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Intimate Partner Homicide Against Women Typology: Risk Factor Interaction in Spain

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Abstract
This investigation studied the interaction between seven risk factors included in the police risk assessment of the VioGén System and found that these factors formed groups based on the dimensions of violence and psychopathology. The 171 femicides analysed were categorised into four groups: normalised (23.4%), violent (25.7%), pathological (18.7%), and pathological/violent (32.2%). These groups exhibited significant differences concerning their psychosocial profile and relationship dynamics. One of the main findings is the identification of the pathological type that had not been detected in previous typologies, thus highlighting the importance of the psychological factor when classifying the perpetrators of femicide. These results have important practical implications, as the classification of the aggressor could be a preliminary step taken before the risk assessment, which would make it possible to individualise predictions and improve the protection of the victims as well as the therapies and intervention programmes.

Keywords Intimate partner homicide · Femicide · Risk factor · VioGén System

Introduction

The most extreme manifestation of Intimate Partner Violence Against Women (IPVAW) is femicide, which has received special attention in the academic sphere in recent years. A history of violence preceding femicide does exist in many cases (Campbell et al., 2007; Vatnar et al., 2017). The idea that these are different phenomena with different dynamics is becoming more and more widely accepted, with the perpetrators of lethal and non-lethal

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violence also exhibiting different characteristics (Dobash et al., 2007; Jung & Stewart, 2019; Sev'er et al., 2004). In Spain, approximately 38.4% of homicide victims are women, with half of the cases being femicides (González et al., 2018b). According to the Statistics Portal of Government Office against Gender-based Violence (2022), between 2004 and 2021, a total of 1059 femicides have been registered, with an annual average of 58.8 victims. As is shown in Fig. 1, between 2004 and 2010, more than 70 femicides per year were recorded, except for 2005, 2006 and 2009. A downward trend can be seen from 2010, registering 60 cases or less during the following years.

One of the main topics that the studies on femicide have addressed is the identification of risk factors that may help to predict a fatal outcome (Matias et al., 2020; Spencer & Stith, 2018). Other main topic is the identification of different types of perpetrators of femicide (Dawson & Piscitelli, 2021; Dixon et al., 2008; Elisha et al., 2010). Regarding the latter, the typological approach is based on the premise that there are characteristics that distinguish certain aggressors from others. It is important to build on the typological studies, given that they hold particular relevance from a therapeutic standpoint, as they make it possible to adapt the prison programmes and the therapies to the characteristics of the aggressors (Lila et al., 2019; Loinaz et al., 2014; Vignola-Lévesque & Léveillée, 2021). Moreover, they are also valuable in terms of predicting and assessing the risk, since each type of aggressor may exhibit different risk indicators (González-Álvarez et al., 2021). In the present study, we examined a typology of those who commit femicide in Spain, with the intention of building on work by Dawson and Piscitelli (2021). Risk factors serve as a reference point to classify the murderers of women in our study.

Risk Factors for Femicide

One of the main objectives of the studies on femicide is the identification of risk factors and of the existing differences between lethal and non-lethal aggressors. The identification

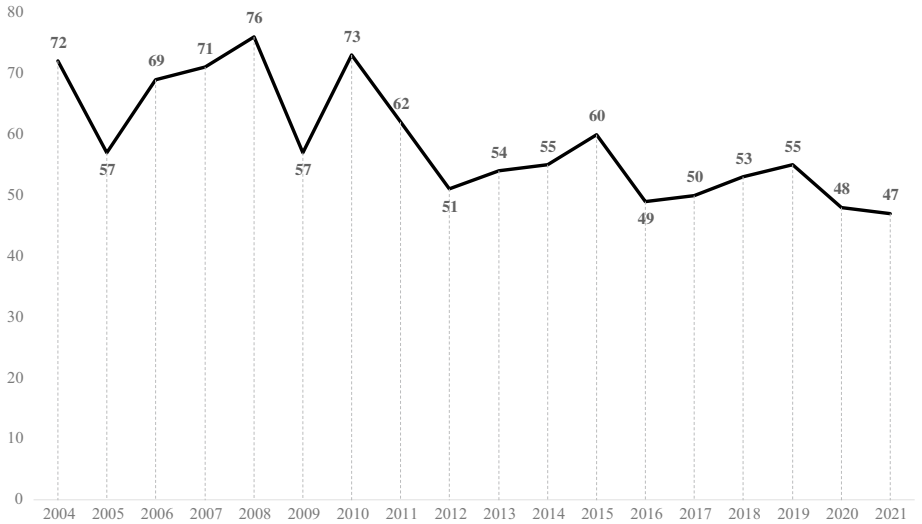

Fig. 1 Number of femicides in Spain (2004–2021)

of these factors has been translated into the creation of various instruments for assessing the risk of IPVAW, such as B-SAFER (Kropp et al., 2005), DV-MOSAIC (Roehl et al., 2005), ODARA (Hilton et al., 2008), SARA (Kropp et al., 1995), DVSI and DVSI-R (Williams & Houghton, 2004), KSID (Gelles and Tolman, 1988), and the Spouse Violence Risk Assessment Inventory (Dayan et al., 2013). Although all these instruments are focused on the assessment in cases of IPVAW, studies such as that of Campbell et al. (2003) and other more recent studies (e.g. Matias et al., 2020) have shown that specific risk factors for femicide do indeed exist. This gave rise to the development of the Danger Assessment (DA) (Campbell, 2012; Campbell & Glass, 2009; Campbell et al., 2003, 2009) and the Spanish VPR5.0-H (López-Ossorio et al., 2020), which is described below.

Two meta-analyses centred on the risk factors associated with femicide were recently published. Spencer and Stith (2018) evaluated a total of 17 studies that included risk factors for male perpetration and female victimisation. This review revealed that the aggressor factors that increased the probability of femicide were the following: access to firearms, having previously threatened the victim with a weapon, having previously strangled the victim, having threatened to hurt the victim, having committed forced sex, demonstrating controlling behaviours, abusing the victim while she was pregnant, harassing the victim, demonstrating jealousy, substance abuse, having a level of education lower than that of middle school, being young, having anger issues, and having a prior record of mental health problems. If the perpetrator was employed, this was a factor of protection against femicide. In turn, the major factors for victims of femicide were as follows: having a level of education lower than that of middle school, breaking up with the aggressor, substance abuse and having children from a previous relationship. One of the main conclusions of this paper is that the factors associated with the perpetrator show a stronger association with femicide. On the other hand, the meta-analysis by Matias et al. (2020) led to the conclusion that the perpetrators of femicide appear to be more socially integrated, seeing as they are more likely to be married and employed and have higher levels of education, and they tend to exhibit suicidal ideation as well as mood disorders. Access to firearms continued to be one of the factors most associated with femicide.

In the case of Spain, the Secretary of State for Security of the Spanish Ministry of the Interior manages the VioGén System (González-Álvarez et al., 2018a, b) which, in response to articles 31 and 32 of the Organic Law 1/2004 on Integrated Protection Measures against Gender-based Violence, unites the various public institutes involved in the fight against intimate partner violence against women. Among the functions fulfilled by the VioGén System is that of the police assessment of the risk faced by the reporting victims of suffering repeated aggression. The System is equipped with two tools for carrying out this task, namely Police Risk Assessment tool (Valoración Policial del Riesgo; VPR following the Spanish abbreviation of its name), which serves to make an initial evaluation of the case, and Police Risk Evolution Assessment tool (Valoración Policial de la Evolución del Riesgo; VPER following the Spanish abbreviation of its name), which enables a follow-up of the case. Since their creation in 2007, the performance of these tools has undergone continuous revision and they have been updated accordingly (López-Ossorio et al., 2019a, b); at present, version VPR5.0-H is in effect (López-Ossorio et al., 2020). This most recent version consists of 35 dichotomous risk factors. In this most recent revision of the VPR, a distinction was made between the risk factors associated with a new episode of non-fatal violence and those that resulted in fatal violence. It was found that the weighting of the 35 factors that served to predict non-lethal recidivism was not effective when it came to predicting femicide, while a different weighting of the factors associated with femicide made it possible to significantly distinguish the deadly cases, yet failed to predict recidivism.

Based on this finding, the decision was made to implement a dual protocol, adding to the scale of recidivism a second complementary scale of assessment of the risk of homicide (VPR5.0-H) using the specific weightings of the 13 factors that displayed a significant association with fatal violence, which are the following: threats of suicide by the aggressor; the aggressor exhibits exaggerated jealousy or suspicions of infidelity by his partner in the last 6 months; the perpetrator exhibits controlling behaviours in the last six months; presence of problems in his life (stress) in the last 6 months; the aggressor has had economic or work-related problems in the last 6 months; presence of past violations of the conditions of his sentence; presence of a prior record of physical or sexual aggression; the aggressor exhibits a mental or psychiatric disorder; presence of suicidal ideas or attempts; presence of any kind of disability in the victim; mental or psychiatric disorder in the victim; any kind of addiction or involvement in substance abuse in the victim; history of gender-based or domestic violence within the victim's family (López-Ossorio et al., 2020).

Typological Approach to Intimate Partner Violence Against Women

The importance of creating typologies lies in the identification of aggressors who share a series of characteristics that distinguish them from the rest, and that make it possible to group them together (Cavanaugh & Gelles, 2005). This classification of individuals is important from the academic perspective, but even more so at the operational level, both from a welfare as well as a police or judicial point of view, given that once the pure types have been identified, it is possible to classify both the current perpetrators of partner violence as well as future aggressors, which in turn will allow for the design of more individualised methods to handle the cases, not only in terms of therapeutic intervention (Elisha et al., 2010; Lila et al., 2019; Loinaz et al., 2014; Vignola-Lévesque & Léveillée, 2021) but also prediction and prevention (González-Álvarez et al., 2021), all of which will contribute to improving the protection of the victims (Cavanaugh & Gelles, 2005; González-Álvarez et al., 2018b). Nonetheless, the conceptual and clinical usefulness of the typological strategies is still under debate (Babcock et al., 2004; Capaldi & Kim, 2007; Dixon & Wride, 2020; Sartin et al., 2006; Ward & Carter, 2019), with some pointing out the need for new ways of developing systems of classification.

One of the most cited works on typologies of intimate partner aggressors is that of Holtzworth-Munroe and Stuart (1994). By analysing 15 typological proposals, the authors concluded that the partner aggressors could be classified based on three dimensions: (1) severity and frequency of the violence; (2) whether the violence was exercised only within the relationship or outside of it too; and (3) the psychopathology or personality disorders of the aggressor. This resulted in a classification into 3 groups: Family-Only (FO), Dysphoric or Borderline (DB) and Generally Violent and Antisocial (GVA). The FO aggressors are those who present low levels of violence and little to no psychopathology. In turn, the DB are violent towards their partner but do not exercise violence outside of the relationship, although they do exhibit the highest levels of psychopathology by way of characteristics associated with borderline personality disorder. Lastly, the GVA are those that are violent both towards their partner as well as towards other people and, as far as psychopathology is concerned, tend to exhibit characteristics of antisocial personality disorder. Subsequent studies have found subtypes similar to the GVA and DB proposed by Holtzworth-Munroe and Stuart (1994). For example, the subtypes instrumental and impulsive (Tweed & Dutton, 1998), cobra and pitbull (Gottman et al., 1995) and proactive and reactive (Chase et al., 2001) could be considered similar to the types GVA and DB, respectively. In a later

study, Holtzworth-Munroe and Meehan (2004) reduce the dimensions to two: antisociality (violence) and borderline personality-relevant measures (psychopathology). The study by Vignola-Lévesque and Léveillée (2021) drew attention to the lack of psychological variables when developing typologies of partner aggressors. This is to be expected, given that accessing this type of information is complicated in comparison to other variables that can be more easily observed directly, such as the existence of violence or the presence of a criminal record. These authors emphasise the role that may be played by alexithymia (personality trait characterized by difficulties in recognising, distinguishing and expressing emotions) and the deficits in recognising emotions, and they highlight the importance that including psychological variables would have for the treatment of partner aggressors, and even for the prevention of cases of femicide.

Recently, Vignola-Lévesque and Léveillée (2021) proposed a new typology of partner aggressors, basing this on an analysis of 67 aggressors (45 partner aggressors and 22 perpetrators of femicide). This study identified four types of aggressors: (1) the homicidal abandoned partner (19.4%); (2) the generally angry/aggressive partner (23.9%); (3) the controlling violent partner (34.3%); and (4) the unstable dependent partner (22.4%). The first group, according to this typology, consisted of aggressors who kill their partners, who had suffered a breakup and presented previous suicide attempts. All of the aggressors in the second category had criminal records, while in half of the cases, they had suffered a breakup and had tried to commit suicide, and 93.8% exhibited alexithymia. None of the aggressors in this second category went so far as to kill their partner. The third group includes both those who commit femicide (30.4%) as well as non-lethal aggressors (69.6%). In this group, a breakup was not as common as in the previous two groups; more than half had a prior criminal record and 34.8% had previously tried to commit suicide, with 87% exhibiting sub-alexithymic behaviour. The last group also included perpetrators of femicide (13.3%) and non-lethal aggressors (86.7%), and what characterised this group was the total absence of breakups and criminal records; all of them were alexithymic and in 40% of the cases, they had presented previous suicide attempts.

In Spain, the application of the two-dimensional model has been used to create partner typologies. In this context, it is worth mentioning the recent work of González-Álvarez et al. (2021), in which 9731 partner aggressors were studied and classified based on the dimensions of antisociality and psychopathology, resulting in a typology of four types: high instability/low antisociality (HiLa; 27.5%), high instability/high antisociality (HiHa; 21.4%), low instability/high antisociality (LiHa; 10.5%) and low instability/low antisociality (LiLa; 40.6%). These results highlight the presence of aggressors with a low tendency towards violence and instability, as is evidenced by the fact that 40.6% of the aggressors were classified as LiLa. But the identification of the HiHa type is also important, not just because the percentage of these aggressors is 21.4%, but also because they demonstrate a high level of violence accompanied by great instability, meaning that they have a very high risk of continuing to exercise violence against their partner and, what is more, of doing so in a very unpredictable manner, given that their instability can cause them to react violently to different situations and to different conflicts that may arise within the relationship.

Typologies of Femicide

The dimensions described in the previous paragraph have also been used to classify perpetrators of femicide. One such example is the study by Dixon et al. (2008), in which a sample of 99 adult men in prisons in England was analysed; the perpetrators of femicide

were classified based on the dimensions of violence and psychopathology, which allowed the authors to satisfactorily classify 80% of the perpetrators of femicide as follows: (a) low criminality and low psychopathology (15.3%); (b) moderate-high criminality and high psychopathology (36.1%); and (c) high criminality and low-moderate psychopathology (48.6%). The remaining 20% were classified in accordance with two of the three classic groups of abusers identified in the literature: GVA/instrumental/cobra/proactive and DB/impulsive/pitbull/reactive. The study by Dawson and Piscitelli (2021) carried out in Canada is of particular importance, not only because of the methodology it uses, but also because it classified 183 killers of women on the basis of 10 risk factors identified by the Domestic Violence Death Review Committee, Office of the Chief Coroner of Ontario. In their study, the authors identified the existence of a dimension composed of the following factors: a history of violence, death threats, isolation of the victim, escalation of the violence, obsessive behaviours, separation, and fear of the aggressor on the part of the victim. They named this dimension the dimension of violence, and it explained 30% of the variance. The second dimension comprised the following factors: depression, previous threats or attempts of suicide and unemployment of the aggressor. This dimension was termed depression and explained 14% of the variance. The authors subsequently calculated the indices of each dimension and, using a two-stage cluster analysis, they obtained a solution comprised of three groups: (a) non-depressed/non-violent (34%); (b) depressed/violent (34%); and (c) non-depressed/violent (32%). Lastly, proposals of typologies of those who commit femicide have also been made at a theoretical level. In this regard, Kivisto (2015) proposed a classification based on four types of aggressor: (a) mentally ill; (b) undercontrolled/dysregulated; (c) chronic batterer; and (d) overcontrolled/catathymic.

In Spain, there have only been two studies on typologies of perpetrators of femicide. In the first, Aguilar (2017) analysed 189 cases of committed and attempted femicide, classifying 70.4% of the perpetrators as normalised and the remaining 29.6% as antisocial, based on the definition provided by previous studies (e.g. Dobash et al., 2007). Furthermore, analysing only cases in which exemption from or attenuation of criminal responsibility was requested due to a mental disorder, Aguilar-Ruiz (2018) studied 237 cases of committed and attempted femicide, whereby he correctly classified 87.3% of the perpetrators of femicide into four groups: (a) mentally ill/not responsible (25.7%); (b) antisocial/coercive with reduced responsibility (18.6%); (c) normalised/fearful/responsible (38.4%); and (d) moderately antisocial/jealous/responsible with reduced responsibility (17.3%).

Objectives

Considering the research described in the introduction, some of the limitations that are identified are related to the samples analysed, since these do not tend to have national representation. What is more, these samples are of a penitentiary more than a community nature, which is why the homicides in which the perpetrators have severe mental disorders are not included, nor are those in which they commit suicide, which constitute a significant percentage of the total of femicides. In the typology presented in this study, an attempt was made to overcome these limitations, given that the investigation is of national scope and includes cases of aggressors with severe mental disorders and others in which the perpetrator ended up committing suicide; this will enable a more complete understanding of the phenomenon, and the results will be generalizable to all of Spain. A further strength of the study is the methodology used to obtain the information, as not only was a documentary review of the information and the VPR factors carried out, but interviews were

also conducted with the people in the environment of the victims and perpetrators, as were interviews with the perpetrators themselves. In the cases of the victims and the perpetrators who committed suicide, the procedure of psychological autopsy was employed. It is important to point out that the VPR factors of the VioGén System were used as a source of information, specifically the factors equivalent to those used in the study by Dawson and Piscitelli (2021), whose methodology will be followed here, since it is the only project in which the interaction between different risk factors was used to identify types of murderers of women. This is especially important given that the aim is to understand the usefulness that the VPR factors may have in terms of classification, as this would mean that, before the risk evaluation, it would be possible to classify the aggressors as soon as they are entered into the VioGén System, which would enable the adaptation of the risk evaluations based on the characteristics of each perpetrator.

The main aim of the research is to determine whether there are specific groups of risk factors of recidivism that make it possible to classify the perpetrators of femicide in Spain. To complement this question and the analysis of the risk factors, the sociodemographic and psychosocial characteristics of the aggressors will be analysed, as will the variables corresponding to the relationship dynamics, since it is expected that once they have been classified according to the risk factors, significant differences will appear in the profiles of each type.

Methodology

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-based Violence in Spain (EHVdG following the Spanish abbreviation of its name) (González et al., 2018a; González et al., 2019). The final sample consisted of a total of 171 cases of femicide. In keeping with the definition of Gender-based Violence as set out in Organic Law 1/2004, only cases of female victims and male perpetrators who were in or had been in a sentimental relationship prior to the femicide were taken into consideration. All of the cases took place in Spain, within the territorial boundaries of the Civil Guard (50.3%), which is the police force responsible for the rural areas; the National Police (40.4%), which is the police force responsible for the urban areas and cities with over 50,000 inhabitants, the Mossos d'Esquadra (8.2%), which is the autonomous police force for Catalonia; and the Ertzaintza (1.2%), which is the autonomous police force for the Basque Country. Cases registered between the years of 2006 and 2016 were included, with the majority of these concentrated between 2010 and 2015 (96.5%). Three cases of attempted femicide were included in the 171 cases analysed, as they were cases of extreme severity in which the perpetrator believed the victim to be dead and in which the death of the victim did not occur due to causes outside of the perpetrator's control.

Procedure

The in-depth review was conducted in 4 phases (González et al., 2018a; González et al., 2019). Phase 1 consisted of the documentary review of all the available information on the case (police, judicial, prison and welfare information). In phase 2, one-on-one interviews

were held with the people in the environments of the victim and the perpetrator, both in the family setting as well as the workplace and friendship setting. In phase 3, an interview was held in prison with the perpetrator, except in the cases in which he had committed suicide after the homicide, in which case—just as for the victims—a psychological autopsy was carried out. Phase 4 comprised the completion of an electronically automated template containing all the variables of the study (including the VPR factors), as well as a case report in which each and every variable was justified. The template contains a total of 105 main variables divided into the following sections: perpetrator, victim, relationship dynamics, circumstances of the event, scene of the crime, and VPR and VPER factors.

Two hundred two femicides were reviewed; for 38 of these, sufficient information could not be obtained, and 3 were discarded because a verdict of acquittal had been issued. The final sample consisted of 171 cases.

Instrument

VPR Factors

Of the risk factors that make up the VPR, this paper made use of the factors that are understood to be comparable to those employed in the study by Dawson and Piscitelli (2021) and that are described in Table 1. All the factors were codified dichotomously (1 = presence; 2 = absence).

Table 1 Risk factors from the VPR form included in the study

Factor	Definition
Existence of some type of violence	Includes the existence of psychological violence (taunting, insults and humiliation), physical violence (non-accidental act that causes harm or illness to the victim) or sexual violence (behaviours that, by means of physical force or coercion, oblige the victim to perform sexual acts against her will)
Work-related problems of the aggressor	Includes problems related to being made redundant, a stressful situation at work, financial problems or debt
Victim ends the relationship	The victim expresses the intention to end the relationship
Harassment	Wilful, malicious and repeated stalking and voluntary harassment by the perpetrator that threatens the safety of the victim
Mental disorder of the aggressor	Existence of a mental or psychiatric disorder
Escalation of the aggressions	There is an increase in the severity of the aggressions or in the frequency with which they occur
Ideas of suicide by the aggressor	Existence of episodes of previous suicide attempts or recurring ideas of ending his life
Death threats	The aggressor has threatened to take the life of the victim
Physically controlling behaviours	The aggressor limits the movement of the victim
The victim thinks that the aggressor may kill her	Level of awareness of the severity of the situation and what she expects may occur based on her experiences with the aggressor and the capacity for aggression that she attributes to him

Variables of the Aggressor and the Relationship Dynamics

Sociodemographic Characteristics Eleven sociodemographic variables of the perpetrator were analysed. Age expressed in years, family of origin (1 = structured; 2 = unstructured), socioeconomic status (1 = high (income above €1200); 2 = low (income below €1200)), level of education (1 = high (secondary education or higher); 2 = low (elementary education or lower); children, social/family support, consumption of drugs, consumption of alcohol, criminal record, criminal versatility, rejection of help/treatment (this variables were codified: 1 = yes; 2 = no).

Personality Traits Following Eysenck's PEN model of personality (Eysenck & Eysenck, 1975), the tendency of the perpetrators in each one of the following 3 aspects was estimated: psychoticism (1 = high; 2 = low), extraversion (1 = high; 2 = low) and neuroticism (1 = high; 2 = low). The subjects with a high tendency to psychoticism are considered to be callous and unemotional, have a lack of empathy and display irresponsible behaviours. Those who demonstrate a high tendency to extraversion are individuals who are very socially active, seek the company of others, do not mind being the centre of attention and have a very extensive social network. Lastly, the subjects with a high tendency to Neuroticism are prone to emotional instability and generally tend to experience higher levels of stress and anxiety, worrying about matters of no importance.

Relationship Dynamics Within the partner dynamics, the analysis encompassed the time of the relationship expressed in years and the type of attachment that the perpetrator presented with regard to the victim (1 = secure; 2 = anxious-insecure; 3 = avoidant-insecure).

Suicidal Behaviour After the Incident The analysis examined whether there was any type of suicidal behaviour after the homicide was committed (1 = no suicide; 2 = attempted suicide; 3 = committed suicide).

Data Analysis

First, descriptive analyses are carried out to describe the characteristics of the victims, aggressors, femicide, and the risk factors included in the study. Second, multiple correspondence analysis (MCA; Hair et al., 2006) was used to assess potential risk factors interactions since these factors were coded as a dichotomous variable. The combination of risk factors was identified as dimensions. Only risk factors with a value of 0.25 or above in one of these dimensions were included. Next, each dimension was converted into an index with a final scoring of the index ranging between 0 and 1. These indices were analysed using a two-step cluster analysis to identify groups of cases that shared similar characteristics. Lastly, the groups or clusters were compared using the chi-square test for categorical variables and ANOVA and Kruskal–Wallis test for quantitative variables.

Results

Descriptive Analysis

Characteristics of the Victims and the Aggressors The victims presented an average age of 41.9 years (SD = 14.620; range = 13–77; median = 40) and were predominantly of Spanish nationality (68.4%), with the foreign women mainly originating from the following countries: Morocco (4.1%), Romania (4.1%) and Bolivia (3.5%). The perpetrators presented an average age of 46.2 years (SD = 14.627; range = 19–86; median = 45) and were mainly of Spanish nationality (71.9%), whereby the countries of origin that stood out among the foreigners were Morocco (7%) and Romania (3.5%). The most common type of relationship at the time of the events was that of ex-partner/ex-boyfriend (37.9%), followed by spouse (33.1%), partner/boyfriend (14.8%) and separated/divorced (14.2%). In 40 of the cases (23.4%), prior complaints of crimes of gender-based violence were registered in the VioGén System.

Characteristics of the Femicide The type of weapon most commonly used to take the life of the victim were bladed weapons (51.5%), followed by blunt objects (13.5%), the force/body of the aggressor (10.5%), asphyxiation (9.9%), firearms (9.4%), and in 9 cases various weapons were registered, whereby it was not possible to determine which caused the death of the victim. In 151 cases (88.3%), a single victim was recorded, while multiple victims were recorded in the remaining cases, and in 8 cases, non-fatal victims were recorded.

Risk Factors Table 2 shows the presence of the risk factors included in the study, compared against the findings from the study by Dawson and Piscitelli (2021).

Table 2 Presence of the factors identified in the Spanish sample ($n = 171$) and in the study by Dawson and Piscitelli (2021)

Risk factor	VPR (%)	Dawson and Piscitelli (2021) (%)
Existence of some type of violence	66.7	73
Work-related problems of the aggressor	49.1	40
Victim ends the relationship	46.2	70
Harassment	36.3	54
Mental disorder of the aggressor	35.7	50
Escalation of the aggressions	33.9	48
Ideas of suicide by the aggressor	32.7	49
Death threats	24.6	43
Physically controlling behaviours	21.1	39
The victim thinks that the aggressor may kill her	8.8	45

Multiple Correspondence Analysis

The 10 risk factors were analysed via the procedure of a MCA, leading to the finding that three of these ("work-related problems of the aggressor"; "victim ends the relationship"; and "victim thinks that the aggressor may kill her") were not significantly related to the rest of the factors. With the 7 remaining factors, the model of 2 dimensions (eigenvalue = 1.308) was considered suitable, as it was able to explain 51.9% of the variance. As can be seen in Table 3, the first dimension is made up of the factors: "existence of some type of violence", "escalation of the aggressions", "death threats", "physically controlling behaviours" and "harassment", which are all factors related to the dimension of violence. This first dimension contributes to 33.2% of the variance. The second dimension is composed of the factors: "mental disorder of the aggressor" and "ideas of suicide by the aggressor", which form the dimension of instability or psychopathology. This dimension contributes to 18.7% of the variance.

Subsequently, the indices of the two dimensions were calculated for each case, adding up the existing factors corresponding to each dimension and dividing this between the total of variables that make up each dimension, with the final scoring of the index ranging between 0 and 1.

The index of the first dimension, which includes 5 factors related to violence, presented an average of 0.37 (median of 0.40) and a standard deviation of 0.31. In addition, in the second dimension, composed of two factors related to the existence of a prior psychopathological record, the index presented an average of 0.34 (median of 0.50) and a standard deviation of 0.38.

Two-Stage Cluster Analysis

A two-stage cluster analysis was used to explore the interaction between the two indices. The 3 clusters shown in Table 4 were identified automatically, but this was expanded to create a solution of 4, since this would be equivalent to the four theoretical groups resulting from the combination of two independent and orthogonal dimensions: low violence and low psychopathology (normalised); high violence and low psychopathology (violent); high pathology and low violence (pathological); and high violence and high psychopathology (pathologically violent). The quality of the conglomerate was superior to 0.5 in both solutions (Table 4).

Table 3 Discriminant measures

	Dimension	
	1	2
Existence of some type of violence	.564	.012
Escalation of the aggressions	.487	.005
Death threats	.477	.006
Physically controlling behaviours	.410	.107
Harassment	.349	.007
Mental disorder of the aggressor	.005	.619
Ideas of suicide by the aggressor	.027	.552

Table 4 Models with 3 and 4 clusters. Indices of the two dimensions

	Index for dimension: violence		Index for dimension: disorder	
	Average	SD	Average	SD
Violent ($n=44$; 25.7%)	.609	.202	.000	.000
Mild disorder ($n=70$; 40.9%)	.077	.098	.214	.249
Violent with high pathology ($n=57$; 33.3%)	.530	.258	.763	.252
Normalised ($n=40$; 23.4%)	.090	.101	.000	.000
Violent ($n=44$; 25.7%)	.609	.202	.000	.000
Pathological ($n=32$; 18.7%)	.056	.091	.531	.123
Pathologically violent ($n=55$; 32.2%)	.549	.241	.755	.252

Figure 2 provides a graphic representation of the distribution of the cases based on their scores in the two dimensions found in the MCA, labelled in accordance with the 4-cluster solution. As can be observed, the normalised perpetrators of femicide (purple square), who are located in the quadrant of low violence and low pathology, are a very homogeneous group, since all of the cases are concentrated within a limited area as they recorded a low presence of the factors of both dimensions. The violent group (red circle) exhibits a greater dispersion in the distribution of the cases, which is associated with the scores in the dimension of criminality, ranging from 0.40 to 1. The perpetrators in the pathological group (green diamond) are generally a fairly homogeneous group, with the perpetrators who exhibit the two factors of the dimension of psychopathology situated further to the right. Lastly, the pathologically violent group (yellow triangle) registered the greatest spatial distribution, due to the fact that the perpetrators who form part of this subtype exhibit

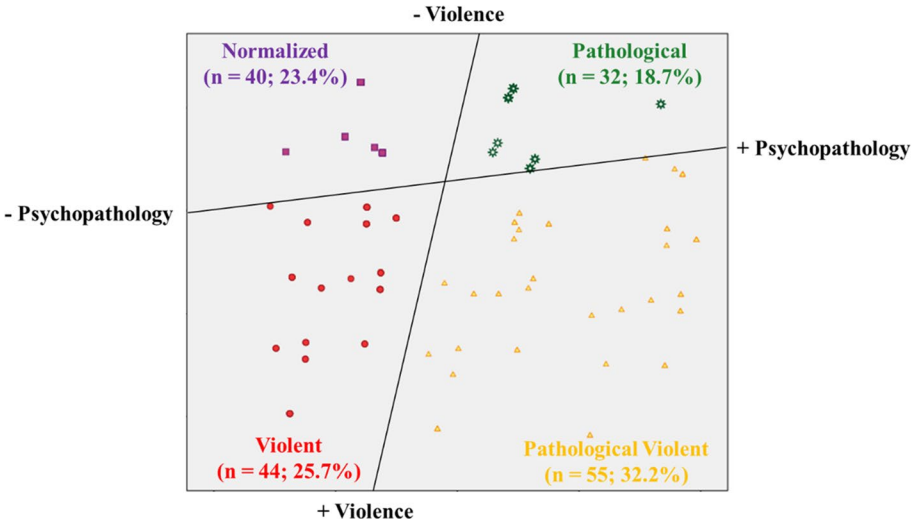

Fig. 2 Grouping of the perpetrators of femicide ($N=171$) based on the dimensions of criminality and psychopathology, on the basis of the four-cluster solution

factors that correspond to both dimensions and that range from 0.20 to 1 in the dimension of criminality, and from 0.50 to 1 in the dimension of psychopathology.

Profile of the Perpetrator and Relationship Dynamics

A statistically significant relation was found in the fact of whether perpetrator and victim were in a relationship at the time at which the homicide occurred (χ^2 (3, $N=169$) = 8.621, $p=0.035$). When the violence is high, there is no relationship (ex-boyfriend or separated), and when the violence is low, there is a relationship (boyfriend or spouse). The variable of the existence of a prior complaint also produced significant results (χ^2 (3, $N=169$) = 18.134, $p<0.000$), whereby it was more common for the cases with a prior complaint to be associated with situations in which a greater level of violence was registered, regardless of the presence of a psychopathological record.

As for the age of the perpetrator, this displays a normal distribution (Kolmogorov–Smirnov $p>0.05$; with the ANOVA parametric test resulting in significant differences). Table 5 shows the descriptive data of age for each of the groups. Although significant differences in age cannot be observed based on the clusters (F (3,165) = 1.687, $p=0.172$), the normalised murderer is younger, followed by the violent, pathologically violent and pathological murderer.

The type of perpetrator of femicide who exhibited the longest relationship was the pathological (median = 12 years), followed by the pathologically violent (median = 10 years) and the violent (median = 9.5 years), with all of them registering a median above 9 years. The normalised type registered the lowest median (4 years). The variable of years of relationship presented a non-normal distribution (Kolmogorov–Smirnov $p<0.05$), with the Kruskal–Wallis non-parametric test resulting in significant differences (H (3) = 11.167, $p=0.011$). The post hoc Mann–Whitney test was used with an adjusted alpha level, with a Bonferroni correction of 0.008 (0.05/6), in order to compare all the peer groups. It was found that the two groups that displayed significant differences were the pathologically violent and the normalised.

Described below are the characteristics that define each of the four groups (Table 6).

Normalised The profile of this perpetrator is a man with an average age of 43.6 years. They are men with a structured family of origin and a high level of education. They present a tendency towards emotional stability (low neuroticism), consumption of alcohol (without this implying an addiction), they do not have a prior criminal record and there were no previous complaints registered against them in the VioGén System. This type of perpetrator tends to accept help/treatment when necessary, and does not attempt to commit suicide

Table 5 Statistics of the age of the perpetrators

	Average	SD	Min	Max	Median
Normalised ($n=40$)	43.6	14.003	19	74	47.5
Violent ($n=44$)	45.1	12.637	26	77	41.5
Pathological ($n=32$)	51	17.876	27	86	45
Pathologically violent ($n=55$)	46.1	14.177	21	79	46

Table 6 Characteristics of the perpetrators of each of the groups

	Normalised ($n=40$)	Violent ($n=44$)	Pathological ($n=32$)	Pathologically violent ($n=55$)	χ^2
	n (%)	*n* (%)	*n* (%)	*n* (%)	
Family of origin					11.132*
Structured	22 (68.8) [1.6]	19 (59.4) [0.4]	20 (69) [1.6]	16 (36.4) [− 3.2]	
Unstructured	10 (31.3) [− 1.6]	13 (40.6) [− 0.4]	9 (31) [− 1.6]	28 (63.6) [3.2]	
Socioeconomic status					4.043
High	8 (26.7) [− 0.3]	13 (37.1) [1.2]	10 (37) [1]	9 (19.6) [− 1.7]	
Low	22 (73.3) [0.3]	22 (62.9) [− 1.2]	17 (63) [− 1]	37 (80.4) [1.7]	
Level of education					8.500*
High	25 (73.5) [2.3]	20 (58.8) [0.3]	16 (59.3) [0.3]	19 (41.3) [− 2.6]	
Low	9 (26.5) [− 2.3]	14 (41.2) [− 0.3]	11 (40.7) [− 0.3]	27 (58.7) [2.6]	
Children					4.644
Yes	28 (70) [− 0.2]	36 (81.8) [1.8]	19 (59.4) [− 1.7]	39 (70.9) [− 0.1]	
No	12 (30) [0.2]	8 (18.2) [− 1.8]	13 (40.6) [1.7]	16 (29.1) [0.1]	
Social/family support					2.324
Yes	19 (59.4) [0]	22 (55) [− 0.7]	22 (71) [1.5]	29 (55.8) [− 0.6]	
No	13 (40.6) [0]	18 (45) [0.7]	9 (29) [− 1.5]	23 (44.2) [0.6]	
Consumption of drugs					6.356
Yes	11 (32.4) [0.2]	9 (23.7) [− 1.1]	6 (18.8) [− 1.7]	22 (42.3) [2.2]	
No	23 (67.6) [− 0.2]	29 (76.3) [1.1]	26 (81.3) [1.7]	30 (57.7) [− 2.2]	
Consumption of alcohol					9.019*
Yes	26 (76.5) [1.7]	20 (52.6) [− 1.7]	16 (50) [− 1.9]	38 (73.1) [1.7]	
No	8 (23.5) [− 1.7]	18 (47.4) [1.7]	16 (50) [1.9]	14 (26.9) [− 1.7]	
Prior criminal record					17.567***
Yes	12 (31.6) [− 2.4]	29 (67.4) [2.9]	9 (28.1) [− 2.6]	31 (57.4) [1.6]	
No	26 (68.4) [2.4]	14 (32.6) [− 2.9]	23 (71.9) [2.6]	23 (42.6) [− 1.6]	
Criminal versatility					8.480*

Table 6 (continued)

	Normalised ($n=40$)	Violent ($n=44$)	Pathological ($n=32$)	Pathologically violent ($n=55$)	χ^2
	n (%)	*n* (%)	*n* (%)	*n* (%)	
Yes	7 (17.9) [−0.6]	6 (15.4) [−1]	3 (10) [−1.7]	18 (34) [2.8]	
No	32 (82.1) [0.6]	33 (84.6) [1]	27 (90) [1.7]	35 (66) [−2.8]	
Rejection of help/treatment					24.010***
Yes	2 (7.4) [−3.6]	7 (25.9) [−1.3]	9 (37.5) [0.1]	24 (64.1) [4.3]	
No	25 (92.6) [3.6]	20 (74.1) [1.3]	15 (62.5) [−0.1]	13 (35.1) [−4.3]	
Psychoticism					25.908***
High	26 (68.4) [−1.2]	35 (85.4) [1.7]	12 (42.9) [−4.4]	48 (90.6) [3.1]	
Low	12 (31.6) [1.2]	6 (14.6) [−1.7]	16 (57.1) [4.4]	5 (9.4) [−3.1]	
Extraversion					3.336
High	19 (50) [1.1]	13 (31) [−1.7]	13 (46.4) [0.5]	23 (42.6) [0.1]	
Low	19 (50) [−1.1]	29 (69) [1.7]	15 (53.6) [−0.5]	31 (57.4) [−0.1]	
Neuroticism					24.400***
High	17 (45.9) [−4.5]	31 (73.8) [−0.1]	22 (81.5) [0.9]	50 (90.9) [3.4]	
Low	20 (54.1) [4.5]	11 (26.2) [0.1]	5 (18.5) [-0.9]	5 (9.1) [-3.4]	
Attachment in the relationship[a]					-
Secure	2 (6.3)	4 (10.5)	9 (34.6)	1 (2)	
Avoidant-insecure	15 (46.9)	4 (10.5)	5 (19.2)	9 (18.4)	
Anxious-insecure	15 (46.9)	30 (78.9)	12 (46.2)	39 (79.6)	
Suicide by perpetrator					14.754*
No suicide	26 (66.7) [1.9]	28 (63.6) [1.6]	10 (32.3) [−2.6]	26 (48.1) [−1.0]	
Attempted	7 (17.9) [−0.8]	4 (9.1) [−2.5]	11 (35.5) [1.9]	16 (29.6) [1.5]	
Committed	6 (15.4) [−1.4]	12 (27.3) [0.6]	10 (32.3) [1.2]	12 (22.2) [-0.3]	

*$p<.05$; **$p<.01$; ***$p<.001$

[a] The variable of attachment in the relationship displays a percentage of cells with an expected count below 5 that exceeds 20%, which is why the results are only shown at a descriptive level

after the act. They are the type with the shortest length of relationship (4 years). Furthermore, at a descriptive level, this group demonstrates an avoidant attachment style.

Violent The profile of this perpetrator is a man aged 45.1 years on average. This type of perpetrator presents a tendency towards psychoticism, does not consume alcohol, and has a prior criminal record, in addition to previous complaints in the VioGén System. At the time of the crime, the perpetrator was not in a relationship with the victim (ex-partner or separated). The duration of the relationship is 9.5 years. At a descriptive level, this perpetrator presents an anxious-insecure attachment style in the relationship.

Pathological The profile of this perpetrator is that of a man aged 51. He comes from a structured family and presents a low tendency towards psychoticism, without consumption of alcohol and without a criminal record or previous complaints in the VioGén System. He was in a relationship with the victim (partner or spouse) and attempted to commit suicide after the event. This group displays the longest time in the relationship (12 years). At a descriptive level, these perpetrators demonstrate a secure attachment style.

Pathologically Violent The profile of this perpetrator is that of a man aged 46.1 years. He comes from an unstructured family with a low level of education. He presents a tendency towards emotional instability (high neuroticism) and psychoticism; he also consumes alcohol, tends to have a prior criminal record, and exhibits criminal versatility, and registers previous complaints in the VioGén System. These perpetrators reject help from their environment for their problems. In this type of cases, the duration of the relationship is 10 years. At a descriptive level, this group exhibits an anxious-insecure attachment style.

Discussion

The typology of those who commit femicide as presented in this paper was carried out using the methodology implemented by Dawson and Piscitelli (2021) for the identification of groupings of risk factors and for the classification of the murderers of women based on the dimensions of violence and psychopathology. For this, the VPR risk factors of recidivism of intimate partner violence against women were used, which are comparable to those used by the study cited.

First, at a descriptive level, differences were found in the presence of the factors used in this study as compared to the study by Dawson and Piscitelli (2021). The factor "the victim thinks that the aggressor is capable of killing her" exhibits a difference of 36.2% (8.8% in the Spanish study as opposed to 45% in the Canadian study), the factor "victim ends the relationship" exhibits a difference of 23.8% (46.2% compared to 70%), and the factor of "existence of violence" is also lesser than in the Canadian study (66.7% compared to 73%). In turn, the factor "work-related problems in the life of the aggressor" is the only one that is more present in the Spanish sample (49.1% compared to 40%). In the remainder of the factors, the percentage difference is between 14.1 and 18.4%. Given that the factors used in both studies are quite specific, these differences cannot be attributed to nuances in the definition of said factors in each country. As various studies have shown, sociocultural factors help to understand cases of femicide (González-Álvarez et al., 2021; Kouta et al., 2018), which is why it is to be expected that certain cultural and social norms and beliefs influence the type of violence exercised against intimate partners and the justification of said

violence, which will give rise to differences between countries. Although aggressors from different countries may exercise physical violence against their partners or exhibit suicidal ideation, the presence of these factors may vary as a reflection of the sociocultural norms of the country, where the forms of understanding intimate partner relationships or the use of violence as a way of resolving conflicts may be understood differently than in other countries. As made evident in the introduction, the two-dimension model can be applied in different contexts, but this does not necessarily mean that the aggressors from one country must exhibit the same scores in these dimensions. This is why it is necessary to continue carrying out typological studies in different countries in order to determine the extent to which cultural factors may help to understand the phenomenon of femicide.

The MCA found that 3 of the 10 factors proposed by the Canadian study did not present a sufficiently significant score in either of the two dimensions in the Spanish sample, which is why they were excluded. The 7 factors used in the final analyses are supported by the scientific literature, since the majority thereof have been identified as risk factors for femicide in the meta-analyses carried out by Spencer and Stith (2018) and Matias et al. (2020). These 7 factors were formed into groups based on the two dimensions of violence and psychopathology and were able to explain a high percentage of the variance (51.9%). The results made it possible to identify the existence of the two underlying dimensions that had previously been identified by the literature. These two dimensions have been applied to classify non-lethal intimate partner aggressors (e.g., Holtzworth-Munroe & Stuart, 1994) and perpetrators of femicide (e.g. Dixon et al., 2008). This has even been applied to intimate partner aggressors in Spain (González-Álvarez et al., 2021). All of this allows for the conclusion that the proposed typology has a strong theoretical and empirical basis.

The two-stage cluster analysis of these two dimensions automatically identified 3 groups of perpetrators of femicide. Upon comparison with the groups proposed by Dawson and Piscitelli (2021), the violent type corresponds to non-depressed/violent, whereby this type of perpetrator of femicide was less common in the Spanish than in the Canadian sample (25.7% compared to 32%). The group violent with high pathology corresponds to depressed/violent and presents a very similar percentage in both samples (33.3% compared to 34%). Lastly, although they are not totally equivalent, the remaining types are that of mild disorder and non-depressed/non-violent; these perpetrators of femicide are more common in Spain (40.9% compared to 34%). The aggressors with high scores in both dimensions present a similar frequency in both samples, but the aggressors with a high level of violence are more common in the Canadian sample, while the aggressors with low scores in both dimensions are more common in the Spanish sample. This reinforces the possible cultural differences; specifically, as observed with the factors, it seems that the aggressors of the Canadian sample generally display a greater frequency of factors of violence and psychopathology, while the profile of the Spanish perpetrators of femicide tends to be more normalised.

Nonetheless, in accordance with the work of González-Álvarez et al. (2021), the 4-cluster solution is considered to be superior, as the combination of two independent dimensions can be used to configure four pure groups, with the normalised type (low violence and low pathology) at one end and the pathologically violent (high violence and high pathology) at the other; this is rounded out by the two complementary groups, the violent (high violence and low pathology) and the pathological (low violence and high pathology). In accordance with this logic, the typology by Dawson and Piscitelli (2021) did not identify the group with a low score in violence and a high level of disorder. The same occurred with the British typology by Dixon et al. (2008), also comprising two dimensions (although in this case consisting of 20 variables) and three groups, in which the cluster that only exhibited high

scores in the dimension of pathology was not identified either. The absence of this type may be due to the type of sample analysed; for example, the study by Dixon et al. (2008) worked with a prison sample, which may have meant that the perpetrators with severe disorders or those who committed suicide after the event were excluded from the analysis. As already indicated in the study by Vignola-Lévesque and Léveillée (2021), it is crucial to pay attention to the psychological factor when establishing typologies of intimate partner aggressors and perpetrators of femicide, which is why the identification of a subtype with high scores in the dimension of psychopathology alone is important. This same study by Vignola-Lévesque and Léveillée (2021) identified the unstable dependent partner type; alexithymia and suicide attempts were characteristic of these cases. And even in Spain, the study by Aguilar-Ruiz (2018) was able to identify different types of killers of women with disorders or mental disturbances.

Although it is hard to compare the Spanish proposal of 4 groups with the Canadian and British typologies, the equivalent types would be as follows: normalised (23.4%), non-depressed/non-violent (34%) and low criminality and low psychopathology (15.3%), respectively; pathologically violent (32.2%), depressed/violent (34%) and moderate-high criminality and high psychopathology (36.1%); violent (25.7%), non-depressed/violent (32%) and high criminality and low-moderate psychopathology (48.6%). The Spanish pathological cluster (18.7%) does not have an equivalent in Canada nor in the UK. Thus, as already mentioned above, although the two-dimensional model appears to be applicable in various contexts, the differences when grouping the subjects according to this model represent an invitation to continue studies in this regard, in order to find the best characteristics when it comes to determining this two-dimensionality in a more homogeneous manner at an international level.

Opting for a model with 4 groups enabled the division of the mild disorder type into two: normalised and pathological, whereby the former exhibited low scores in both dimensions, and the latter exhibited an average score in the dimension of psychopathology. It is understood that this classification is a better representation of all possible scenarios and is better adapted to the Spanish sample, since at a descriptive level, the factors showed a reduced presence in comparison to the Canadian sample. It is for this reason that it is important to identify the normalised type, especially from the standpoint of prediction and prevention, because as this is a type of aggressor who exhibits scores that are low or zero in both dimensions, he will be harder to predict; alternatively, other factors that have not been considered in this study would have to be applied. What is more, the pathological type has a profile that exhibits neither violence nor a prior criminal record, with a secure attachment style, and registers the highest percentage of cases involving attempted or committed suicide. These characteristics, added to the fact that this group has the highest average age and the longest relationship and still maintains a relationship with the victim at the time of the crime, allow for the hypothesis that these could be cases of couples of an advanced age in which suicide pacts, phenomena such as caregiver stress syndrome and both physical and mental illnesses associated with age could play a decisive role in the commitment of the homicide. The literature has indicated that these types of cases are very different from the rest and require a differentiated explanatory framework. The fact that this study distinguished between this type and the normalised type, therefore, is considered one of its strengths. Nevertheless, it should be pointed out that it is easy to identify and classify the individuals who exhibit extreme scores in both dimensions, but the reality is complex, and in some cases it may be complicated to strictly categorise a perpetrator into one group.

The 4 groups demonstrated significant differences in terms of the sociodemographic characteristics and the personalities of the perpetrators, as well as in the variables of the

relationship dynamics. This reinforces the idea that it is possible to create typologies of perpetrators of femicide, just as other authors have already demonstrated. The review conducted by Kivisto (2015) proposes a typology with 4 types, based on the sociodemographic characteristics and the characteristics related to violence and mental disorders. Albeit with some exceptions, the mentally ill type can be compared to the pathological, as can the undercontrolled/dysregulated to the violent, the chronic batterer to the pathologically violent, and the overcontrolled/catathymic to the normalised. In Spain, the study by Aguilar (2017) only distinguished between the profile of the normalised and the antisocial perpetrator of femicide. By reducing the number of types of murderers of women to two, it seems that the main discriminating factor is that of having a less socially integrated lifestyle, whereby the existence of addictions, a prior criminal background and intimate partner violence are associated with the antisocial type, and suicidal behaviours and mental disorders with the normalised type, relegating the dimension of pathology to second place. This same author (Aguilar-Ruiz, 2018) also found that within the group of perpetrators of femicide with mental disorders, they exhibited a greater (antisocial/coercive/responsible) or lesser degree of violence (mentally ill/not responsible).

The most important finding of this study is that different types of perpetrators of femicide can be identified, who may or may not exhibit behavioural signs of violence or psychopathology, which would reinforce the idea that femicide is not always the end of a history of abuse. The implications for prevention and prediction are also important. As previously noted, the pathological and above all the normalised type, who represent 42.1% of the perpetrators of femicide in Spain, do not display the factors that best predict the death of the partner when tools of police risk assessment of recidivism are used. But of course, since no previous records of violence or complaints exist, these tools of detection will not be employed; instead, it is necessary to seek other preventive factors outside of the police and judiciary environment, as the study by Elisha et al. (2010) has shown. All of which should be interpreted as the reality being complex, and as the need to understand femicide as a deficient situational response when faced with a lack of effective strategies for resolving conflicts.

Limitations and Future Lines of Research

With regard to the sample size, although it is similar to the one used in the study by Dawson and Piscitelli (2021), the analyses should be replicated with a larger sample. Furthermore, since the replication of a study was taken into consideration, only 7 factors were used for the identification of the two dimensions, which is a lower number than that used by Dawson and Piscitelli (2021) and a considerably lower number than in the study by Dixon et al. (2008), which could also be replicated using Spanish data.

Despite this limitation, tests of independence were undertaken for all of the sociodemographic characteristics and the perpetrator's personality as well as for the variables of the relationship dynamics, which is a strength compared to the replicated study that only found significant differences in 4 variables (age of the victim, whether the relationship was maintained, separation, and suicide). Another major strength of the study is the methodology used to collect the information. The interviews provide greater empirical support for the data and make it possible to discover information that would otherwise not be available.

Aside from replicating the analyses with a larger sample and including more factors to classify the femicides, two major future lines of research are proposed. Firstly, it would be necessary to analyse the characteristics of the victims, paying particular attention to the

factors of vulnerability, in such a way that the possibility could be explored of creating a typology of victims so as to determine whether a specific type of victim is associated with a specific type of perpetrator. Secondly, as a complement to the objective already expressed, variables should be included that go into depth on the relationship dynamics. Although the existence of prior violence is studied, a deep dive could be made into what type of violence (e.g. physical vs. psychological; mild vs. severe) permits a better distinction between types of perpetrators of femicide, and the same could be applied to control and threats, which are important factors in the VPR. In essence, what is suggested is to approach the problem in a more comprehensive way, understanding that femicide is the result of an interaction between victim and aggressor, and that as a consequence of this interaction, a unique relationship dynamic is generated that has an impact on both members of the couple.

Practical Implications

The analyses have shown that it is possible to identify groups of perpetrators of femicide using the VPR risk factors, which is why, in addition to its predictive capacity in terms of recidivism (lethal and non-lethal), a capacity of classification can also be attributed to this tool. This has substantial implications from a practical point of view. On the one hand, being able to classify the aggressors into groups is valuable in and of itself, since it helps to better understand the phenomenon. On the other, from a police perspective, classifying the individuals could be a preliminary step before the prediction of the risk of femicide, as instead of using a prediction tool with the same weighting of factors for all cases, weightings could be calculated based on the group, which would allow for the prediction of the risk to be more individualised and precise, thus helping to improve the protection of the victims who report this violence. For example, it is not possible to use factors of violence in the case of aggressors from the pathological group, so it would be necessary to give more weight to factors of instability. On the other hand, it would also be helpful to give more weight to contextual variables in the case of normalized aggressors, as the study by Elisha et al. (2010) has shown.

From a treatment standpoint, the combination of factors that give rise to different groups can help with the planning of interventions, as much for the prevention of a possible episode of fatal violence as for developing reintegration programmes with convicted perpetrators. Studies such as that of Babcock et al. (2004) highlight that intervention programmes do not display great effectiveness, which is why the identification of different types of aggressors could help to individualise these programmes, increasing their effectiveness, but would also make it possible to identify whether there is any specific type that is more reluctant to accept this type of treatment (Holtzworth-Munroe & Meehan, 2004). Therefore, not treating the entire intimate partner aggressors as a homogeneous group and classifying them will make it possible to identify specific aspects on which to act, reducing the risk of femicide (Elisha et al., 2010).

Given that the type of information police investigators are able to access is limited and restricted to cases with a prior complaint, collaboration between different professionals is required in order to conduct an integral intervention in the prevention of future femicides. In order to act in the cases that are not made known to the police, employees in the welfare and health sectors should be trained to be able to recognise certain risk factors. Consequently, these professionals could also help with the early detection of these cases, and the social services could help the aggressors to confront situations of conflict and provide them with effective strategies for conflict resolution that may avoid fatal results. Therefore, the

recommendation at this point is to consider the typologies of the aggressors when developing treatment programmes and, above all, evaluate which strategies work better with each group of aggressors.

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Declarations

Conflict of Interest The authors declare no competing interest.

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