latter. The result of Egger's test was not significant for each of the items with  $p$  values  $> 0.1$ , which indicates absence of publication bias. Direct observation of the funnel graphs also allowed seeing this result. Figure 2 shows the Forest Plot graphs and the statistical results of the tests applied to each of the items from the Myths about Love Scale. The high estimated prevalence values of the *eternal passion* (72%; CI(95%) = 70.1–73.9;  $Q = 115$ ; DoF = 4;  $p < 0.0001$ ;  $I^2 = 96.5\%$ ), *marriage* (70.5%; CI(95%) = 68.6–72.4;  $Q = 29$ ; DoF = 4;  $p < 0.0001$ ;  $I^2 = 86.5\%$ ) and *omnipotence* (67.7%; CI(95%) = 65.7–69.6;  $Q = 260$ ; DoF = 5,  $p < 0.0001$ ;  $I^2 = 98.1\%$ ) myths stand out.

## Discussion

This study has recapitulated the scientific evidence published to the present day in order to disclose the prevalence of the romantic love myths in the Spanish general population, assessed by means of the Myths about Love Scale. The statistical prevalence analysis of the studies included in the meta-analysis has corroborated that the most accepted myths are those contained in the *Love idealization* factor, namely: *eternal passion* (72%), *marriage* (70.5%), *omnipotence* (67.7%) and *perfect match* (52%). The least accepted myths belong to the *Love-maltreatment link* (6.3%), in addition to the *couple* (14.8%) and *jealousy* (18.7%) myths.

Believing or participating in the love myths is related to the following variables: gender, age, schooling level, specialty studied, having a partner or not, number of partners and living with them or not, satisfaction with the partner, love styles, ambivalent sexism, use of contraceptive methods and abuse via cell phones or online media during courtship.

These results are consistent with national and international studies that point to similar results with high prevalence in acceptance of the myths. At the national level, qualitative studies exploring the topicality of the romantic love discourses among young individuals have been published. The research by Blanco Ruiz (2014) pointed out that most of the boys and girls agree with the *perfect match* (60% and 68% respectively), *eternal passion* (86% and 82% respectively), *omnipotence* (55% and 63%, respectively) and



**Fig. 2** Forest Plot graphs and statistical results of the Myths about Love Scale



*jealousy* myths. The phrase *whoever loves you will make you cry* is more accepted among boys (41%) than among girls (35%). When it was asked if love can eventually justify violent or controlling situations towards the partner, the speeches are very favourable to freedom, which is inconsistent with the controlling attitudes identified in the social networks. The study by Caro Garcia and Monreal-Gimeno (2017) on the love styles reported that, in girls, passion prevails in conjunction with altruism and sacrifice, whereas boys enjoy temporary relationships and prioritize their future needs. They offer total dedication to their partners and the men demand so. Although the perceptions about love relationships are similar, the girls expressed a more romantic view of love.

Likewise, Palacios et al. (2011) described certain internalization of the romantic love myths by the Spanish youth. Fifty-four percent believe in omnipotence, 81% of the girls and 68.6% of the boys accept that true love overcomes everything, 68.5% consider themselves as *the half of something* and seek someone to close that circle, 63.5% of the boys and 53.9% of the girls consider love as the cornerstone of human existence, and the belief that jealousy is a proof of love is very high (61.2% of the boys and 41.7% of the girls); in addition, 75% of the girls and almost 70% of the boys accept the presence of violent behaviours in the couples as a proof of love. In this line, the study by Carbonell and Mestre (2018) concluded that the boys internalized more the romantic love myths than the girls, with omnipotent love, love as possession, total dedication and absence of intimacy in the love relationships being the most accepted. The study by Bisquert-Bover et al. (2019) also described a greater proportion of men who assume as valid the romantic myths when compared to the women, with no differences in relation to having a partner or not, nor conditioned by age, except for the belief that true love is predestined, which is more prevalent in young individuals aged from 15 to 18 years old.

At the international level, in an adolescent collective from the Mexican culture, it has been identified that men show more acceptance regarding the myths around love idealization and the love-maltreatment link, and that they are more adherent to the traditional gender roles, contributing to women's inequality. They are attributed an abnegation and submission role before men's superiority in the family system and in love relationships (Nava-Reyes et al., 2018). In the Colombian population (Bonilla-Algovia & Rivas-Rivero, 2019), men have expressed greater adherence to the beliefs related to the traditional role and to violence (blaming women, minimizing violence, acquittal of the aggressor, etc.). *Love idealization* was more accepted than *Love-maltreatment link*; no significant differences are observed by age/gender in idealization, as opposed to *love-maltreatment link* and in *jealousy*, where men obtain higher mean scores than women. Instead, women are more in agreement with *perfect match* and with *omnipotence*, although without

statistically significant difference regarding men. The internalization of the *Love-maltreatment link* may be related to having been exposed to situations of GV in childhood, since the evidence reflects that the sons or daughters of families with gender-based violence have a greater risk of being victims of GV or perpetrating violence in adolescence and adulthood (Bair-Merritt et al., 2013).

Internalization of the romantic love myths can increase the risk and vulnerability in the face of extremely negative situations such as frustration, emotional instability at the individual and couple level, difficulties in the resolution of problems and conflicts, and excessive demand and tolerance levels (Yela-García, 2003). Internalization of the romantic love myths has previously been linked to gender violence. The findings of Lelaurain et al. (2021) illustrated the relationship between the ideology of romantic love and the legitimization of intimate partner violence, as the more participants adhered to romantic love, the more they blamed the victim and exonerated the perpetrator. Romantic love can mask behaviours that are signs of domestic violence. In the study of Power et al. (2006) women revealed that the ideal of romantic love underpinned their desires to establish and invest in the relationship despite the presence of cues for intimate partner violence. The achievement of romantic goals has been described as an imperative to ensure social respect, value and credibility as women. Thus, romantic desires and fear of breakup force women to cling to their relationships even while acknowledging the sexual transgressions of their partners (McLaren, 2016).

According to Palacios et al. (2011): The *couple* myth can lead the person to consider the other as the centre and reference of their own existence, without whom happiness is not possible, therefore rejecting personal fulfilment models. The "omnipotence" myth can generate difficulties if is employed as an excuse not to modify certain behaviours or abusive attitudes in the couple. The *perfect match* myth has direct consequences such as dependence and the need to tolerate, make sacrifices or suffering whatever it takes so as not to lose that single true love. The *jealousy* myth is usually employed to justify selfish, unfair, repressive and sometimes violent behaviours in the couples. Although it presents a high rejection percentage, those who believe in this last myth can eventually become victims or perpetrators of power, control and domination strategies, facilitating unequal relationships that can lead to abusive relationships and to GV (Bisquert-Bover et al., 2019). Higher prevalence of the myths has been revealed among young individuals (Rodríguez-Castro & Alonso-Ruido, 2015); therefore, they should be a collective considered as at risk in the prevention programs, as well as in the educational centres and in those devoted to treating the aggressors (Valledor, 2012).

In summary, a stereotyped pattern of love can be seen that is accepted by men and women who believe in

idealized, distorted, erroneous and mythicized love. This can be explained by the differential socialization of the concept of love and the love relationships (Pascual-Fernández, 2016) that perpetuate power and unequal relationships based on patriarchal models that can lead to GV (Blanco-Ruiz, 2014; Bonilla-Algovia et al., 2017; Cerro & Vives, 2019). The results obtained in this review indicating that men obtain significantly higher scores than women in the *Love-maltreatment link* and that women do so in the *Love idealization* factor corroborate this unequal pattern. Based on the results of previous reviews, women believe in romantic, idyllic and perfect love that could conquer anything and change their partner's behaviour into the ideal they fell in love with. They believe in power, control and jealousy as protective factors for love; they firmly maintain a commitment to their partner and consider responsibility, guilt and fear as factors that perpetuate relationships (Pocock et al., 2020). Other studies also show that men usually present thoughts of inferiority regarding women, legitimizing perpetration of violence to solve conflicts and blaming women for what happens to them because they consent to it or ask for it in the name of love (Bosch-Fiol & Ferrer-Pérez, 2012).

Findings from this review could also assist healthcare professionals in identifying vulnerable populations and initiating preventive interventions. The barriers that hinder the recognition of victims in healthcare settings have already been described, such as prejudices and errors of appreciation that lead to silencing the problem, lack of experience and training in terms of GV or scarcity of resources (Bradbury-Jones et al., 2014). The lack of privacy and intimacy, communication or language and cultural barriers, together with the fact that the victim usually goes together with her aggressor to the health service, have also been pointed out as difficulties in accessing the victims (Wilson et al., 2016).

Despite the increase in the implementation of egalitarian education at all instructional levels, tolerance and justification of GV remain and persist. A possible reason for that is the erroneous conception of love and the internalization of its associated myths, as well as inexperience in courtship relationships and lack of critical ability to distinguish a proof of love from control (Muñiz-Rivas et al., 2015). This is added to the effect of the Information and Communication Technologies as socializing agents on acceptance of the romantic love myths (Cardona-Segura, 2019). Women who are experts in GV and those who have experienced it coincide in stating that the romantic love myths are a tool to normalize behaviours that can be framed into the GV phenomenon in adulthood since, even if there is no direct correlation to maltreatment, it can be camouflaged in the name of love (Bajo-Pérez, 2020). Consequently, it is necessary to (i) keep educating on equality, independence, self-esteem and freedom; (ii) deconstruct the gender roles and the concept of love which diminish women in front of men; and (iii) educate since childhood regarding affective

and healthy relationship models, while sensitizing society and fostering egalitarian affective models distant from maltreatment (Bajo-Pérez, 2020).

## Limitations

The studies included in the review present limitations. In the first place, the cross-sectional design does not allow analysing the evolution or the implications of the beliefs regarding the love myths over time. As a proposal, it is necessary to conduct longitudinal studies that allow examining the causal relationship between the variables presented. Secondly, despite having large samples, they are not always representative of the population; therefore, caution must be used when generalizing the results. In the third place, the fact that most of the studies included more female participants might have biased the results, with the consequent need to expand the male samples to attain more representativeness. The fourth limitation is that the information collected through questionnaires and surveys may not actually reflect the existing beliefs due to the possibility that socially expected answers have been given; therefore, response bias must be assumed. In the fifth place, the Myths about Love scale's reliability is low for the 8- and 10-item versions, which may be exerting an influence on the underestimation of the prevalence of the love myths. On the other hand, the 7-item two-factor model is the one with the most suitable psychometric properties. In the future, the 7-item version should be used to improve reliability of the other versions. Despite that, the significant similarity in terms of characteristics and results has allowed meeting the study objectives and conducting the meta-analysis. The selection, publication and researcher biases associated to the review and meta-analysis itself are also acknowledged. Despite these limitations, the results allow advancing in the research line on GV and contribute significant insights regarding the beliefs in relation to the romantic love myths.

## Practical and Clinical Implication and Prospect of the Results

These results are an invitation to continuing the task of deconstructing the concept of love and its myths, from early ages. The study encourages educating a future society free from the traditional love topics that perpetuate power, inequality, dependence on the other and violent or toxic relationships. This deconstruction and resocialization of the concept of love, of the desirable affective models and of the male and female models in love relationships would contribute to the prevention of GV (Flecha-Fernández-Sanmamed et al., 2005). To such end, it would be necessary to foster a healthier form of love that teaches to accept

differences, self-respect and respect towards the other, as well as to struggle to maintain demythicized illusions and desires (Luego-Rodríguez & Rodríguez-Sumaza, 2010).

In this social and cultural change, collaborative and multidisciplinary work is important, involving the different socializing agents (Bonilla-Algovia & Rivas-Rivero, 2018). Health professionals have a frontline screening role in healthcare settings, as evidence shows that it increases the identification of women who experience intimate partner violence (O'Doherty et al., 2015). The faculty is the ideal agent, and the educational centres are the active and privileged spaces to foster equality and transmission of egalitarian values and models (García-Pérez et al., 2011). Mothers, fathers and other legal guardians and/or tutors can set the example, educate, guide and prepare the family members so that they adopt suitable behaviours regarding interpersonal, attachment or love relationships (Pérez-Grande, 2007). Peer groups also play a central role (Flecha-Fernández-Sanmamed et al., 2005), and it is through the figure of the community leader that they can be educated and socialized with a new world view (Gómez-Zermeño & Yunga-Saraguro, 2019). The communication and advertising means should implement actions so as not to foster romantic love and its associated myths that lead to the unconscious internalization of inequality, of sexist patterns and of toxic and violent relationships as normal (Cerro & Vives, 2019). To the contrary, they should disseminate messages free from prejudice and stereotypes, as well as tolerant under a concept of real and demythicized love (Bosch et al., 2007). At the political, economic and health level, the current strategies, plans, guides and protocols should be reviewed to include romantic love and its myths as possible risk factors for GV, remodelling or creating new training and health prevention programs based on gender, age and schooling level and exerting an influence on those myths that have proved to be related to these variables.

Finally, this paper can contribute to increasing the number of research studies on GV and on the prevalence of the romantic love myths which allow advancing in the understanding of the phenomenon and contrasting or refuting the results presented.

## Conclusion

The study contributes a current and wide perspective of the Spanish society about the prevalence of the romantic love myths. The results reflect a stereotyped pattern around love accepted by men and women who believe in idealized love based on the premise that love should be passionate and lasting (*eternal passion* myth), that the maximum expression of love is marriage (*marriage* myth), that love can overcome any obstacle or problem (*omnipotence* myth) and

that there is a predestined person for each individual (*perfect match* myth). Although the *jealousy* and *couple* myths were scarcely accepted, there are men and women who link love to maltreatment, for being a sign of true love and even indispensable in the relationships.

These myths can be a conditioning factor in love relationships and a risk factor for tolerance, justification and invisibility of GV. As GV represents a severe public health problem requiring a comprehensive and multidisciplinary approach, it would be relevant to start talking about good, free and egalitarian love in all contexts, although very especially in the educational spaces, teaching that love cannot be based on myths or on violence.

Researchers and health, educational and political organizations are encouraged to continue investigating factors that may be contributing to a higher incidence of toxic relationships and GV, especially in the young and adolescent population and at the beginning of love relationships. It would be interesting to educate the future generations demythifying the beliefs and assisting in awareness raising regarding the myths and the unhealthy practices in love relationships, in order to promote decision-making in search of own well-being. Given the results, love is a concept that would need to be deconstructed and reformulated to foster egalitarian relationships and free from myths, false beliefs, conditioning factors and stereotypes with no repercussions on people's physical, psychological and social health.

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**Availability of Data and Material** The tables show all the data obtained. However, if any researcher wants to have access to the data, they can contact with corresponding author (Macarena.romero@denf.uhu.es).

**Code Availability** Not applicable.

## Declarations

**Conflict of Interest** The authors declare no competing interests.

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