

## PAPER

Psychiatry &amp; Behavioral Science

# Psychopathic femicide: The influence of psychopathy on intimate partner homicide

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## Abstract

High scores in psychopathy were associated with acts of violence, and the prevalence of this condition is greater among the prison population than among the general population. In terms of its relation to femicide, two studies, one carried out in Sweden and another in Spain with a prison population, found that psychopathy is an uncommon condition among perpetrators of femicide. This study analyzes 97 cases of femicide in the whole of Spain, in which it was possible to evaluate the degree of psychopathy of the perpetrators using the Psychopathy Checklist-Revised (PCL-R). The scores are analyzed not only directly, but also in terms of Factors and Facets. The results show an average in the total score of the PCL-R of 14.4, with only 13 subjects (13.4%) presenting scores of 25 or more, and just 3 (3.1%) of these presenting scores of 30 or higher. It was found that, in general, high scores in psychopathy are associated with shorter relationships and less time between the first complaint, the breakup, and the femicide. What is more, characteristics of the victims, such as addiction to toxic substances or economic dependency, also demonstrated a relationship to the scores of the perpetrators of femicide in the PCL-R. Lastly, it was found that the scores in the different dimensions of psychopathy are associated with different types of violence, whereby there was a noteworthy difference between the most explicit violence and control exercised over the partner.

## KEYWORDS

femicide, intimate partner violence, psychopathy, psychopathy checklist-revised

## Highlights

- Psychopathy is a rare condition among perpetrators of femicides in Spain.
- 13 subjects (13.4%) presented scores of 25 or more and just 3 (3.1%) of these presenting scores of 30 or higher.
- High scores in psychopathy correlate with shorter romantic relationships.
- Femicides with high scores in Factor 1 develop a pattern of physical violence to resolve conflicts.
- In femicides with high scores in Factor 2, psychological control may be more reactive than instrumental.

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## 1 | INTRODUCTION

Psychopathy can be defined as a construct characterized by facets of personality related to the interpersonal, affective, and behavioral dimensions [1–3]. Psychopathy has been associated with criminal conduct, in particular violent criminal conduct [2,4,5]. Moreover, studies have found high levels of psychopathy in violent criminals in prison [6] and associate a high likelihood of recidivism with these individuals [7–9]. With regard to the prevalence of psychopathy, it is estimated that it fluctuates between 1% and 3.5% in the general population [10,11], with this percentage increasing to 10%–25% in the prison population [2,12].

The instrument most commonly used to measure the degree of psychopathy of a person is the Psychopathy Checklist (PCL) developed by Hare [13]. This instrument measures psychopathy using 20 indicators divided into two major factors: Factor 1, which is related to the interpersonal and affective; and Factor 2, which is related to lifestyle and antisocial behavior. These factors, in turn, are divided into two facets. Factor 1 is divided into Facet 1 (interpersonal) and Facet 2 (affective). Factor 2, for its part, is divided into Facet 3 (lifestyle) and Facet 4 (antisocial behavior). At present, the most widely used version for measuring psychopathy is the Psychopathy Checklist-Revised (PCL-R) [2]. In order to consider that an individual shows a clear psychopathic tendency, he or she must register a score of 30 points or higher [2], although, owing to the possible sociocultural influences, a cutoff point of 25 is used in Europe [14].

Although it seems clear that high scores in psychopathy are associated with violent behavior, some studies indicate that it is Factor 1 that is most associated with these violent behaviors and with recidivism [15,16], while others found that it is Factor 2 that is most associated with violent recidivism [17,18], and yet other studies, such as that of Walsh et al. [19], found that both Factor 1 and 2 were associated with violence and recidivism. These differences could be due to the nature of the violence, as Factor 1 could help to better explain instrumental violence, which pursues a specific objective, with Factor 2 explaining reactive violence, which shows up as a reaction to a provocation or threat [7,19–21].

### 1.1 | Psychopathy and intimate partner violence

There are intimate partner aggressors for whom personality disorders play a crucial role in the exertion of violence. In this sense, the most commonly diagnosed disorders are antisocial personality disorder, borderline personality disorder, and narcissism, all of which are related to behaviors that denote a lack of sensitivity toward others, the assumption of risky behaviors, or a lack of inhibition with regard to behavior [22,23]. As for psychopathy, it is one of the factors that has been most extensively studied in connection with intimate partner violence. With regard to the prevalence of psychopathy among intimate partner aggressors, according to studies, it ranges between 12% and 42% [23–26]. Specifically, in Spain, the study carried out by Echeburúa and Fernández-Montalvo [22] in Spanish prisons found

that 12.7% of the intimate partner aggressors met the criteria for being considered a psychopath ( $\geq 30$ ) or exhibited psychopathic tendencies ( $\geq 20$ ).

Although the literature on the influence of psychopathy in intimate partner violence is extensive, contradictory results do exist. What is more, these results may differ depending on whether the analyses are performed on the basis of the total scores, the factors, or the facets. The type of sample analyzed also plays a role, that is to say, whether the sample is from a prison, community, or clinical setting. Several studies have found that psychopathy is an important predictor of intimate partner violence [27–32]. The correlations found by the research between psychopathy and intimate partner violence were significant, positive, and ranged between small and moderate (0.19 to 0.39) [28,33–35], although the study by Swogger et al. [36], with a prison sample of 172 inmates, did not find a relation between the total score in psychopathy and the fact of being an intimate partner aggressor, though Facets 2 and 3 did indeed find a relation.

Upon comparing men who had not committed intimate partner violence with men who had exercised this type of violence, no statistically significant differences were found in their psychopathy scores [37–39]. For its part, the study by Theobald et al. [40], which compared the scores in the Psychopathy Checklist: Screening Version (PCL: SV) [41] of aggressors who commit violence only within the relationship and others who exercise violence both outside of and within the relationship, found that the latter demonstrated higher average scores in psychopathy. In prison samples, there seems to be a consensus among the studies, since the majority thereof found significant and positive correlations (0.22 to 0.39) between the psychopathy scores and the fact of having committed intimate partner violence [42,43]. When comparing intimate partner aggressors with other types of aggressors related to violent crimes, the studies show that the latter exhibit higher scores in psychopathy [44,45], which have been explained by the influence of Factor 2 [36,46].

The study by Kiire [28], which established a link between the life strategies and the traits of the dark triad (i.e., machiavellianism, narcissism, and psychopathy) in a sample of 344 Japanese university students (182 women and 162 men), found that the individuals with high scores in psychopathy tended to establish shorter romantic relationships, but ones in which they exercised violence as a method of maintaining the relationship [47]; that is to say, they began to exercise violence from the start of the relationship or in the very early stages due to a lack of other strategies for keeping the partner in the relationship. In turn, the study by Marshall and Holtzworth-Munroe [34], which analyzed men's recognition of their partners' emotions ( $n = 88$ ), showed that the participants with high scores in psychopathy tended to interpret the exteriorization of positive (happiness) and negative (fear) emotions by their partner as acts of provocation, which may set off episodes of violence. In this regard, in the recent study by Vignola-Lévesque and Léveillé [48], alexithymia (difficulties in recognizing, distinguishing, and expressing emotions) appears as a significant variable to understand intimate partner violence. Problems in recognizing

emotions can cause different situations, and the aggressor can use violence to resolve the conflict.

## 1.2 | Types of violence and psychopathy

According to the studies that have found that psychopathy can help to predict intimate partner violence, this predictive capacity may vary depending on the type of violence, for example, physical versus psychological violence [32] or instrumental versus reactive violence [49]. The studies in this context also reveal contradictory results. On the one hand, there are studies that have found an association between psychopathy and physical violence, especially in aggressors with high scores in Factor 1 [30,50], although other studies did not find an association with Factor 1 [35,51]. With reference to Factor 2, the studies have also found that high scores are related to the existence of physical violence [30,50–52]. As for psychological violence, again, contradictory results have been obtained, since, for example, the study by Coyne et al. [51] found a link between high scores in Factor 1 and psychological violence, but the study by Wymbs et al. [53] did not find this factor to be associated with psychological violence. The review conducted by Robertson et al. [32] highlighted the lack of data when it came to reporting on a reliable connection between the psychopathy scores and the existence of physical and psychological violence. Nevertheless, the studies analyzed in the review showed the existence of positive correlations, albeit sometimes very low, between psychopathy and physical violence (correlations of between 0.10 and 0.33) and psychological violence (correlations of between 0.12 and 0.47). In conclusion, these results should be interpreted with caution, and further studies should be developed to help eliminate these contradictions.

On the other hand, Blais et al. [49] carried out a review of 53 studies in which it was concluded that psychopathy is associated with instrumental just as much as with reactive violence. With this in mind, it appears that high scores in Factor 1 are associated with the use of instrumental violence, while the scores for Factor 2 are linked to reactive violence [49,54,55]. This is to be expected, given that Factor 1 is related to characteristics such as manipulation or a lack of remorse, which could help individuals to carry out more planned violence and with a specific objective. Meanwhile, since characteristics such as a lack of self-control, impulsivity, or antisocial behavior are included in Factor 2, these subjects may react to certain situations in a violent manner owing to a lack of alternative strategies for conflict resolution, which, together with their lack of control, may culminate in episodes of reactive violence.

## 1.3 | Homicide, femicide, and psychopathy

Studies have also found a relationship between psychopathy and homicide [56,57]. The recent meta-analysis carried out by Fox and DeLisi [56] found a large effect size for the relationship between psychopathy and homicide (0.68); this effect size grew as the type

of homicide was more violent (sexual homicide = 0.71; serial homicide = 0.74; sadistic homicide = 0.78; and multi-offender homicide = 0.80). In terms of general homicide, the study by Woodworth and Porter [58] found that the perpetrators of homicide with high psychopathy scores tended to commit homicides that were classified as instrumental (Factor 1), which was explained by the lack of empathy demonstrated by these perpetrators. In this regard, the same study concluded that there may be individuals with high psychopathy scores involved in reactive homicides, but that this was not just due to an inability to anticipate the consequences, but rather that they may simply not attempt to suppress their violent behavior. Recently, Sohn et al. [57] studied the relationship between psychopathy and homicide in a sample of 457 offenders convicted of homicide in South Korea. The subjects in the sample had a mean PCL-R score of 12.3 (median = 11). When the authors studied the relationship between psychopathy and homicide at the facet level, they found that Facet 2 was related to instrumental homicides, supporting the results of Woodworth and Porter [58].

The study by Belfrage and Rying [59], conducted in Sweden, compared the characteristics of perpetrators of femicide ( $n = 164$ ) with those of general murderers ( $n = 690$ ) and found that the general score for psychopathy obtained in the PCL:SV was 11.3 and that just 7 of the subjects exhibited a score greater than 17, which is the cutoff point used in the PCL:SV to consider an individual to have an average score in psychopathy (a score of 18 or above is considered high and low for 12 or below). This study concludes that the perpetrators of femicide are a group in which the psychopathic population is not overrepresented, seeing as the most common disorders and disturbances in the sample were depressive disorders. In the case of Spain, the study by Echeburúa and Fernández-Montalvo [22] in prisons found that of the 28 killers of women included in the sample, only 3 (10.7%) met the criteria to be classified as psychopaths, using a score of 20 or higher in the PCL-R.

## 1.4 | Objectives

Despite the fact that different studies have been conducted on the link between intimate partner violence and psychopathy, these have produced contradictory results, which is why the main objective of this investigation is to shed a little more light on this matter, especially the question of lethal intimate partner violence, which is the least studied type. What is more, as studies such as that of Cunha, Pinheiro et al. [60] suggest, it is important to develop studies on psychopathy in different cultural contexts, since this factor may have an influence on the scores of the subjects. In Spain, only the study by Echeburúa and Fernández-Montalvo [22] provided data on psychopathy in the perpetrators of femicide, although it was not a central topic of the research, but instead was analyzed as yet another characteristic of the subjects.

Thus, the objectives of this investigation are geared toward understanding the link between psychopathy and femicide in a Spanish sample, which is why the first research question is:

**Research question 1.** What is the prevalence of psychopathy among Spanish perpetrators of femicide, and what scores do they exhibit in each of the Factors and Facets?

On another note, the majority of studies have focused on analyzing psychopathy in response to the question of what the perpetrators are like according to their scores in the PLC-R, but not a single study has focused on describing the possible differences that may exist between the victims based on the scores of the perpetrators. This question is considered relevant since, institutionally, in the fight against violence against women, the attention is placed on the victim. This applies both to women who file complaints, so that the risk of recidivism can then be evaluated by the police and welfare services in order to avoid it, as well as to silent victims at whom informative campaigns are directed in an attempt to empower them, or even any women who enter into or maintain a romantic relationship with men, warning them of the risks they may run faced with potential abusers. With all of this in mind, the next research question that is posed is the following:

**Research question 2.** Are there differences between the victims of the perpetrators of femicide based on the perpetrators' scores in the PLC-R, by Factor or by Facet? This is because, if they do exist, they could serve as indicators of the risk of violence or recidivism.

Lastly, the majority of studies that analyzed the type of violence committed left out certain behaviors that could be considered violent, such as behaviors of control and harassment. This is why, aside from violence (psychological and physical), the existence of control and its various manifestations (physical, psychological, work-related, and economic control) were also included, as was the existence of behaviors of harassment.

**Research question 3.** Are there differences in the relationship dynamics of the perpetrators of femicide based on their scores in the PLC-R, by Factor or by Facet?

## 2 | METHODS

### 2.1 | Sample

The design of the investigation included a retrospective study of the cases of femicide reviewed by the National Team for In-Depth Homicide Review in the context of Gender Violence in Spain [61]. The cases of femicide included in this paper are those that took place in Spain and for which it was possible to obtain the score of the PCL-R [2] of the perpetrators. The final sample consisted of a total of 97 cases of femicide. In keeping with the definition of

Gender Violence as set out in Organic Law 1/2004 [62], only cases of female victims and male perpetrators who are or have been linked to it by an analogous relationship of affectivity were taken into consideration.

The perpetrators included in the sample presented an average age of 46.4 years (SD = 15.274; range = 20–86; median = 43.5) and were predominantly of Spanish nationality (73.2%), whereby the foreign countries of origin that stood out were as follows: Morocco (8 cases; 8.2%), Bolivia, Ecuador, and Romania (all with 3 cases, respectively; 3.1%). The victims, in turn, presented an average age of 42.1 years (SD = 15.503; range = 18–77; median = 40), and the majority of them were Spanish (70.1%), with the most notable foreign countries of origin being: Morocco (6 cases; 6.2%), Bolivia and Romania (4 cases; 4.1%) and Bulgaria and Ecuador (3 cases; 3.1%). In 19 cases (19.6%), there was a prior complaint before the femicide.

## 2.2 | Instruments

### 2.2.1 | Psychopathy Checklist-Revised (PCL-R; 2)

In this study, the Spanish adaptation of the PCL-R created by Torrubia et al. [63] was used. This instrument uses a semi-structured interview format comprised of 20 items that are codified from 0 to 2 points (0 = the item is not present; 1 = the item is sometimes present; and 2 = the item is always present). The resources utilized for the evaluation of the subjects included both the audiovisual recording of an in-person interview with the subjects and all of the police, judicial and welfare documentation available on the perpetrator and the act committed. The scores yielded by the PCL-R range between 0 and 40, whereby the subject may be classified as a psychopath starting from scores of 30 or more [2], or scores of 25 or more if the European cutoff point is taken into account [14].

### 2.2.2 | Computerized template and VPR indicators

To record the variables relating to the victims, the perpetrators, and the relationship dynamics of the couple, a computerized template was used, which forms part of the protocol of action of the previously cited National Team for In-Depth Homicide Review in the context of gender-based violence in Spain (Equipo Nacional de Revisión Pormenorizada de Homicidios or EHVdG). What is more, the study also includes the indicators from the form for Police Risk Assessment (Valoración Policial del Riesgo or VPR) of the Comprehensive Monitoring System in Cases of Gender-Based Violence [64] that made reference to risk factors of the victim, as well as indicators regarding the existence of violent behaviors within the relationship. For this study specifically, the following variables were used (Table 1 includes the definitions of the variables):

- *Variables of the perpetrator and the victim.* The age and the difference in age, expressed in years, were included. As far as the

TABLE 1 Variables of the victim, the perpetrator, and the relationship dynamics included in the study

Variable	Definition
Age of the victim	Age of the victim, expressed in years, at the time of the femicide.
Age of the perpetrator	Age of the perpetrator, expressed in years, at the time of the femicide.
Difference in age	Difference in age, expressed in years, between the perpetrator and the victim.
Addiction to toxic substances on the part of the victim <sup>a</sup>	The victim is considered to abuse alcohol, prescription drugs, or toxic substances if she consumes said substances on a regular basis, excessively or in large quantities at certain moments in such a way that this behavior causes problems for her. Toxic substances are understood to be all drugs that alter the normal functioning of the organism, both legal and illegal.
Prior records of gender-based violence on the part of the victim <sup>a</sup>	This indicator includes prior records or situations of gender-based abuse, both reported and not reported. It includes not only cases suffered by the victim, but also within the family.
Economic dependency of the victim <sup>a</sup>	Regardless of whether she has her own income or not, it is shown that the victim is dependent on the aggressor to carry out her day-to-day activities.
Desire by the victim to end the relationship <sup>a</sup>	The victim has expressed to the aggressor her intention of wanting to end the relationship.
Prior complaint before the femicide	Existence of a prior complaint before the femicide.
Duration of the relationship	Duration of the relationship expressed in years.
Period between the breakup and death	Time elapsed, in days, between the breakup of the relationship (if it occurred) and the femicide.
Period between the complaint and death	Time elapsed, in days, between the filing of the complaint (if it occurred) and the femicide.
Existence of violence <sup>a</sup>	Includes the existence of psychological or physical violence.
Existence of psychological violence <sup>a</sup>	Manifested through taunting, insults, or humiliation.
Existence of physical violence <sup>a</sup>	Manifested through non-accidental acts that cause harm or illness to the victim.
Escalation of the aggressions <sup>a</sup>	There is an increase in the severity of the aggressions or in the frequency with which they occur.
Existence of control <sup>a</sup>	Restriction, inspection, monitoring or recording carried out by the aggressor in different spheres of the victim's life.
Existence of physical control <sup>a</sup>	Restriction of movement by the aggressor.
Existence of psychological control <sup>a</sup>	The aggressor dictates who the victim may talk to or not, who she may see and associate with; the aggressor also control the victim's way of dressing and behavior.
Existence of work-related control <sup>a</sup>	Depending on whether the victim works or studies, evaluating whether the aggressor pays surprise visits to the place of work or study of the victim, whether the victim suffers from bullying by the aggressor in class or at work, or even whether the aggressor prevents the victim from having a job or developing herself in terms of career or education.
Existence of economic control <sup>a</sup>	The aggressor controls spending and the money available to the victim.
Existence of harassment <sup>a</sup>	Wilful, malicious, and repeated stalking and voluntary harassment by the perpetrator that threatens the safety of the victim.

<sup>a</sup>Variables obtained from the VPR.

victim, the following were analyzed as risk factors: addiction to toxic substances, the existence of a prior record of gender-based violence, economic dependency, the desire to end the relationship, and previous complaints against the perpetrator (all of the variables were codified 1 = Yes, 2 = No).

- *Variables of the relationship dynamics.* Firstly, the duration of the relationship was measured, expressed in years, as was the period between the breakup and death, as well as the period between the complaint and death, both expressed in days. In addition, the study also registered the existence of violence in general and the various types (psychological and physical), the escalation of the aggressions, the existence of control in general, and the various types (physical, psychological, work-related, and economic) as well as the existence of behaviors of harassment (all of the variables were codified 1 = Yes, 2 = No).

## 2.3 | Procedure

The information necessary to complete the PCL-R was obtained from the interviews conducted in prison and all of the documentary information available on the case, which was gathered by the National Team for In-Depth Homicide Review in the context of gender-based violence (EHVdG). Using these two sources of information improves the completion of the PCL-R, since, as indicated by Hare [2], applying only documentary information may give rise to lower scores and affect the reliability of the results. The information used to fill out the PCL-R was analyzed retrospectively by a team of five forensic psychologists trained in the application of the instrument. Twenty cases were randomly selected to evaluate the inter-rater reliability. These 20 cases were reviewed in pairs, and the estimates for the intraclass correlation coefficient (ICC) and its confidence intervals

were calculated. The ICC was chosen as the most appropriate reliability index for continuous data and, moreover, it is the most used index in the reliability analyses of the PCL-R [65]. The estimates of the ICC ranged from 0.74 (Facet 4) to 0.94 (Facet 3), and the values of the inferior and superior limits ranged from 0.54 (Facet 4) to 0.98 (Facet 3). In the event that there were doubts about how to complete any of the indicators, a collective decision was reached among at least two of the psychologists in the team.

## 2.4 | Analysis

In this study, descriptive analyses are carried out for the scores of the perpetrators of femicide in the PCL-R. Due to the reduced size of the sample and the fact that many of the scores, by factor and by facet, did not exhibit a normal distribution (Kolmogorov-Smirnov  $< 0.05$ ), nonparametric tests were used. Firstly, analyses of correlation were performed, using the Spearman correlation. To compare the scores in the PCL-R with the rest of the variables, the Mann-Whitney U test was selected.

## 3 | RESULTS

As can be seen in Table 2, the total score of the subjects of the sample in the PCL-R displayed an average of 14.4 points, below both the cutoff point of 30 points and the European cutoff point of 25 points. It is worth mentioning that 13 subjects (13.4%) exhibited scores of 25 or more and, of these subjects, 3 (3.1% of the total) exhibited scores of 30 or more.

### 3.1 | Age, temporal distances, and scores in the PCL-R

Upon linking the age and the temporal distances of the femicide with the scores obtained by the subjects in the PCL-R, significant results were found. Previously, with regard to the ages, it was found that the older the perpetrator, the older the victim, although as the difference in age shows, the differences in age tend to entail cases in which the perpetrators are older than the victims. Furthermore, the more advanced the age, of both the victim and the perpetrator, the greater the duration of the relationship. Lastly, a positive linear relationship was found between the duration of the relationship and the period between the breakup and death (see Table 3).

When comparing the ages with the scores of the PCL-R (see Table 3), it was found that the older the perpetrator, the greater the overall score, the greater the score in the two Factors and the greater the score in Facets 1, 3, and 4. The same results were found for the victim, since the more advanced the age, the greater the total score of the perpetrator, the greater the score in the two Factors and the greater the score in Facets 1 and 4. In terms of the

TABLE 2 Scores for the PCL-R

	Average	Median	SD	Range
Total score PCL-R	14.4	15	8.131	0-32
Factor 1	8.3	9	4.614	0-16
Facet 1	3	2	2.535	0-8
Facet 2	5.3	6	2.526	0-8
Factor 2	5.8	5	3.976	0-16
Facet 3	4.1	4	3.019	0-10
Facet 4	1.7	2	1.550	0-7

Note: Total score, by factor and by facet ( $n = 97$ ).

duration of the relationship, all of the scores showed significant results, yielding a negative linear relationship, that is, the greater the scores in the PCL-R, the shorter the duration of the relationship. The period between the end of the relationship and the femicide demonstrated significant results with the scores in Facet 1 and Facet 3, showing a negative linear relationship in both. For their part, neither the difference in age nor the period between the first complaint and the femicide showed an association with any of the scores.

### 3.2 | Characteristics of the victim and scores in the PCL-R of the perpetrator of femicide

Table 4 shows the characteristics of the victims who exhibited significant differences according to the scores obtained by the perpetrators in the PCL-R. It was found that when the victim exhibits addiction to toxic substances, the total score ( $U = 375$ ,  $z = -2.656$ ,  $p = 0.008$ ,  $r = -0.270$ ), that of Factor 2 ( $U = 346.5$ ,  $z = -2.941$ ,  $p = 0.003$ ,  $r = -0.299$ ) and that of Facets 3 ( $U = 357.5$ ,  $z = -2.841$ ,  $p = 0.005$ ,  $r = -0.288$ ) and 4 ( $U = 410.5$ ,  $z = -2.373$ ,  $r = -0.241$ ), is greater. The fact of the victim having a background of having suffered previous crimes of gender-based violence was associated with a higher score in Facet 3 ( $U = 304$ ,  $z = -2.271$ ,  $p = 0.023$ ,  $r = -0.231$ ). When the victim depends on the aggressor economically, the total score ( $U = 690$ ,  $z = -2.334$ ,  $p = 0.020$ ,  $r = -0.237$ ) and the scores in Factors 1 ( $U = 738$ ,  $z = -1.958$ ,  $p = 0.50$ ,  $r = -0.199$ ) and 2 ( $U = 639.5$ ,  $z = -2.740$ ,  $p = 0.006$ ,  $r = -0.278$ ) and in Facets 1 ( $U = 680.5$ ,  $z = -2.432$ ,  $p = 0.015$ ,  $r = -0.247$ ) and 3 ( $U = 613$ ,  $z = -2.957$ ,  $p = 0.003$ ,  $r = -0.300$ ) are lower than when the victim does not depend on the aggressor economically. The victim expressing the desire to end the relationship is associated with a higher overall score ( $U = 497$ ,  $z = -2.380$ ,  $p = 0.017$ ,  $r = -0.242$ ) as well as a higher score in Factors 1 ( $U = 518$ ,  $z = -2.181$ ,  $p = 0.029$ ,  $r = -0.221$ ) and 2 ( $U = 510$ ,  $z = -2.261$ ,  $p = 0.024$ ,  $r = -0.230$ ) and in Facets 1 ( $U = 535.5$ ,  $z = -2.029$ ,  $p = 0.042$ ,  $r = -0.206$ ) and 3 ( $U = 522$ ,  $z = -2.152$ ,  $p = 0.031$ ,  $r = -0.218$ ). Lastly, the existence of a complaint prior to the femicide was related to a higher score in Facet 4 ( $U = 482$ ,  $z = -2.359$ ,  $p = 0.018$ ,  $r = -0.239$ ).

TABLE 3 Age, duration of the relationship, period until the femicide, and scores in the PCL-R

	1	2	3	4	5	6	7	8	9	10	11	12	13
[1] Age perpetrator	1												
[2] Age victim	0.720***	1											
[3] Difference in age	0.250*	-0.385***	1										
[4] Years of relationship	0.635***	0.547***	-0.018	1									
[5] Days between breakup and death	0.093	0.219	-0.211	0.309*	1								
[6] Days between first complaint and death	-0.393	-0.169	0.014	-0.080	0.285	1							
[7] Total score PCL-R	-0.290**	-0.261*	-0.017	-0.464***	-0.284	-0.004	1						
[8] Factor 1	-0.239*	-0.238*	-0.003	-0.418***	-0.263	-0.217	0.921***	1					
[9] Facet 1	-0.289**	-0.308**	0.046	-0.451***	-0.314*	-0.025	0.881***	0.926***	1				
[10] Facet 2	-0.154	-0.108	-0.068	-0.286***	-0.129	-0.434	0.797***	0.902***	0.692***	1			
[11] Facet 3	-0.301**	-0.229*	-0.071	-0.410***	-0.268	0.085	0.879***	0.653***	0.652***	0.525***	1		
[12] Facet 4	-0.222*	-0.163	-0.066	-0.391***	-0.294*	0.030	0.850***	0.655***	0.644***	0.536***	0.944***	1	
[13] Facet 5	-0.311**	-0.266**	0.004	-0.293**	-0.142	0.225	0.603***	0.383***	0.415***	0.293**	0.729***	0.494***	1

Note: \*p < 0.05; \*\*p < 0.005; \*\*\*p < 0.001.

TABLE 4 Characteristics of the victim and scores in the PCL-R

	Total score (median)	Factor 1 (median)	Facet 1 (median)	Facet 2 (median)	Factor 2 (median)	Facet 3 (median)	Facet 4 (median)
Addiction to toxic substances							
Yes	18.5 <sup>a</sup>	10	4	6	8 <sup>a</sup>	6 <sup>a</sup>	2 <sup>a</sup>
No	13 <sup>a</sup>	8	2	6	5 <sup>a</sup>	3 <sup>a</sup>	1 <sup>a</sup>
Background of gender violence							
Yes	18.5	8.5	3	6	8.5	6.5 <sup>a</sup>	2
No	14	9	2	6	5	3 <sup>a</sup>	1
Economic dependency							
Yes	11 <sup>a</sup>	7 <sup>a</sup>	1 <sup>a</sup>	6	3 <sup>a</sup>	2 <sup>a</sup>	1
No	15.5 <sup>a</sup>	9 <sup>a</sup>	3 <sup>a</sup>	6	6 <sup>a</sup>	4.5 <sup>a</sup>	2
Desire to end relationship							
Yes	15 <sup>a</sup>	9 <sup>a</sup>	3 <sup>a</sup>	6	6 <sup>a</sup>	4 <sup>a</sup>	2
No	7 <sup>a</sup>	5.5 <sup>a</sup>	1 <sup>a</sup>	4	3 <sup>a</sup>	2 <sup>a</sup>	1
Prior complaint against perpetrator							
Yes	14	8	2	6	5	3	2 <sup>a</sup>
No	15	9	3	6	5	4	1 <sup>a</sup>

<sup>a</sup>Significant differences according to the Mann–Whitney U test.

### 3.3 | Dynamics of violence and scores in the PCL-R

As can be seen in Table 5, upon analyzing the dynamics of violence within the relationship, a link was found between the perpetrators' scores in the PCL-R and the presence of violence and control. The existence of some type of violence was associated with higher scores in Factor 2 ( $U = 787.5, z = -1.959, p = 0.050, r = -0.199$ ) and in Facet 4 ( $U = 604, z = -3.439, p = 0.001, r = -0.349$ ). When analyzing the specific types of violence, psychological violence was once again associated with high scores in Factor 2 ( $U = 899, z = -2.025, p = 0.043, r = -0.206$ ) and in Facet 4 ( $U = 633, z = -3.311, p = 0.001, r = -0.336$ ), while physical violence revealed differences with the total score ( $U = 725.5, z = -2.925, p = 0.003, r = -0.297$ ), with Factors 1 ( $U = 813.5, z = -2.277, p = 0.023, r = -0.231$ ) and 2 ( $U = 733.5, z = -2.873, p = 0.004, r = -0.292$ ) and with Facets 2 ( $U = 735, z = -2.889, p = 0.004, r = -0.292$ ), 3 ( $U = 814.5, z = 2.279, p = 0.023, r = -0.231$ ) and 4 ( $U = 651.5, z = -3.567, p = 0.000, r = -0.362$ ). Lastly, an escalation in the aggressions and the use of violence was associated with higher scores in Facet 4 ( $U = 663, z = -3.076, p = 0.002, r = -0.312$ ).

An analysis of the controlling behaviors revealed that the presence thereof is associated with high scores in Facet 4 ( $U = 780.5, z = -2.351, p = 0.019, r = -0.239$ ). When analyzing the types of control, physical control did not display significant results. However, among the remaining types of control, it was found that psychological control is associated with greater scores in total ( $U = 764, z = -2.885, p = 0.004, r = -0.293$ ), in Factors 1 ( $U = 784.5, z = -2.740, p = 0.006, r = -0.278$ ) and 2 ( $U = 742.5, z = -3.049, p = 0.002, r = -0.310$ ) and in Facets 1 ( $U = 717, z = -3.257, p = 0.001, r = -0.331$ ), 3 ( $U = 800, z = -2.637, p = 0.008, r = -0.268$ ) and 4 ( $U = 813, z = -2.598, p = 0.009, r = -0.264$ ). Work-related control displayed a link to the score of Facet 3 ( $U = 296, z = -2.026, p = 0.043, r = -0.206$ ), while economic control was linked to

the score of Facet 2 ( $U = 454, z = -2.172, p = 0.030, r = -0.220$ ). Lastly, the presence of behaviors of harassment was associated with higher scores in Factor 2 ( $U = 804, z = -2.280, p = 0.023, r = -0.232$ ) and in Facet 4 ( $U = 817, z = -2.237, p = 0.025, r = -0.227$ ).

## 4 | DISCUSSION

The analyses have demonstrated that Spanish perpetrators of femicide presented an average score in psychopathy of 14.4 points, which is a score similar to that found by other homicide [57] and femicide studies [22,59]. When taking into account the total score for classifying the killers of women as psychopaths or not, if the European cutoff point (25 points) is used, the percentage of subjects considered to be psychopaths ascends to 13.4%, but upon raising the cutoff point to 30, just 3 subjects (3.1%) could be considered psychopaths. These values are below what was indicated by Hare [2], who suggested that the percentage of subjects considered to be psychopaths among the prison population would be between 10% and 15%; this is true for the sample when the European cutoff point is used. Nonetheless, the low presence of perpetrators of femicide with high scores supports the findings by Belfrage and Rying [59] in the sense that these aggressors present a less antisocial profile than other types of criminals and that when they exhibit disturbances or mental disorders, these tend to be depressive disorders.

### 4.1 | Age, temporal distances, and scores in the PCL-R

The results of the age of the victims and the perpetrators of femicide have shown that the scores in psychopathy, both in total and broken

TABLE 5 Characteristics of the dynamics of violence and scores in the PCL-R

	Total score (median)	Factor 1 (median)	Facet 1 (median)	Facet 2 (median)	Factor 2 (median)	Facet 3 (median)	Facet 4 (median)
Existence of violence							
Yes	15	9	2	6	6 <sup>a</sup>	4	2 <sup>a</sup>
No	14	9	2.5	6	3 <sup>a</sup>	3	1 <sup>a</sup>
Psychological violence							
Yes	15	9	2.5	6	6 <sup>a</sup>	4	2 <sup>a</sup>
No	13	9	2	6	3 <sup>a</sup>	3	1 <sup>a</sup>
Physical violence							
Yes	17 <sup>a</sup>	9.5 <sup>a</sup>	3	6.5 <sup>a</sup>	7 <sup>a</sup>	5.5 <sup>a</sup>	2 <sup>a</sup>
No	12 <sup>a</sup>	7 <sup>a</sup>	2	5 <sup>a</sup>	4 <sup>a</sup>	3 <sup>a</sup>	1 <sup>a</sup>
Escalation of the aggressions							
Yes	16	9	3	6	6	5	2 <sup>a</sup>
No	14	8.5	2	6	5	3	1 <sup>a</sup>
Controlling behaviors							
Yes	15	9	3	6	6	4	2 <sup>a</sup>
No	13	8	2	6	3	3	1 <sup>a</sup>
Physical control							
Yes	14	9	3	5	5	4	2
No	15	8.5	2	6	5	4	1
Psychological control							
Yes	16 <sup>a</sup>	9 <sup>a</sup>	4 <sup>a</sup>	6	7 <sup>a</sup>	5 <sup>a</sup>	2 <sup>a</sup>
No	11.5 <sup>a</sup>	7 <sup>a</sup>	2 <sup>a</sup>	6	3 <sup>a</sup>	2.5 <sup>a</sup>	1 <sup>a</sup>
Work-related control							
Yes	17	10	4	6	7	6 <sup>a</sup>	1
No	14	9	2	6	5	3 <sup>a</sup>	2
Economic control							
Yes	16	10	4	7 <sup>a</sup>	6	5	2
No	14	8	2	5.5 <sup>a</sup>	5	3.5	1.5
Harassment							
Yes	16	9	4	6	6 <sup>a</sup>	5	2 <sup>a</sup>
No	13.5	8	2	6	4 <sup>a</sup>	3	1 <sup>a</sup>

<sup>a</sup>Significant differences according to the Mann-Whitney U test.

down by Factor and by Facet, negatively correlate with the age of both. This may be due to the fact that, with the passing of time, the characteristics of psychopathy gradually begin to diminish, especially those that are related to an antisocial lifestyle [3]. Given that the average age of the perpetrators of femicide tends to be higher, mainly due to the presence of couples of an advanced age, the presence of perpetrators of an advanced age may in part explain the low psychopathy scores of the sample. The period of duration of the relationship showed a negative correlation with the scores in psychopathy. As indicated by the study by Kiire [28] on intimate partner aggressors, they tend to establish short, violent relationships, which seems to extend to the cases of femicide studied here. What is more, the study by Marshall and Holtzworth-Munroe [34] also emphasized the idea that psychopaths tend to misinterpret the emotions of their partners, giving rise to conflicts within the relationship. As

the study by Vignola-Lévesque and Léveillé [48] has shown, difficulties in recognizing emotions can cause conflicts, and femicide can be understood as a deficient situational response when faced with a lack of effective strategies for resolving the conflict. In other words, dynamics of violence and conflicts, which are more common among cases of subjects with high scores in psychopathy, may lead to situations that culminate in femicide. Lastly, it is noteworthy that the scores in Facets 1 and 3 negatively correlated with the time that elapses between the breakup and death and the first complaint and death. This could be explained by the fact that in the presence of stimuli that the perpetrators perceive as negative, such as the filing of a complaint or abandonment by their partner, the perpetrators with high scores in Facet 1 (interpersonal) may perceive this as an insult or a threat to their self-esteem, while those with high scores in Facet 3 (impulsivity/irresponsibility) are associated with homicides

of the reactive type, not so much due to an inability to foresee the consequences, but rather because they do not attempt to suppress their violent behavior, just as demonstrated in the study by Woodworth and Porter [58].

## 4.2 | Characteristics of the victim and scores in the PCL-R

To explore the characteristics of the victims, the VPR indicators and several variables of the computerized template from the study by the EHVdG [61] were selected. If the victim exhibited addiction to toxic substances, this was linked to high total scores in the PCL-R, in Factor 2 and in Facets 3 and 4. This may be because Factor 2 describes an antisocial lifestyle, in which the perpetrator may also consume these substances; therefore, it seems likely that the consumption and addiction would be a problem shared by both partners in the relationship. As far as the victim having a prior background of gender-based violence, this was only linked to Facet 3 of psychopathy, in which high scores in this Facet are associated with parasitic lifestyles and impulsive behaviors. It may be the case that there is a certain tendency among the victims, especially those who accumulate particular risk indicators (such as addiction or involvement with criminal environments), to establish relationships with men who exhibit a very pronounced antisocial profile with few effective strategies for resolving conflicts, such as those that may occur in a relationship, and who resort to violence to deal with these problems. The economic dependency of the victim was linked to lower scores in the total score, in Factors 1 and 2 and in Facets 1 and 3. That is to say, in the cases in which the victims depend on their aggressors economically, the latter do not tend to exhibit high scores in psychopathy, especially in aspects related to irresponsibility (Factor 2 and Facet 3), which is why it could be implied that these types of killers of women have greater difficulty finding a job and, above all, keeping it, meaning that the victim is not able to depend on them economically. In fact, the opposite could be hypothesized, as due to their tendency to deceive and manipulate (Facet 1) and their parasitic lifestyle (Facet 3), it is to be expected that it is the perpetrator who takes advantage of the victim economically. The victim expressing a desire to end the relationship was associated with high scores overall, in Factors 1 and 2 and in Facets 1 and 3. The behaviors of the subjects with high scores both in the Factors and in the Facets could lead to their partner considering the possibility of ending the relationship due to irresponsible and antisocial behaviors and a lack of affection and empathy in the relationship. Lastly, the victim having filed complaints against the perpetrator was associated with a higher score in Facet 4. Moreover, it may be that the use of violence itself within these relationships is what leads the victim to want to end the relationship since, as demonstrated by the study by Kiire [28], the subjects with high scores in psychopathy make use of violence to maintain the relationship and, when the victim wants to end it, they may feel a loss of control that could lead to them increasing the severity of the violence. As already discussed, if the victim filed

a report of the violent situation in which she found herself, this may have been interpreted by the perpetrator as a hostile act toward him, which, combined with the fact that this Facet is related to poor self-control and behavioral problems, may lead to a situation in which the perpetrator responds with excessive violence, to the point that he ends the life of the victim.

## 4.3 | Dynamics of violence and scores in the PCL-R

The study at hand analyzed the dynamics of violence as a whole, understanding violence to also mean the behaviors of control and harassment that other studies have not included in their analyses. Since Factor 1 is associated with deficits in interpersonal and emotional relationships, it may be that the individuals with high scores in this Factor, but low scores in Factor 2, do not exhibit such explicit violent behavior in the form of physical aggression or insults. Hence, the understanding that it was important to include this type of behavior.

The results of this study support the theory that the existence of violence, in general and without specifying the type, is associated with high scores in Factor 2, specifically in Facet 4. Studies such as that of Kennealy et al. [17] and Walsh and Kosson [18] found that violent behaviors are more heavily influenced by Factor 2, which is logical, since Facet 4 describes an antisocial lifestyle and is the facet most related to criminality. Upon analyzing the existence of psychological violence, these findings hold true, but when physical violence is analyzed, not only do they show significant results in Factor 2 and Facet 4, but also in the overall score, Factor 1 and Facets 2 and 3. A link between Factor 1 and physical violence would support the findings in the studies by Bates et al. [50] and Mager et al. [30]; namely, the absence of remorse, insensitivity, and superficial affection (Facet 2), together with impulsivity (Facet 3), could better explain the presence of physical violence as a more reactive type of violence. Lastly, an escalation in the aggression was associated with Facet 4. Although Factor 1 may be associated with a more manipulative profile, as will be discussed below, the fact that it reveals a link to physical violence but not to psychological violence is because the aggressors' feelings of self-worth, together with their lack of remorse and deep feelings for the victim, may lead them to exercise violence on a recurring basis, potentially increasing the use of violence to resolve conflicts if they perceive that this helps them to cope with problems in the relationship, while those who only score high in Factor 2 may allow themselves to get carried away by the situation and insult the victim or, although they may even attack them, potentially not create such a pattern of instrumental physical violence.

With regard to the controlling behaviors, the existence of control, in general, was associated with Facet 4, which can be explained by the reasons stated above. When analyzing the types of control, it is worth mentioning that physical control did not reveal a connection to any of the scores, unlike psychological control, which was associated with the total score, Factors 1 and 2 and Facets 1, 3, and 4. In contrast to what was shown to be the case for violence,

psychological control seems to show a stronger connection to all of the dimensions of psychopathy, which, as has already been mentioned, may be due to the fact that Factor 1 may be related to a more manipulative, less empathetic profile, rather than a violent one, which is why psychological control may be one means of controlling the victim without the need to use violence. Nonetheless, the high scores in Factor 2 are not incompatible with the use of psychological control, as after all, it is still a form of violence against the partner that may be accompanied by other, more explicit forms of violence. Work-related control only revealed a connection to Facet 3, and economic control showed a link to Facet 2. The link between work-related control and Facet 3, as has already been stated, is related to the impulsivity of the perpetrator. For its part, economic control may have an instrumental objective, given that the lack of remorse, added to the inability to accept responsibility, may lead the perpetrator to control the victim's income for his own benefit. Lastly, the harassment behaviors were connected to Factor 2 and Facet 4, since these perpetrators often exhibit intimidating behaviors by means of more explicit control, such as following the victim.

#### 4.4 | Limitations and future lines of research

The main limitation of this research is one that is shared by other studies, namely that the size of the sample is reduced. Just 97 cases were able to be included in the analysis, which is due in part to the low prevalence of this phenomenon in Spain and the difficulty in accessing sufficient information on the perpetrators of femicide in order to fill out the PCL-R. The low psychopathy scores generated in the sample precluded the creation of two groups of comparison: psychopathic subjects (scores  $\geq 25$ ) compared with non-psychopaths (scores  $< 25$ ), using the scores in the PCL-R for the analyses, which is why all of the results should be interpreted in relation to the tendency to psychopathy, not the presence of psychopathy in and of itself. Similarly, a further idea being considered is the design of a longitudinal study in which it is possible to observe the evolution in the behavior of the aggressors with their partners, from the start of the relationship up until the moment of death. Since there is an interaction between the four facets of the PCL-R, it would be significant to see how the different facets interact with intimate partner violence at a multivariate level and not only at individual level.

As far as future lines of research go, various analyses are proposed. First of all, within this study, only cases of femicide were analyzed, which is why it would be advisable to carry out a comparative study of the scores of the subjects, which would make it possible to measure the predictive capacity of the scores in the PCL-R. For example, a comparison could be made between the killers of women and other murderers outside of the intimate partner setting, even including other, non-homicidal aggressors. Besides that, it is also particularly important to compare the perpetrators of femicide with a group of abusers who do not exercise lethal violence, as in this way, it would be possible to know whether psychopathy or any of its

dimensions could be considered a risk indicator for femicide. On the contrary, expanding the sample would allow for the creation of two groups of comparison, psychopathic subjects (scores  $\geq 25$ ) compared with non-psychopathic subjects (scores  $< 25$ ), since having worked with these two groups in the study at hand would mean a limited number of statistical analyses due to the requirements in terms of the sample size. Apart from including comparison groups, it is important to continue expanding the research on the victims so as to answer the question of whether psychopaths seek out a certain type of woman in order to establish an intimate relationship. Lastly, it is also significant the relationship between psychopathy and other types of intimate partner violence. Thus, it would be necessary to replicate the analyzes, including cases in which the woman ends the life of her male partner and same-sex intimate homicides.

## 5 | CONCLUSIONS

One of the primary conclusions of this research is that the perpetrators of femicide in Spain exhibit low scores in psychopathy. This is consistent with the findings made by the research in this field. The influence of the social context is also decisive, as is evidenced by the fact that a lower cutoff point is used in Europe than the one used in the American context, but this is not all; the intimate partner aggressors, and specifically the perpetrators of femicide, do not exhibit an extremely antisocial profile like that exhibited by other criminals. Nevertheless, there are still subjects who exhibited high scores, and even 3 who exceeded the cutoff point of 30 points, which is why it is still important to investigate what may differentiate this type of aggressor from those who exhibited a lower score, especially from the standpoint of prevention and treatment.

Given that psychopathy encompasses various dimensions ranging from the affective-emotional, to an antisocial lifestyle, all the way to impulsivity and behavioral aspects, it is only to be expected that the scores in every single one of the Factors and Facets may help explain certain behaviors. Despite this, no attempt was made to establish a causal relationship between the scores and the behaviors; instead, an effort was made to outline how certain characteristics of the perpetrators that are measured with the PCL-R may help to understand why they behave in a certain manner with their partners. It is interesting to note the link between psychopathy and the periods of time analyzed in this study. High scores in psychopathy correlate with shorter romantic relationships, which reflects, for one, the inability of these subjects to establish bonds that are translated into lasting relationships (interpersonal-affective), but also because living with a person who is irresponsible, has poor impulse control and reacts violently to conflicts (irresponsibility-antisocial behavior) is complicated and may trigger the termination of the relationship. In any case, it must be kept in mind that these are cases of femicide that are being analyzed; thus, the short duration of the relationship is explained by the period of time taken by the perpetrator to end the life of the victim from the start of the relationship. This was also to be expected, since the perpetrators with high scores in psychopathy

may react to conflicts in a more violent manner, which, together with low impulse control and a lack of anticipation of the consequences, may lead to femicide.

One topic that has not been studied much in the literature is the question of what the victims of these kinds of perpetrators are like. The analyses have shown that the profiles of the victims may be different depending on the scores of the perpetrators. As already mentioned, relationships with subjects with high scores in psychopathy are complicated, due to their lifestyle and the behaviors they may demonstrate in day-to-day life within the relationship. Although only 5 variables associated with the victim were analyzed, it is evident that there is an interaction between the victim's way of being and the perpetrator. For example, victims with addictions are likely to maintain relationships with perpetrators who also consume addictive substances, meaning that both will share an antisocial lifestyle. The same could apply to victims who have had previous relationships in which they suffered violence; namely, it is possible that perpetrators with high psychopathy scores look for partners who are easily manipulated or who they can take advantage of, as is the case with the issue of finances.

The analysis of violent behaviors also produced interesting results that had not yet been addressed by previous studies. The differences between more explicit violence in the form of physical aggression or insults, and violence exercised by way of control, are important. Without trying to establish a causal relationship between the scores in certain dimensions of psychopathy and the existence of certain types of violent behavior, it seems clear that the various Facets could serve to better explain different types of behavior. For example, it is to be expected that high scores in Facet 1 but low scores in Facet 4 are connected to behaviors that are controlling rather than violent, seeing as this profile describes manipulative subjects who, to a certain extent, are able to control their impulses. A clear reflection of the complex relationship between psychopathy and the behaviors is what happens with violence and psychological control. On the one hand, psychological violence is associated with Factor 2, specifically the Facet of antisocial behavior, that is to say that these subjects are capable of insulting the victim, normally in a reactive manner when faced with certain situations, but upon analyzing the aspect of psychological control, a link is also observed to the direct score and, what is more important, to Factor 1, specifically to the interpersonal Facet 1. Although it still shows a connection to Factor 2, it appears that the use of psychological control may correspond to a more reactive type of control (Factor 2 and Facet 4), but also to a more instrumental, subtle type of manipulation (Factor 1 and Facet 1). This instrumentalization of violence may also be behind the connection between physical violence and Factor 1, since as already mentioned in regard to the aggressors who score high points in this Factor, if the use of physical violence allows them to resolve conflicts, they may come to develop a pattern of physical violence that recurs more frequently than is the case for subjects with high scores in Factor 2, who react in an impulsive manner without having to make use of physical violence.

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