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Differential Psychopathological Profile of Male Intimate Partner Violence Perpetrators Depending on Problematic Alcohol Use

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Abstract

Objective: This study explored the differential psychopathological profile between male perpetrators of intimate partner violence (IPV) with and without problematic alcohol use (PAU). Method: A sample of 981 men was recruited from a specialized IPV perpetrators treatment programme. All of them were assessed with the Symptom Checklist-90-Revised (SCL-90-R), the State-Trait Anger Expression Inventory-2 (STAXI-2), and the Millon Clinical Multiaxial Inventory-III (MCMI-III). Comparisons between perpetrators with (n = 125) and without (n = 856) PAU on all the variables studied were carried out. Results: Perpetrators with PAU were less frequently employed and had higher rates of previous psychiatric history and childhood family violence. Moreover, they presented with higher levels of cognitive biases about women and violence. On a psychopathological level, participants with PAU reported significantly higher scores on the SCL-90-R, on the STAXI-2, and on almost all the MCMI-III scales than did those without PAU. The multivariate logistic regression analyses showed that the main variables related to PAU were as follows: higher levels of previous psychiatric history, distorted thoughts about women, depression, drug dependence, and various personality disorders (bipolar, dysthymia, antisocial, avoidant, borderline, and schizotypal); and lower scores on internal control, anger reaction, paranoid ideation, and schizoid personality disorders. Discussion: IPV perpetrators with PAU have a more severe psychopathological profile than those without PAU. Additionally, several variables along with PAU may have contributed to the development of IPV. Therefore, tailored interventions should be developed for those perpetrators with PAU.

Keywords: intimate partner violence, alcohol abuse, male perpetrators, assessment, psychopathology

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1. Introduction

The relationship between problematic alcohol use (PAU) and intimate partner violence (IPV) perpetration is still a controversial debate. There is solid evidence indicating that alcohol is associated with and increases the likelihood of IPV perpetration (Arteaga, López-Goñi, et al., 2015; Brasfield et al., 2016; Cafferky et al., 2018; Crane et al., 2014). Moreover, PAU has been identified as a mediator of the association between psychiatric disorders and IPV (Okuda et al., 2015) and has also been related to the type and severity of perpetrated violence (Shorey et al., 2012). The prevalence rate of PAU among male perpetrators ranges between 17% and 57% (Brasfield et al., 2016; Elklit et al., 2018; Grigorian et al., 2020; Langenderfer, 2013; Lila, Gracia, & Catalá-Miñana, 2020) depending on the research method and procedure (Cafferky et al., 2018; Foran & O'Leary, 2008; Langenderfer, 2013). Furthermore, approximately 40% of men in treatment for alcohol dependence report IPV perpetration (Arteaga, Fernández-Montalvo, et al., 2015; Chermack & Blow, 2002; Crane & Easton, 2017).

Despite the abovementioned data, the association between PAU and IPV perpetration has small to moderate effect sizes and is less consistent than generally expected when controlling for other factors, such as jealousy, anger control, or drug consumption (Capaldi et al., 2012; Foran & O'Leary, 2008; Gil-Gonzalez et al., 2006; Stith et al., 2004). Beyond the co-occurrence of PAU and IPV perpetration, it is evident that alcohol is not necessary or sufficient for the commission of IPV (Cafferky et al., 2018; Thomas et al., 2013). Alcohol may play a role in the development of IPV, but the link is complex, and it is itself insufficient to explain IPV dynamics (Clements &

Schumacher, 2010). In fact, diminishing alcohol consumption among perpetrators in treatment for alcohol dependence reduces but does not eliminate the perpetrated IPV (Fernandez-Montalvo et al., 2011; Fernández-Montalvo et al., 2019). PAU and IPV are usually related to additional individual and situational risk factors that need to be considered to explain both behaviours (Crane et al., 2016; Grigorian et al., 2020; Parrott & Eckhardt, 2018).

Personality traits and psychopathology are relevant to understand how alcohol facilitates aggression in some men but not in others (Parrott & Giancola, 2004). Perpetrators with higher levels of alcohol consumption have been identified as having a higher number of psychopathological symptoms than perpetrators without PAU (Catalá-Miñana et al., 2013). PAU and IPV perpetration have been both related to a wider range of deviant behaviour or antisocial characteristics, in which alcohol increases the risk of violence for men with aggressive predispositions (Clements & Schumacher, 2010; Johnson et al., 2006; Klostermann & Fals-Stewart, 2006). Deficits in empathy (Clements & Schumacher, 2010; Romero-Martinez et al., 2019), hostility towards women, and acceptance of interpersonal violence (Johnson et al., 2006) have also been related to alcohol and IPV perpetration. Additionally, although the relationship is still unclear, there is a bidirectional link between substance use, IPV perpetration, and anger management (Clements & Schumacher, 2010; Oberleitner et al., 2013; Thomas et al., 2013). Moreover, childhood maltreatment is interrelated with adult personality traits, which may also overlap with alcohol consumption and IPV perpetration (Bevan & Higgins, 2002; Ehrensaft et al., 2003).

IPV perpetration is based on multifactorial individual and situational circumstances (Beck & Heinz, 2013), and personality traits seem to be a relevant factor when interpreting IPV itself and alcohol-related IPV. However, there is a substantial

percentage of IPV perpetrators who do not present with PAU. As there are few and varying studies that have compared the personality profiles of perpetrators with and without PAU (Catalá-Miñana et al., 2013; Kraanen et al., 2010; Thomas et al., 2013), it is necessary to analyse the psychopathological differences between them. Thus, the main purpose of the present study was to identify the specific sociodemographic, cognitive, and psychopathological profile of male IPV perpetrators with PAU.

2. Method

2.1. Participants

The initial sample consisted of 1135 male IPV perpetrators who were in a specialized treatment programme due to having committed a gender violence offence against their female partners. This programme is developed by PSIMAE (Institute of Judicial and Forensic Psychology), which is directed by the Social Service of Justice of the Navarra Government, and provides treatment for all IPV perpetrators in Navarra (Spain). All patients who began the treatment programme from March 2009 to December 2019 were included in the study.

The sample inclusion criteria were as follows: a) being older than 18 years of age; b) having been involved in violence against the current female partner; c) not suffering from any serious mental disorder (psychotic disorder or intellectual disability); d) having knowledge of the Spanish language; and e) signing the informed consent to participate in the study after having been properly informed of its characteristics.

From the initial sample, 154 men (16.6%) were excluded from the study. Twenty of them refused to participate, and the remaining 134 did not meet the inclusion criteria. Consequently, 981 participants (86.4% of the initial sample) were studied.

The mean age of the sample was 37.5 years (SD = 10.8) and nearly half was Spanish (48.5%). The participants were court-referred to the treatment programme

(71.4%), imprisoned (22.1%), or sought treatment voluntarily (6.5%). The rationale for placing a subject in a court-referred treatment versus an imprisonment treatment is mainly related to the severity of the offence. Spanish legislation allows judges to impose a suspended sentence if three conditions are met: the person is a primary offender, the sentence does not exceed two years of imprisonment, and the offender agrees to participate in a specialized treatment programme.

2.2. Assessment Measures

2.2.1. Violence Variables

The General Structured Interview of Batterer Men (Echeburúa & Fernández-Montalvo, 1998) comprises five sections that collect data on the respondents' demographic characteristics, potential labour problems, child and adolescent development, potential problems of IPV in previous relationships, the current situation with their partners, health status, criminal records, and social relations. It also explores psychopathological variables that are usually related to IPV perpetrators (mainly jealousy and abuse of alcohol). This interview was used to identify the self-reported presence of childhood family violence (CFV) (physical, psychological, and/or sexual), taking into consideration whether respondents directly suffered and/or witnessed the abuse.

The Inventory of Distorted Thoughts about Women (Echeburúa & Fernández-Montalvo, 1998) comprises a checklist of 13 binary items aimed at detecting irrational thoughts in the perpetrator that are related to sexual roles and the inferiority of women. Each affirmative response scores 1 point, so that the total inventory score ranges between 0 and 13 points. The higher the score is, the greater the number of cognitive distortions related to women. Cronbach's alpha for this inventory is .87.

The Inventory of Distorted Thoughts on the Use of Violence (Echeburúa & Fernández-Montalvo, 1998) comprises a checklist of 16 binary items aimed at detecting irrational thoughts in the perpetrator that are related to the use of violence as an acceptable method of conflict resolution. Each affirmative response scores 1 point, so that the total inventory score ranges between 0 and 16 points. The higher the score, the greater the number of cognitive distortions connected with the use of violence as an acceptable way of resolving conflicts. Cronbach's alpha for this inventory is .94.

2.2.2. Psychopathological Variables

The Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1992; Spanish version of González de Rivera, 2002) is a self-administered general psychopathological assessment questionnaire. It consists of 90 questions that are answered on a 5-point Likert-type scale, ranging from 0 (*none*) to 4 (*very much*). The SCL-90-R measures the following nine areas of primary symptoms: somatization, obsessive-compulsive behaviours, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. It also provides three indices that reflect the subject's overall level of severity: the Global Severity Index (GSI), the Positive Symptom Distress Index (PSDI), and the Positive Symptom Total (PST). The internal consistency for the Spanish version ranges from .70 to .90.

The State-Trait Anger Expression Inventory (STAXI-2) (Spielberger, 1999; Spanish version of Miguel-Tobal et al., 2001) consists of 15 items related to state-anger (the intensity of the emotion of anger in a specific situation) and an additional 10 items related to trait-anger (the individual disposition to experience anger habitually). The range of scores is from 15 to 60 on the state-anger scale and from 10 to 40 on the traitanger scale. The higher the score is, the higher the level of anger. The STAXI-2 also has a third subscale of 24 items connected with the form of expressing anger (anger

expression-out, anger expression-in, and anger control). The internal consistency for the Spanish version ranges from .82 to .89.

The Millon Clinical Multiaxial Inventory-III (MCMI-III) (Millon, 1997; Spanish version of Cardenal & Sánchez, 2007) is a clinical questionnaire used to assess general psychiatric disorders, including personality disorders (PD), similar to those contained in the DSM-IV-TR. It is a self-report inventory consisting of 175 dichotomous items (true or false). It comprises 3 validity scales, 11 clinical personality pattern scales, 3 severe personality scales, 7 clinical syndrome scales, and 3 severe syndrome scales. The MCMI-III is interpreted using base-rate (BR) transformation scores. The presence of a BR score lower than 75 is considered not clinically relevant. When BR scores are between 74 and 85, this suggests the presence of traits and symptoms associated with the disorder, albeit not at a diagnostic level. A BR score higher than 84 reflects a trait or symptom at the diagnostic level. The Spanish adaptation manifested alpha coefficients between .65 and .88 and a high test-retest reliability (.91) (Cardenal & Sánchez, 2007).

To determine the presence of clinically relevant PAU, a BR \geq 75 on the alcohol dependence scale (scale B) of the MCMI-III was used. This scale measures the presence of current problematic drinking or a history of alcoholism with associated symptoms such as subjective distress, family problems, and deficits in social and occupational functioning.

2.3. Treatment Programme

The intervention is a broad treatment programme that is based on cognitive behavioural therapy. It is composed of 20 one-hour individual sessions delivered once a week. The programme includes the modification of cognitive distortions and behavioural deficits related to IPV. Regarding PAU, it is not necessary to stop drinking to enter the treatment programme. There is a unique general protocol, which has been

applied to all of the participants during the research time. However, depending on the clinical judgement, the therapists can adapt the length or the techniques used to the specific current needs of each participant. A clinical psychologist of the programme centre conducted the treatment sessions who is usually the same professional who collects the initial information through the questionnaires and interviews.

In the first part of the intervention (sessions 1-3), motivational aspects, such as the acceptance of responsibility for the IPV and motivation for therapy, are taken into account. The second part (sessions 4-15) includes the treatment of psychopathological symptoms that are usually associated with violent men. This part focuses on empathy and skills training, anger management, and the modification of cognitive distortions related to IPV. Finally, the treatment programme includes a specific intervention in relapse prevention (sessions 16-20) by identifying high-risk situations for violent behaviour and teaching IPV perpetrators adequate coping strategies that provide an alternative response to violence.

2.4. Procedure

The protocol for this study was approved by the ethics committee of the XXX (identifying information removed) (code XXX).

Once the clinical sample was selected, the assessment of the sample was carried out in three ninety-minute individual sessions conducted by clinical psychologists of the treatment centre. The sessions took place prior to the beginning of the treatment once a week for three weeks. The time interval between the sessions was the same for each participant. Data related to sociodemographic characteristics and violence variables were collected in the first session through the General Structured Interview of Batterer Men. In the second session, the MCMI-III was administered and, finally, the SCL-90-R

and the STAXI-2 were completed in the third session. None of them received any compensation, monetary or otherwise, for participating in the study.

2.5. Data Analysis

The distribution of missing data was studied, and the extent was below 5%, without significant differences between subjects with and without available data on each of the variables studied. Therefore, the pairwise deletion method, which involves analysing the available cases for each variable, was selected. Descriptive analyses were conducted for all variables. Comparisons between the two groups were performed using χ^2 or Student's t statistics depending on the nature of the variables studied. Effect sizes (Cohen's d) were provided as follows: d = 0.20 (small effect size), d = 0.50 (medium effect size), and d = 0.80 (large effect size). Two logistic regression analyses (forward method) were conducted to determine which specific factors were more relevant in differentiating between perpetrators with and without PAU. The first logistic regression analysis included all the clinical variables as covariates (i.e., previous psychiatry history, SCL-90-R, STAXI, and clinical variables of the MCMI-III) because all of them have been shown relevant in previous studies. The covariates in the second logistic regression analysis were all the personality variables of the MCMI-III. Those variables that exhibited statistically significant differences in the bivariate analyses were included as independent variables. A difference of p < .05 was considered significant. Bonferroni correction was conducted for multiple comparisons to avoid Type I error. Statistical analyses were carried out using SPSS software (version 25.0).

3. Results

3.1. Prevalence of Problematic Alcohol Use

Taking into consideration a BR \geq 75 on the alcohol dependence scale of the MCMI-III, the prevalence rate of PAU in the sample was 12.7% (*n* = 125). Most of the participants did not present with PAU (87.3%; *n* = 856).

3.2. Sociodemographic Variables and Programme Access

The comparisons of sociodemographic variables and treatment access are shown in Table 1. The mean age of the total sample was 37.5 years (SD = 10.8), without significant differences between the groups. No significant differences were found in terms of the length of the relationship with the victim, nationality, education level, and having children together.

PLACE TABLE 1 HERE

Participants with PAU had a statistically significant higher prevalence of unemployment, previous psychiatric history, and the presence of CFV than did those without PAU, with small effect sizes. Among those who suffered CFV, perpetrators with PAU had significantly higher rates of direct abuse than did perpetrators without PAU.

The rate of court-referred access to the treatment programme was significantly higher for perpetrators without PAU, whereas the rates of imprisoned and voluntary participants were higher for perpetrators with PAU. The effect size of these differences was small.

3.3. Cognitive Biases

The results of the comparisons of cognitive biases related to the inferiority of women and to the use of violence as an acceptable way of resolving conflicts are shown in Table 2. The group with PAU showed statistically significant higher scores of distorted ideas about women than did the group without PAU, with medium effect size.

PLACE TABLE 2 HERE

3.4. Psychopathological Variables

The results of the SCL-90-R and the STAXI-2 are shown in Table 2.

Perpetrators with PAU reported significantly higher scores on all the scales of the SCL-90-R. Comparisons on the STAXI-2 showed statistically significant differences in all of the evaluated scales with medium to high effect sizes. Perpetrators with PAU reported higher scores on most of the scales, except for the external control and internal control domains, in which those without PAU scored higher.

3.5. Prevalence of Clinical Syndromes and Personality Disorders

The prevalence of the MCMI-III clinical syndromes and PD (BR \ge 85) are shown in Table 3. With respect to clinical syndromes, the group with PAU reported significantly higher percentages on anxiety, dysthymia, drug dependence, PTSD symptoms, thought disorder, and major depression scales than did perpetrators without PAU. These differences had small to medium effect sizes.

PLACE TABLE 3 HERE

Regarding the total rate of PD, 35.7% of the sample presented with at least one PD without significant differences between groups. However, participants with PAU reported significantly higher percentages on avoidant, dependent, antisocial, and schizotypal scales than those without PAU. On the other hand, perpetrators without PAU showed a statistically significant higher prevalence of compulsive personality disorder than did those with PAU. Finally, perpetrators with PAU reported significantly higher percentages on disclosure and debasement modifying indices, while those without PAU reported significantly higher on the desirability scale. Effect sizes were small to medium.

3.6. Clinical Syndromes and Average PD Scores

The mean scores of the MCMI-III clinical syndromes and PD are shown in Table 4. All the scales showed statistically significant differences between groups with medium to high effect sizes. Perpetrators with PAU presented with significantly higher scores on most of the variables, except on the histrionic, narcissistic, and compulsive scales, as well as on the desirability index, in which those without PAU exhibited higher scores.

PLACE TABLE 4 HERE

3.7. Multivariate Analysis for Differentiating Between Perpetrators with and without Problematic Alcohol Use

Two logistic regression analyses were performed (Table 5). Regarding clinical variables, the results showed that the main domains related to PAU were having previous psychiatric history, a higher score on the depression subscale (SCL-90-R), higher levels of distorted thoughts about women, a higher score on the drug dependence, bipolar, and dysthymia scales (MCMI-III), a lower score on internal control and anger reaction (STAXI), and a lower score on the paranoid ideation scale (SCL-90-R). These variables correctly classified 90.1% of the cases (36% with PAU and 98% without PAU).

PLACE TABLE 5 HERE

According to PD, the main domains related to PAU were a higher score on the antisocial, avoidant, borderline, and schizotypal scales and a lower score on schizoid personality disorder. These variables correctly classified 89.1% of the cases (29% with PAU and 98% without PAU) (Table 5).

4. Discussion

In this paper, the differential profile of male IPV perpetrators according to PAU has been described. Specifically, sociodemographic data, cognitive biases about women

and violence, and psychopathological traits have been analysed. It constitutes one of the few studies that have compared IPV perpetrators regarding PAU. The results indicate that there is a low prevalence of PAU in the sample (12.7%). This percentage is lower than in prior research, using both the same instrument and criteria (25-28%) (Elklit et al., 2018; Gondolf, 1999) and other measuring instruments (17-57%) (Brasfield et al., 2016; Langenderfer, 2013). However, no cultural or sociodemographic differential factors have been found between these studies that could explain this difference.

Although alcohol *per se* may not be the strongest correlate of IPV perpetration (Langenderfer, 2013), it is linked to several variables that may contribute to its development. In this study, some of these variables are related to sociodemographic characteristics, such as higher rates of unemployment, previous psychiatric history, and CFV. This is in line with some previous studies (Bevan & Higgins, 2002; Fernández-Montalvo et al., 2020), but not with others that have not found differences between groups about the employment situation (Catalá-Miñana et al., 2013; Thomas et al., 2013).

On the other hand, perpetrators with PAU showed significantly higher rates of distortions about women compared to perpetrators without PAU. Similarly, previous studies have found that IPV perpetrators with PAU have higher levels of hostility towards women and more sex role stereotyping (Johnson et al., 2006; Thomas et al., 2013). In these same studies, a higher proclivity towards general interpersonal violence was also found among perpetrators with PAU. However, the results of our research did not show a significant difference between groups in the scale of distorted thoughts on the use of violence.

With regard to psychopathological traits, these results are similar to Catalá-Miñana et al. (2013), who established that IPV perpetrators with alcohol consumption

had significantly higher scores on all the SCL-90-R scales than did those without PAU. It has also been suggested that alcohol could interact with anger-induced disinhibition to increase the likelihood of IPV aggression in some men (Clements & Schumacher, 2010). Similar to Thomas et al. (2013), the STAXI-2 results showed that perpetrators with alcohol consumption scored significantly higher on all anger scales except for external and internal control. This means that perpetrators without PAU have a better capability to control their angry feelings (Miguel-Tobal et al., 2001). Parrott and Giancola (2004) stated that among individuals with high trait anger and low ability to control anger episodes, alcohol enhances general aggression.

In relation to the MCMI-III, no significant differences were found between groups in the prevalence of the total number of PD, although participants with PAU presented more frequently with antisocial, schizotypal, and avoidant personality disorders. The most frequent clinical syndromes in perpetrators with PAU were drug dependence, anxiety, and thought disorder. When mean scores were compared, perpetrators with PAU presented with significantly higher scores on most of the clinical syndromes and PD. In contrast, those without PAU scored higher than perpetrators with PAU on desirability, and histrionic, narcissistic, and compulsive personality disorders. No previous studies using the MCMI-III to compare IPV male perpetrators with and without PAU have been found, which makes it difficult to contrast the results. However, Thomas et al. (2013) found higher levels of borderline personality disorder among perpetrators with substance consumption problems, and Catalá-Miñana et al. (2013) stated that IPV perpetrators with PAU had higher levels of drug abuse than did those without PAU.

Furthermore, in this study, the higher levels of psychopathological symptoms and PD were related to the presence of PAU in the logistic regression analyses. These

findings showed that PAU among IPV perpetrators was related to having a previous psychiatric history, and to the presence of drug dependence. It is not possible to establish causal inferences between IPV and PAU or to determinate their order of appearance. However, both IPV and substance consumption might be in interaction with additional psychopathological conditions, psychosocial distress, and situational factors. These factors should be further analysed in future studies to examine how the combination of all of them interact to yield aggression (Clements & Schumacher, 2010). Distorted thoughts about women also appeared associated with PAU. This cognitive bias has been identified as one key factor in all IPV perpetrators (Fernandez-Montalvo et al., 2012; Fernandez-Montalvo et al., 2005). Finally, PAU was also associated with a lower anger internal control and higher anger reaction that, in conjunction with antisocial, borderline, or depressive personality traits, could interfere with the ability to control substance consumption or with the loss of control over violence after alcohol consumption.

Some clinical implications from this study can be drawn. Specific treatment for IPV perpetrators with PAU and specific attention to their victims might be required for greater safety, because according to previous studies these perpetrators are more likely to commit higher levels and more severe violence (Thomas et al., 2013). Tailored interventions should be developed for those with abusive alcohol consumption (Crane et al., 2014) to prevent their higher rates of treatment dropout (Lila, Gracia, & Catala-Minana, 2020) and to reduce both alcohol use and violence (Eckhardt et al., 2015). Treating PAU alone is not enough to effectively reduce IPV (Fernández-Montalvo et al., 2019). Consequently, additional areas, such as anger management, childhood trauma, conflict resolution, personality disorders, and clinical symptoms, need to be

addressed in future treatment programmes for IPV perpetrators with PAU (Gilchrist et al., 2015; Thomas et al., 2013)

The following limitations should be considered when interpreting the results. First, it was not possible to obtain information about the type and severity of the perpetrated IPV, which might have given relevant information about alcohol-related aggression. Second, the use of the MCMI-III to assess PAU does not allow for a diagnosis of alcohol dependence. Most likely, the lower rate of PAU obtained in this sample is directly related to this limitation. Third, all data are based on self-report measures, which might have biased or underreported some results. Moreover, the number of variables studied is limited. This could explain that the logistic regression analyses correctly classified only 28-36% of individuals with PAU. Future studies should include other types of variables (e.g., contextual, labour, family or social) to better identify other factors related to PAU in IPV perpetrators. Finally, the crosssectional design of the study limits the capacity to establish causal relationships between the variables studied and IPV perpetration.

5. Conclusion

The present study supports a link between IPV perpetration, PAU, distorted thoughts, and psychopathological traits. Although there is not a causal relationship, perpetrators with PAU have a more severe psychopathological profile. In this study, IPV perpetrators with PAU showed higher levels of previous psychiatric history, mainly addiction-related problems. The main predictor variables identified for PAU were related to depression, distorted thoughts about women, anger control, and several personality disorders. Tailored programmes for IPV perpetrators with PAU should take into account these specific profiles to improve the effectiveness of the treatment.

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Table 1

Age37Length of relationship18Nationality8Spanish4Immigrant5Education level2Primary4	Total $N = 981$ Mean (SD) 7.54 (10.83) 3.31 (8.51) N (%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	Yes $n = 125$ Mean (SD) $35.98 (10.89)$ $8.24 (8.92)$ n (%) $52 (41.6)$ $73 (58.4)$ $64 (51.2)$ $60 (48)$ $1 (0.8)$	No $n = 856$ Mean (SD) $37.76 (10.81)$ $8.33 (8.45)$ $n (\%)$ $424 (49.5)$ $432 (50.5)$ $432 (50.5)$ $374 (43.7)$	<i>d</i> .16 .01 Phi .05 .08	$\frac{t (df)}{1.73 (979)}$ 0.10 (979) $\chi^2 (df)$ 2.75 (1) 5.80 (2)	p .085 .920 p .097
Age37Length of relationship18Nationality8Nationality4Spanish4Immigrant5Education level29Primary4Secondary4University4	Mean (SD) 7.54 (10.83) 3.31 (8.51) N (%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	Mean (SD) 35.98 (10.89) 8.24 (8.92) n (%) 52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	Mean (SD) 37.76 (10.81) 8.33 (8.45) n (%) 424 (49.5) 432 (50.5) 432 (50.5)	.16 .01 Phi .05	$ \begin{array}{r} 1.73 (979) \\ 0.10 (979) \\ \hline \chi^2 (df) \\ 2.75 (1) \end{array} $.085 .920 p
Age37Length of relationship18Nationality8Nationality5Education level29Primary2Secondary2University2	7.54 (10.83) 3.31 (8.51) N (%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	35.98 (10.89) 8.24 (8.92) n (%) 52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	37.76 (10.81) 8.33 (8.45) n (%) 424 (49.5) 432 (50.5) 432 (50.5)	.16 .01 Phi .05	$ \begin{array}{r} 1.73 (979) \\ 0.10 (979) \\ \hline \chi^2 (df) \\ 2.75 (1) \end{array} $.085 .920 p
Length of relationship18NationalitySpanishImmigrantEducation level2PrimarySecondaryUniversity	3.31 (8.51) N(%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	8.24 (8.92) n (%) 52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	8.33 (8.45) n (%) 424 (49.5) 432 (50.5) 432 (50.5)	.01 Phi .05	$ \begin{array}{r} 1.73 (979) \\ 0.10 (979) \\ \hline \chi^2 (df) \\ 2.75 (1) \end{array} $.085 .920 p
Length of relationship18NationalitySpanishImmigrantEducation level2PrimarySecondaryUniversity	3.31 (8.51) N(%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	<i>n</i> (%) 52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	8.33 (8.45) n (%) 424 (49.5) 432 (50.5) 432 (50.5)	Phi .05	$ \begin{array}{r} 0.10 (979) \\ \chi^2 (df) \\ 2.75 (1) \end{array} $.920 p
NationalitySpanishImmigrantEducation level2PrimarySecondaryUniversity	N (%) 476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	<i>n</i> (%) 52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	n (%) 424 (49.5) 432 (50.5) 432 (50.5)	.05	χ ² (df) 2.75 (1)	р
Spanish2Immigrant5Education level2Primary2Secondary2University	476 (48.5) 505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	52 (41.6) 73 (58.4) 64 (51.2) 60 (48)	424 (49.5) 432 (50.5) 432 (50.5)		2.75 (1)	
Immigrant5Education level2Primary2Secondary2University2	505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	73 (58.4) 64 (51.2) 60 (48)	432 (50.5) 432 (50.5)			.097
Immigrant5Education level2Primary2Secondary2University2	505 (51.5) 496 (50.6) 434 (44.2) 51 (5.2)	73 (58.4) 64 (51.2) 60 (48)	432 (50.5) 432 (50.5)	.08		
Primary 2 Secondary 2 University	434 (44.2) 51 (5.2)	64 (51.2) 60 (48)		.08	5.80(2)	
Secondary 4 University	434 (44.2) 51 (5.2)	60 (48)		.08	5.80(2)	
Secondary 4 University	434 (44.2) 51 (5.2)	60 (48)			5.00(2)	.055
University	51 (5.2)	· /				
	· · ·		50 (5.8)			
Employment situation						
	508 (51.8)	47 (37.6)	461 (53.8)	.11	12.70 (2)	.002
	429 (43.7)	73 (58.4)	356 (41.6)			
Retired	44 (4.5)	5(4)	39 (4.6)			
Children in common	()					
	539 (54.9)	61 (48.8)	478 (55.8)	.05	2.18(1)	.139
	442 (45.1)	64 (51.2)	378 (44.2)		- ()	
Previous psychiatric						
history						
	637 (64.9)	109 (87.2)	528 (61.7)	.18	31.19(1)	.000
	344 (35.1)	16 (12.8)	328 (38.3)	-		
Type of psychiatric			()			
history $(n = 637)$						
•	453 (71.1)	88 (80.7)	365 (69.1)	.12	9.26 (2)	.010
	133 (20.9)	11 (10.1)	122 (23.1)			
Personality disorder	51 (8)	10 (9.2)	41 (7.8)			
Childhood family						
violence (CFV)						
	293 (29.9)	56 (44.8)	237 (27.7)	.12	15.25 (1)	.000
	688 (70.1)	69 (55.2)	619 (72.3)			
Type of CFV (n = 293)			(,_,,)			
	200 (68.3)	49 (87.5)	151 (63.7)	.20	11.83 (1)	.001
	93 (31.7)	7 (12.5)	86 (36.3)			
Programme access		, (1=.0)				
-	700 (71.4)	71 (56.8)	629 (73.5)	.12	14.87 (2)	.001
	217 (22.1)	42 (33.6)	175 (20.4)		, (-)	
Voluntary	64 (6.5)	12 (9.6)	52 (6.1)			

Results of Sociodemographic Variables and Treatment Programme Access

Note. ¹Length of relationship = Years of relationship with the victim. ²Education level in Spain: primary

studies (6-12 years old), secondary studies (12-18 years old), university (>18 years old).

Bonferroni corrected p value < 0.05: p = .0045.

Table 2

		Problematio	e alcohol use			
	Total	Yes	No			
	N=981	<i>n</i> = 125	<i>n</i> = 856			
	Mean (SD)	Mean (SD)	Mean (SD)	d	t (df)	р
IDT						
IDT - women	3.00 (2.29)	3.59 (2.26)	2.91 (2.28)	.30	3.13 (977)	.002
IDT - violence use	3.60 (2.47)	4.16 (2.52)	3.52 (2.45)	.26	2.71 (977)	.007
SCL-90-R			· ·			
GSI	0.52 (0.50)	0.87 (0.57)	0.47 (0.46)	.80	7.48 (149.17)	.000
PSDI	1.53 (0.57)	1.81 (0.62)	1.49 (0.55)	.56	5.94 (977)	.000
PST	27.48 (19.67)	41.13 (17.99)	25.49 (19.11)	.80	8.61 (977)	.000
Somatisation	0.50 (0.56)	0.80 (0.71)	0.46 (0.52)	.60	5.10 (144.59)	.000
Obsessive-compulsive	0.63 (0.61)	0.98 (0.69)	0.58 (0.59)	.65	6.20 (151.49)	.000
Interpersonal sensitivity	0.48 (0.57)	0.80 (0.68)	0.43 (0.53)	.66	5.89 (147.38)	.000
Depression	0.79 (0.73)	1.29 (0.79)	0.71 (0.69)	.79	7.76 (152.93)	.000
Anxiety	0.45 (0.57)	0.80 (0.72)	0.40 (0.52)	.71	6.05 (143.63)	.000
Hostility	0.32 (0.53)	0.68 (0.81)	0.26 (0.46)	.78	5.63 (135.76)	.000
Phobic anxiety	0.23 (0.42)	0.46 (0.58)	0.20 (0.38)	.63	4.95 (140.15)	.000
Paranoid ideation	0.62 (0.64)	0.89 (0.72)	0.58 (0.61)	.49	4.61 (151.10)	.000
Psychoticism	0.33 (0.48)	0.61 (0.60)	0.29 (0.44)	.68	5.80 (143.85)	.000
STAXI						
Trait-anger	16.13 (5.13)	19.21 (6.40)	15.68 (4.76)	.69	5.94 (144.78)	.000
Anger temperament	6.98 (2.72)	8.82 (3.65)	6.71 (2.44)	.78	6.25 (140.66)	.000
Anger reaction	9.12 (3.11)	10.46 (3.38)	8.92 (3.02)	.49	5.21 (977)	.000
External expression	9.10 (2.96)	10.89 (3.41)	8.83 (2.80)	.69	6.42 (149.52)	.000
Internal expression	11.46 (3.54)	13.09 (3.90)	11.22 (3.42)	.53	5.07 (153.21)	.000
External control	18.55 (5.19)	16.13 (5.70)	18.91 (5.02)	.54	5.16 (153.39)	.000
Internal control	16.14 (5.24)	14.50 (5.03)	16.38 (5.23)	.36	3.77 (977)	.000
Index of anger expression	21.82 (11.53)	29.39 (12.86)	20.71 (10.89)	.75	7.18 (151.16)	.000

Results of Psychopathological Variables

Note. IDT = Inventory of Distorted Thoughts.

Bonferroni corrected p value < 0.05: p = .00227.

Table 3

		Problemati	c alcohol use			
	Total	Yes	No			
	N = 981	<i>n</i> = 125	<i>n</i> = 856			
	N(%)	n (%)	n (%)	Phi	$\chi^2(df)$	р
Clinical syndrome						
scales ¹						
Anxiety	105 (10.7)	33 (26.4)	72 (8.4)	.19	36.93 (1)	.000
Somatoform	5 (0.5)	2 (1.6)	3 (0.4)	.06	3.36(1)	.067
Bipolar	19 (1.9)	7 (5.6)	12 (1.4)	.10	10.12(1)	.001
Dysthymia	8 (0.8)	4 (3.2)	4 (0.5)	.10	10.07 (1)	.002
Drug dependence	89 (9.1)	42 (33.6)	47 (5.5)	.33	104.47 (1)	.000
PTSD	7 (0.7)	4 (3.2)	3 (0.4)	.11	12.50(1)	.000
Thought disorder	42 (4.3)	19 (15.2)	23 (2.7)	.21	41.67 (1)	.000
Major depression	26 (2.7)	10 (8)	16 (1.9)	.13	15.89(1)	.000
Delusional disorder	20(2)	4 (3.2)	16 (1.9)	.03	0.97 (1)	.325
Personality disorder						
scales						
Schizoid	3 (0.3)		3 (0.4)	.02	0.44(1)	.507
Avoidant	4 (0.4)	2 (1.6)	2(0.2)	.07	5.01 (1)	.025
Depressive	4 (0.4)	1 (0.8)	3 (0.4)	.02	0.54(1)	.461
Dependent	3 (0.3)	2 (1.6)	1 (0.1)	.09	7.87 (1)	.005
Histrionic	54 (5.5)	6 (4.8)	48 (5.6)	.01	0.14(1)	.712
Narcissistic	60 (6.1)	9 (7.2)	51 (6)	.02	0.29(1)	.588
Antisocial	12 (1.2)	11 (8.8)	1 (0.1)	.26	68.06(1)	.000
Aggressive	5 (0.5)	1 (0.8)	4 (0.5)	.02	0.24(1)	.626
Compulsive	210 (21.4)	5 (4)	205 (23.9)	.16	25.80(1)	.000
Passive-aggressive	1 (0.1)		1 (0.1)	.01	0.15(1)	.702
Self-defeating						
Schizotypal	6 (0.6)	4 (3.2)	2 (0.2)	.13	15.79(1)	.000
Borderline	4 (0.4)	1 (0.8)	3 (0.4)	.02	0.54 (1)	.461
Paranoid	13 (1.3)	4 (3.2)	9 (1.1)	.06	3.85 (1)	.050
TOTAL ²	350 (35.7)	35 (28)	315 (36.8)	.06	3.68 (1)	.055
Modifying indices		X /	X /		~ /	
Disclosure	56 (5.7)	16 (12.8)	40 (4.7)	.12	13.38(1)	.000
Desirability	429 (43.7)	27 (21.6)	402 (47)	.17	28.51 (1)	.000
Debasement	36 (3.7)	12 (9.6)	24 (2.8)	.12	14.25 (1)	.000
Note ¹ The alcohol depe						

Prevalence of MCMI-III Personality Disorders (base rate \geq 85)

Note. ¹The alcohol dependence scale has been removed because it was used to classify perpetrators into

the studied groups.²The total number of people affected by personality disorders is inferior to the total

sum of disorders because there are patients who present more than one personality disorder.

Bonferroni corrected p value < 0.05: p = .0019.

Table 4

Results of the MCMI-III Scales

		Problematic	alcohol use			
	Total	Yes	No	-		
	N=981	<i>n</i> = 125	<i>n</i> = 856			
	M (SD)	M (SD)	M (SD)	d	t(df)	р
Clinical syndrome						
scales ¹						
Anxiety	41.70 (33.93)	68.28 (27.38)	37.82 (33.05)	.90	11.30 (181.18)	.000
Somatoform	29.71 (26.93)	47.05 (24.80)	27.18 (26.30)	.74	8.30 (167.39)	.000
Bipolar	48.38 (22.76)	63.98(16.62)	46.10 (22.65)	.78	10.66 (198.27)	.000
Dysthymia	29.53 (27.02)	51.39 (23.71)	26.34 (25.98)	.93	10.90 (170.54)	.000
Drug dependence	49.23 (27.49)	76.11 (19.58)	45.30 (26.26)	1.12	15.66 (195.75)	.000
PTSD	29.65 (25.71)	50.14 (22.25)	26.66 (24.82)	.91	10.85 (172.31)	.000
Thought disorder	32.25 (28.82)	57.58 (27.23)	28.55 (27.15)	1.01	11.16 (979)	.000
Major depression	29.51 (28.61)	47.69 (28.54)	26.86 (27.66)	.73	7.83 (979)	.000
Delusional disorder	48.61 (30.72)	62.26 (22.84)	46.62 (31.23)	.51	6.78 (198.74)	.000
Personality						
disorder scales						
Schizoid	40.66 (21.51)	49.27 (20.13)	39.40 (21.43)	.46	4.85 (979)	.000
Avoidant	35.50 (23.46)	50.88 (21.19)	33.25 (22.94)	.75	8.59 (169.37)	.000
Depressive	31.80 (25.61)	49.69 (22.74)	29.19 (24.96)	.80	9.29 (170.71)	.000
Dependent	37.91 (20.37)	49.29 (17.76)	36.24 (20.21)	.64	7.53 (174.43)	.000
Histrionic	50.98 (18.57)	44.34 (21.07)	51.95 (17.98)	.41	3.84 (151.53)	.000
Narcissistic	67.38 (12.49)	63.39 (14.88)	67.96 (12.00)	.37	3.85 (979)	.000
Antisocial	47.49 (22.32)	68.86 (14.07)	44.23 (21.41)	1.15	17.60 (218.31)	.000
Aggressive	39.18 (22.95)	59.94 (12.88)	36.15 (22.52)	1.04	17.16 (252.18)	.000
Compulsive	61.67 (21.13)	45.11 (20.27)	64.09 (20.15)	.90	9.83 (979)	.000
Passive-aggressive	39.94 (22.95)	56.31 (16.50)	37.55 (22.79)	.82	11.24 (200.44)	.000
Self-defeating	32.12 (24.27)	50.48 (16.13)	29.43 (24.10)	.87	12.67 (214.76)	.000
Schizotypal	31.52 (26.39)	51.18 (20.82)	28.65 (25.89)	.85	10.93 (185.00)	.000
Borderline	34.90 (24.78)	58.49 (15.45)	31.45 (24.00)	1.09	16.83 (222.77)	.000
Paranoid	46.59 (26.68)	61.06 (19.78)	44.47 (26.91)	.62	8.32 (197.97)	.000
Modifying indices					. ,	
Disclosure	48.50 (21.02)	67.95 (15.00)	45.66 (20.26)	1.06	14.76 (196.84)	.000
Desirability	77.20 (16.22)	66.90 (20.03)	78.70 (15.02)	.73	6.34 (145.05)	.000
Debasement	43.64 (23.32)	61.54 (17.95)	41.02 (22.86)	.88	9.61 (979)	.000
Note ¹ The alcohol d		<u> </u>	<u> </u>		<i></i>	

Note. 1The alcohol dependence scale was removed because it was used to classify perpetrators into the

studied groups.

Bonferroni corrected p value < 0.05: p = .0019.

Table 5

Logistic Regression Analyses for Differentiating Between Perpetrators with and without

Clinical variables (Dependent variable = PAU; 0 = No; 1 = Yes)								
	Variable		OR	р	95% CI			
	Previous ps	ychiatric history (yes	s) 2.03	.027	(1.08-3.80)			
	Depression	(SCL-90-R)	2.00	.001	(1.35-2.97)			
	Distorted th	oughts about womer	n 1.13	.016	(1.02-1.25)			
		dence (MCMI-III)	1.06	<.001	(1.04-1.07)			
	Bipolar (M	CMI-III)	1.02	.006	(1.01-1.04)			
	Dysthymia	(MCMI-III)	1.02	.001	(1.01-1.03)			
	Internal cor	trol (STAXI)	0.94	.012	(0.90-0.99)			
	Anger react	ion (STAXI)	0.91	.019	(0.84-0.98)			
Paranoid ideation (SCL-90-R)			0.62	.034	(0.40-0.97)			
	Constant		0.00	<.001				
Adjusted R ²	.42							
Compativalas	aified	90.1%	36%	98%				
· · · ·			(With PAU)	(Without PA	.U)			
	Personality v	ariables (Dependen	t variable = PAU	U; 0 = No; 1 = Yc	es)			
	Variable		OR	р	95% CI			
	Antisocial		1.09	<.001	(1.07 - 1.12)			
	Avoidant		1.03	.001	(1.01 - 1.04)			
	Borderline		1.02	.013	(1.00-1.04)			
	Schizotypal		1.01	.045	(1.00-1.03)			
Schizoid			0.98	.001	(0.96-0.99)			
	Constant		0.00	<.001	. ,			
Adjusted R ²	.42							
Composition of the	-: fi - 1	89.1%	28%	98%				
Correctly class	sified	(Total)	(With PAU)	(Without PA	.U)			

Problematic Alcohol Use (PAU)

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Highlights:

- Problematic alcohol use is linked to distorted thoughts in IPV perpetrators
- Perpetrators with problematic alcohol use present a more severe psychopathological profile
- Interventions with IPV perpetrators should address problematic alcohol use