Treatment effectiveness for male intimate partner violence perpetrators depending on problematic alcohol use

Sandra Siria [a], Javier Fernández-Montalvo [a,b,*], Josean Echauri [c], Juana Azkárate [c], María Martínez [c], Laiene Olabarrieta [a], Diego Rivera [a]

[a] Departamento de Ciencias de la Salud, Universidad Pública de Navarra, Campus de Arrosadía, 31006 Pamplona, Spain
[b] Instituto de Investigación Sanitaria de Navarra (IdiSNA), Pamplona, Navarra, Spain
[c] Psimae, Instituto de Psicología Jurídica y Forense, Pamplona, Navarra, Spain

ARTICLE INFO

ABSTRACT

Background: Problematic alcohol use (PAU) is highly correlated with intimate partner violence perpetration (IPV). However, when treatments for male IPV perpetrators that address alcohol consumption are evaluated, the results are varied. Therefore, the main goal of this study was to assess the differential long-term effectiveness of a standard individual treatment programme for male IPV perpetrators depending on the presence of PAU.
Methods: The sample was composed of 641 male IPV perpetrators who completed a specialized individual treatment programme for gender violence perpetrators. All of the participants were followed for one year after treatment completion.
Results: The effects of PAU on treatment success were evaluated by means of multiple logistic regression analyses. The full model was reliable ($\chi^2 = 10.243$; $df = 3$; $p = .016$), and overall, 88.8% of the predictions were accurate. The findings indicated that the probability of successful treatment does not depend on the presence of PAU.
Conclusions: The relationship between IPV perpetration and PAU is highly complex, and several underlying mechanisms should be further evaluated. Accordingly, interventions should not only screen for alcohol consumption but also for all individual characteristics that might necessitate tailored treatment.

1. Introduction

One of the most assessed correlates of intimate partner violence (IPV) perpetration is alcohol consumption, which in recent years has had an impact on the design of integrated treatments (Easton et al., 2018; Fernández-Montalvo et al., 2019). Alcohol is not the only or main cause of IPV perpetration, and the association between the two variables is not as consistent as often expected (Crane et al., 2016; Grigorian et al., 2020). This association might be influenced by a variety of underlying mechanisms including individual and contextual factors (Crane et al., 2016; Expósito-Álvarez et al., 2021; Thomas et al., 2013). However, available data suggest that between 12.7% (Siria et al., 2021) and 57.2% (Brasfield et al., 2016) of men in IPV treatment programmes present with a problematic alcohol use (PAU). Alcohol use can increase both the frequency and the severity of IPV (Cafferky et al., 2018; Leonard and Quigley, 2017; Romero-Martínez et al., 2016). Moreover, compared to those without problematic alcohol consumption, IPV perpetrators with PAU have more psychopathological symptoms and personality

disorders, more distorted thoughts about women, a higher prevalence of childhood family violence, less anger control, and less social and community support (Catalá-Miñana, Lila, and Oliver, 2013; Expósito-Álvarez et al., 2021; Siria et al., 2021).

Treatment models for male IPV perpetrators are varied, but their effectiveness in terms of decreasing recidivism is still inconclusive (Cheng et al., 2021; Stephens-Lewis et al., 2019). When these interventions do not address the specificities of each individual, they might deliver modest or null effects (Fernández-Montalvo et al., 2020; Travers et al., 2021). For this reason, there is consensus on the fact that a one-size-fits-all approach does not work and that perpetrators should be assigned to interventions that meet their individual needs (e.g., alcohol consumption) (Crane and Easton, 2017). Despite professionals' and researchers' agreement, current evidence provides mixed results. Karakurt et al. (2019) concluded in their meta-analysis that programmes for IPV perpetrators that address substance abuse achieve better results at reducing violence than programmes that do not address this component. In contrast, the meta-analysis conducted by Stephens-Lewis et al. (2019)

---

shows that interventions that target IPV and substance abuse do not yield better outcomes than general treatments for IPV.

There are several studies assessing IPV perpetration among individuals in substance abuse treatment that have evidenced a significant reduction in IPV after the intervention (Fernández-Montalvo et al., 2019; O'Farrell et al., 2003; Stuart et al., 2009). Integrated treatments that target both substance consumption and IPV perpetration have demonstrated their effectiveness in reducing both behaviours (Easton et al., 2018; Fernández-Montalvo et al., 2011; Satyanarayana et al., 2016). Moreover, Walker (2017) found that those perpetrators who desisted from IPV had also changed their consumption and attitude towards alcohol to facilitate their cessation of violence.

Despite these promising results, many of the programmes developed in Spain for IPV perpetrators do not yet address an integrated approach considering both IPV and PAU. In this sense, a significant reduction in alcohol consumption has been found among men who complete an IPV perpetrator treatment programme that does not specifically address alcohol abuse (Lila et al., 2020). Thus, it is still unclear if men engaged in IPV interventions who are not seeking a substance abuse treatment benefit from the alcohol use approach to reduce both partner violence and alcohol consumption (Bennett, 2008). Consequently, given that no differences in treatment outcomes have been found in some studies, it should be further assessed the extent to which alcohol consumption should be included as a target of intervention, as well as whether alcohol consumption hinders the positive results of IPV standardized programmes (Catalá-Miñana, Lila, Conchell et al., 2013).

For these reasons, the main aim of this study was to evaluate the differential effectiveness of a standardized individual treatment programme for IPV perpetrators presenting with PAU and for those who did not. The major contribution of this study is to determine the specific role of alcohol consumption as a predictor variable of treatment results.

2. Method

2.1. Participants

The initial sample consisted of 1135 male IPV perpetrators enrolled in a specialized treatment programme due to having committed a gender violence offence against their female partners. The programme was developed by the Institute of Judicial and Forensic Psychology (PSI-MAE), which is directed by the Social Service of Justice of the Navarra Government (Spain). The programme provides treatment for all IPV perpetrators in Navarra. All patients who began the treatment programme from March 2009 to December 2019 were included in the study. None of the participants received any compensation, monetary or otherwise, for participating in the study.

The sample inclusion criteria were (a) being older than 18 years of age; (b) having been involved in violence against a female partner; (c) not suffering from any serious mental disorder (psychotic disorder or intellectual disability) after being assessed by a clinical psychologist; (d) having knowledge of the Spanish language; (e) having completed the treatment programme; and (f) providing informed consent to participate in the study after having been properly informed of its characteristics.

Following these admission criteria, 494 men (43.5%) were excluded from the study. Of these men, 20 refused to participate (1.8%), and 474 did not meet the inclusion criteria for having been referred to other services ($n = 201$; 17.7%), having dropped out from treatment ($n = 182$; 16%), and not having yet completed the treatment programme ($n = 91$; 8%). Accordingly, the final sample consisted of 641 participants.

The mean age of the sample was 38.2 years ($SD = 11.0$). In terms of nationality, 51.8% of the participants were Spanish, and the rest were of non-Spanish origin. Slightly more than half of the participants (53.4%) were employed, while the rest were unemployed (42%) or retired (4.6%). The participants were court-referred to the treatment programme (80.5%), were imprisoned (15.4%), or had sought treatment voluntarily (4.1%). The rationale for placing a subject in a court-referred

treatment versus an imprisonment treatment is mainly related to the severity of the committed offence. Spanish legislation allows judges to impose a suspended sentence if three conditions are met: the person is a first-time offender, the sentence imposed does not exceed two years of imprisonment, and the offender agrees to participate in a specialized treatment programme.

2.2. Assessment measures

Information on sociodemographic characteristics and on the variables related to the perpetration of IPV was collected through the General Structured Interview of Batterer Men (Echeburúa and Fernández-Montalvo, 1998). It consists of 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).

The Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1992; 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 instrument has been shown to be sensitive to therapeutic change and may therefore be used for either single or repeated assessments. 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) (Miguel-Tobal et al., 2001; Spielberger, 1999) consists of 15 items related to state-anger (the intensity of the emotion of anger in a specific situation) and 10 additional 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 trait-anger 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) (Cardenal and Sánchez, 2007; Millon, 1993) 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 (0.91) (Cardenal and Sánchez, 2007).

To determine the presence of clinically relevant PAU, a BR value of ≥ 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 (Millon, 1993).

2.3. Treatment programme

The intervention is a broad treatment programme based on cognitive-behavioural therapy (CBT). It involves 20 one-hour individual sessions delivered once a week and conducted by a clinical psychologist of the programme centre. A general protocol is applied to all participants and is not specifically focused on the treatment of alcohol consumption.

The first part of the intervention (sessions 1–3) takes into account motivational aspects such as accepting responsibility for the perpetrated IPV and the motivation for therapy. The second part (sessions 4–15) addresses psychopathological symptoms related to empathy, skills training, anger management, and the modification of cognitive distortions related to IPV. The last part (sessions 16–20) focuses on relapse prevention by identifying high-risk situations for violent behaviour and teaching adequate coping strategies that provide an alternative response to violence. Therapists can adapt the length or the techniques used to the specific current needs of each participant, but adherence to the intervention is guaranteed by clinical supervision sessions.

2.4. Procedure

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

After the participants were selected, clinical psychologists of the treatment centre carried out the initial assessment over three sessions. These sessions took place once a week for three weeks, and the time interval between the sessions was the same for each participant. In the first session, data related to sociodemographic characteristics and violence variables were collected. The MCMI-III was administered in the second session. Finally, the SCL-90-R and STAXI-2 were completed in the third session. The next assessments were carried out after the treatment ended and after a one-year follow-up period by the clinical psychologists of the treatment centre.

Two levels of therapeutic change were considered after the follow-up period: success and failure. Treatment success was defined as the complete disappearance of episodes of IPV during the one-year follow-up period. The second level considered is treatment failure, primarily based on the repetition of episodes of IPV or on a negative professional evaluation related to a poor treatment response and to the participant's resistance to change. IPV recidivism was assessed using both criminal justice databases of new IPV charges and participants' self-reports of repeated episodes of IPV.

2.5. Data analysis

Descriptive analyses were conducted for sociodemographic and psychopathological variables. Comparisons between groups were performed using χ^2 or Student's t statistics depending on the nature of the variable. Effect sizes (Hedges's g) were provided as follows: $g = 0.20$ (small effect size), $g = 0.50$ (medium effect size), and $g = 0.80$ (large effect size).

The effects of alcohol scores on treatment success were evaluated by means of multiple logistic regression analyses. Five polynomial orders of alcohol scores (alcohol to alcohol[5]) were used to predict treatment success. The alcohol score was centred ($alcohol\ score - \overline{X}_{alcoholscore}$) before computing the quadratic alcohol value to avoid multicollinearity (Kutner et al., 2005). Treatment was coded as success = 1 and no success = 0. Polynomial orders of alcohol scores were added to the full model to allow for exponential effects between this independent variable and the treatment success. To select the best model, the Akaike information criterion (AIC) and log-likelihood indices were used so that smaller values were measured as better (Rizopoulos, 2006).

In the model-building procedure, no predictor was removed as long as it was also included in a higher order term in the model (Aiken et al., 1991). For multiple logistic regression models, the following

assumptions were evaluated: (a) multicollinearity by checking that the variance inflation factor (VIF) was not greater than 10 and (b) the existence of influential values by calculating the maximum Cook's distance in the sample. The maximum Cook's distance value was subsequently related to an $F(p, n - p)$ distribution, where p is the number of regression parameters (including the intercept) and n is the sample size. Influential values are considered when the obtained percentile value is equal to or higher than 50 (Kutner et al., 2005). An alpha level of .05 was used in all analyses. All analyses were performed using R 4.0.5 for Windows (R Development Core Team, 2021).

3. Results

Comparisons between IPV perpetrators who had PAU ($n = 64$; 10%) and those who did not ($n = 577$; 90%) on the studied variables are shown in Table 1. In terms of sociodemographic characteristics, IPV perpetrators with PAU had significantly higher levels of previous psychiatric history (mainly addictions) and childhood family violence than IPV perpetrators without PAU. Regarding psychopathological variables, IPV perpetrators with PAU had significantly higher mean scores on the STAXI-2 Anger Expression Index and on the SCL-90-R Global Severity Index than perpetrators without PAU. Concerning referral to the treatment programme the percentage of perpetrators with PAU in prison and seeking treatment voluntarily was significantly higher than among perpetrators without PAU.

After the follow-up period 88.8% ($n = 569$) of the participants were considered as treatment success, and 11.2% ($n = 72$) as treatment failure.

Five multiple logistic regressions were conducted with one applied for each polynomial model. AIC and log-likelihood indices show that the cubic model has the best fit relative to the other four models (see Table 2). The assumptions of multiple regression analysis were largely met for the selected model. There was no multicollinearity (the VIF value is 6.22, which is well below the threshold value of 10) or influential cases (the maximum Cook's distance value is .094; relating this value to an $F(4, 637)$ distribution yields a percentile value of 1.6 that is not indicative of the presence of influential cases).

The model selected (cubic model) was performed with treatment success set as the dependent variable and the alcohol score used as the predictor variable (see Table 3). A total of 641 cases were analysed, and the full model was reliable ($\chi^2 = 10.243$; $df = 3$; $p = .016$). Overall, 88.8% of the predictions were accurate. Fig. 1 shows that success probabilities for the programme are high independent of alcohol score. The lowest probability of success (0.83) occurs at alcohol scores of between 50 and 60.

4. Discussion

Contrary to what might be expected, alcohol per se plays no role in the differential effectiveness of a standard IPV treatment programme. The findings show that this individual intervention had the same therapeutic outcomes for male IPV perpetrators with and without PAU. This finding is consistent with some previous studies that have found no differential treatment results when comparing perpetrators with and without PAU (Catalá-Miñana, Lila, Conchell et al., 2013; Lila et al., 2016). However, other authors have found a reduction in alcohol consumption among IPV perpetrators with PAU after completing general treatment, although the reduction in IPV perpetration did not show differences between perpetrators with and without PAU (Lila et al., 2020). In this sense, it is well established that integrated treatments that target IPV and alcohol show a reduction in both IPV perpetration and alcohol consumption (Easton et al., 2018; Fernández-Montalvo et al., 2019, 2011; Karakurt et al., 2019; Murphy and Ting, 2010). Therefore, these results should be interpreted with caution.

One possible explanation for the absence of differences between groups is that the majority of the sample had a suspended sentence and

Table 1
Sociodemographic and Psychopathological Variables at Pretreatment.

	With PAU $n = 64$ Mean (SD)	Without PAU $n = 577$ Mean (SD)	g	t (df)	p
Age	37.84 (10.88)	38.25 (11.05)	0.04	.28 (639)	.779
GSI	0.85 (0.54)	0.45 (0.46)	0.85	6.45 (639)	< 0.001
AEI	29.34 (10.81)	19.79 (10.79)	0.88	6.71 (77.61)	< 0.001
	n (%)	n (%)	Phi	χ^2 (df)	p
Nationality					
Spanish	32 (50%)	300 (52%)	0.01	0.09 (1)	.762
Immigrant	32 (50%)	277 (48%)			
Education level					
Primary	33 (51.6%)	289 (50.1%)			
Secondary	31 (48.4%)	258 (44.7%)	0.07	3.53 (2)	.171
University	0 (0%)	30 (5.2%)			
Employment situation					
Employed	27 (42.2%)	315 (54.6%)			
Unemployed	34 (53.1%)	235 (40.7%)	0.08	3.77 (2)	.152
Retired	3 (4.7%)	27 (4.7%)			
Previous psychiatric history					
Yes	56 (87.5%)	340 (58.9%)	0.18	19.92 (1)	< 0.001
No	8 (12.5%)	237 (41.1%)			
Type of psychiatric history (n = 396)					
Addiction	52 (92.9%)	234 (68.8%)			
Emotional disorder	3 (5.4%)	81 (23.8%)	0.19	13.85 (2)	.001
Personality disorder	1 (1.8%)	25 (7.4%)			
Childhood family violence					
Yes	25 (39.1%)	153 (26.5%)	0.08	4.52 (1)	.033
No	39 (60.9%)	424 (73.5%)			
Type of childhood family violence (n = 178)					
Directly suffered	20 (80%)	97 (63.4%)	0.12	2.63 (1)	.105
Witnessed	5 (20%)	56 (36.6%)			
Programme access					
Court referred	43 (67.2%)	473 (82%)			
Prison	15 (23.4%)	84 (14.6%)	0.12	9.47 (2)	.009
Voluntary	6 (9.4%)	20 (3.5%)			

Note. GSI = Global Severity Index of the SCL-90-R; AEI = Anger Expression Index of the STAXI-2.

Table 2
Models for each Criterion.

| Polynomial Model	AIC	BIC	Log-Likelihood
Linear model	453.9199	462.8459	-224.9599
Quadratic model	451.1556	464.5447	-222.5778
Cubic model	448.1844	466.0365	-220.0922
Quartic model	448.8663	471.1815	-219.4332
Quantic model	450.1602	476.9384	-219.0801

Note. AIC = Aikake Information Criterion; BIC = Bayesian Information Criterion.

Table 3
Final Multiple Logistic Regression Model.

Coefficient	Estimate	Std. Error	z value	Pr (>|z|)
(Intercept)	1.725	1.78e-01	9.665	< 2e-16
Alcohol score	-2.00e-02	1.15e-02	-1.728	0.0841
Alcohol score^2	1.13e-03	4.39e-04	2.570	0.0102
Alcohol score^3	2.57e-05	1.22e-05	2.114	0.0345

Note. $R^2 = .015$ (Cox-Snell), .031 (Nagelkerke's). Model χ^2 (3) = 10.243, $p = .016$.
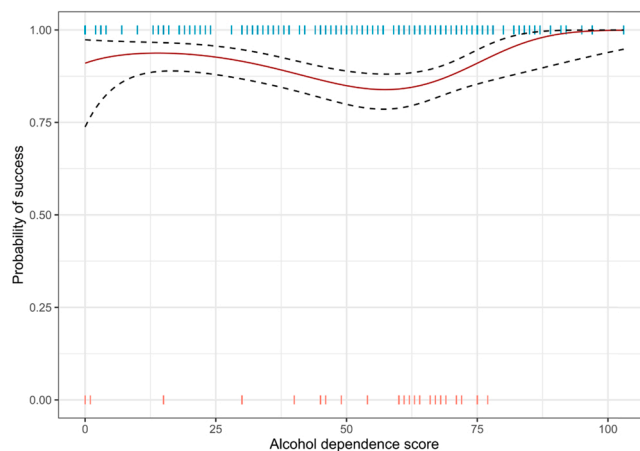
Fig. 1. *Probability of Success Adjusted to Final Multiple Logistic Regression Model*, *Note.* The red line represents the relationship between alcohol dependence score and the probability of success in treatment (1 = success, 0 = failure). The discontinuous black lines represent lower and upper 95% CI. (For interpretation of the references to colour in this figure, the reader is referred to the web version of this article.)

the avoidance of a harsher punishment depended on not reoffending. This would create a strong motivation for them to not perpetrate another episode of IPV during the follow-up period. It might be expected that, in the long term, those perpetrators with PAU may be more likely to lose control, as they have not been specifically treated for their alcohol consumption (Murphy and Ting, 2010). Thus, future studies should assess long-term recidivism because short periods of assessment can artificially increase the efficacy rate (Arce et al., 2020).

It may also be that an individualised treatment, unlike group treatments, can better suit IPV perpetrators' current needs (Brassard et al., 2021). Most of the treatment programmes delivered for this population are group-based (Cannon et al., 2016), and limited studies have assessed the efficacy of individual treatments (Babcock et al., 2004). Although this is a standard treatment and the procedure is the same for all of them, following their clinical judgement, therapists have the flexibility to adapt sessions to the specific individual needs of each participant, achieving more positive treatment results.

A third possible reason is that the intervention, although not specifically targeting alcohol abuse, has focused on different personal, social, and contextual factors and mechanisms that underlie both IPV perpetration and alcohol consumption (e.g., empathy or skills training). This is in line with Walker et al. (2017), who found that men who desisted from IPV after treatment changed their attitudes towards alcohol and levels of consumption.

These results could also support perspectives on the independence of alcohol and IPV. That is, it may be that despite the well-established correlation (Brasfield et al., 2016; Cafferky et al., 2018; Leonard and Quigley, 2017), alcohol has a limited impact on the development of IPV (Bennett, 2008; Eckhardt et al., 2015; Fernández-Montalvo et al., 2019) such that intervention for IPV perpetration are effective regardless of alcohol consumption. As multiple variables are associated with the

aetiology of IPV (Easton and Crane, 2016), treatments should address all of them independent of the presence of PAU.

In sum, the relationship between IPV perpetration and PAU is complex, and several mechanisms and additional risk factors interact with these variables (Crane et al., 2016; Walker, 2017). Hence, the above explanations are merely hypotheses that need to be further analysed in future studies.

4.1. Limitations

It was not possible to evaluate participants with the MCMI-III during and after the follow-up period. Consequently, there is a lack of information about the progress of PAU as a dynamic risk factor, which would have provided interesting information. Levels of alcohol consumption and corresponding effects likely varied throughout the treatment, so future studies should assess alcohol use in relation to possible changes in perpetrated IPV (Bennett, 2008).

Information about the type and severity of perpetrated IPV would have provided crucial information linking it to alcohol consumption. However, it was not possible to obtain these data.

With regard to the sample, all of the participants agreed to participate in the treatment programme in exchange for less severe legal punishment. This circumstance should be taken into consideration when interpreting the results.

Finally, there is a lack of information from victims about perpetrators' recidivism. This would have provided more accurate information on recidivism, but this programme does not have direct access to victims.

5. Conclusion

Given the above evidence, when designing treatment programmes, it is essential to take into account the heterogeneity of male IPV perpetrators, the differential aetiology of violence, specific criminogenic needs, and the cooccurring conditions (Easton et al., 2018; Massa et al., 2020). Substance use often goes undiagnosed among this population (Easton et al., 2018), so IPV intervention programmes should screen for both alcohol use and the interaction dynamics between alcohol use and IPV in all participants. More specifically, such interventions should address all personal, social, and contextual needs beyond alcohol abuse and violence perpetration (Bennett, 2008; Expósito-Álvarez et al., 2021).

CRediT authorship contribution statement

Sandra Siria conducted the literature search and, in conjunction with Javier Fernández-Montalvo, wrote the article. Josean Echauri, Juana Azkárate, and María Martínez assessed and treated the sample. Laiene Olabarrieta and Diego Rivera conducted the statistical analyses. Javier Fernández-Montalvo made the validation and supervision of the research. All authors contributed significantly to the research and have approved the final manuscript.

Declarations of interest

None.

Disclosures

Sandra Siria, Javier Fernández-Montalvo, Josean Echauri, Juana Azkárate, María Martínez, Laiene Olabarrieta, and Diego Rivera do not have any financial interests that may be interpreted as influencing the research.

References

Aiken, L.S., West, S.G., Reno, R.R., 1991. Multiple Regression: Testing and Interpreting Interactions. Sage Publications.

Arce, R., Arias, E., Novo, M., Farina, F., 2020. Are interventions with batterers effective? a meta-analytical review. Psychosoc. Interv. 29 (3), 153–164. https://doi.org/10.5093/pi2020a11.

Babcock, J.C., Green, C.E., Robie, C., 2004. Does batterers' treatment work? a meta-analytic review of domestic violence treatment. Clin. Psychol. Rev. 23 (8), 1023–1053. https://doi.org/10.1016/j.cpr.2002.07.001.

Bennett, L.W., 2008. Substance abuse by men in partner abuse intervention programs: current issues and promising trends. Violence Vict. 23 (2), 236–248. https://doi.org/10.1891/0886-6708.23.2.236.

Brasfield, H., Morean, M.E., Febres, J., Shorey, R.C., Moore, T.M., Zapor, H., Stuart, G.L., 2016. Alcohol use, alcohol-related outcome expectancies, and partner aggression among males court-mandated to batterer intervention programs: a brief report. J. Interpers. Violence 31 (2), 245–256. https://doi.org/10.1177/0886260514555366.

Brassard, A., Belzile, M., Dugal, C., Gehl, K., Savard, C., Daspe, M.E., Godbout, N., 2021. Predictors of discontinuation from individual treatment in men perpetrators of intimate partner violence. Partn. Abus. 12 (3), 295–316. https://doi.org/10.1891/pa-2020-0042.

Cafferky, B.M., Mendez, M., Anderson, J.R., Stith, S.M., 2018. Substance use and intimate partner violence: a meta-analytic review. Psychol. Violence 8 (1), 110–131. https://doi.org/10.1037/vio0000074.

Cannon, C., Hamel, J., Buttell, F., Ferreira, R.J., 2016. A survey of domestic violence perpetrator programs in the United States and Canada: findings and implications for policy and intervention. Partn. Abus. 7 (3), 226–276. https://doi.org/10.1891/1946-6560.7.3.226.

Cardenal, V., Sánchez, M.P. , 2007. Adaptación y baremación al español del Inventario Clínico Multiaxial de Millon-III (MCMI-III). TEA Ediciones.

Catalá-Miñana, A., Lila, M., Conchell, R., Romero-Martínez, A., Moya-Albiol, L., 2013. Do offenders with alcohol problems benefit from non-alcohol oriented batterer intervention programs? Psychosoc. Interv. 22, 135–143. https://doi.org/10.5093/in2013a16.

Catalá-Miñana, A., Lila, M., Oliver, A., 2013. Alcohol consumption in men punished for intimate partner violence: individual and contextual factors. Adicciones 25 (1), 19–28. https://doi.org/10.20882/adicciones.68.

Cheng, S.Y., Davis, M., Jonson-Reid, M., Yaeger, L., 2021. Compared to what? a meta-analysis of batterer intervention studies using nontreated controls or comparisons. Trauma Violence Abus. 22 (3), 496–511. https://doi.org/10.1177/1524838019865927.

Crane, C.A., Easton, C.J., 2017. Integrated treatment options for male perpetrators of intimate partner violence. Drug Alcohol Rev. 36 (1), 24–33. https://doi.org/10.1111/dar.12496.

Crane, C.A., Godleski, S.A., Przybyla, S.M., Schlauch, R.C., Testa, M., 2016. The proximal effects of acute alcohol consumption on male-to-female aggression: a meta-analytic review of the experimental literature. Trauma Violence Abus. 17 (5), 520–531. https://doi.org/10.1177/1524838015584374.

Derogatis, L.R. , 1992. The SCL-90-R. Clinical Psychometric Research.

Easton, C.J., Crane, C.A., 2016. Interventions to reduce intimate partner violence perpetration among people with substance use disorders. Int. Rev. Psychiatry 28 (5), 533–543. https://doi.org/10.1080/09540261.2016.1227307.

Easton, C.J., Crane, C.A., Mandel, D., 2018. A randomized controlled trial assessing the efficacy of cognitive behavioral therapy for substance-dependent domestic violence offenders: an integrated substance abuse-domestic violence treatment approach (SADV). J. Marital Fam. Ther. 44 (3), 483–498. https://doi.org/10.1111/jmft.12260.

Echeburúa, E., Fernández-Montalvo, J.,1998. Instrumentos de evaluación de los maltratadores. In E. Echeburúa & P. Corral (Eds.), Manual de violencia familiar (pp. 91–129). Siglo XXI.

Eckhardt, C.I., Parrott, D.J., Sprunger, J.G., 2015. Mechanisms of alcohol-facilitated intimate partner violence. Violence Women 21 (8), 939–957. https://doi.org/10.1177/1077801215589376.

Expósito-Álvarez, C., Lila, M., Gracia, E., Martín-Fernández, M., 2021. Risk factors and treatment needs of batterer intervention program participants with substance abuse problems. Eur. J. Psychol. Appl. Leg. Context 13 (2), 87–97. https://doi.org/10.5093/ejpalc2021a9.

Fernández-Montalvo, J., Arteaga, A., López-Goñi, J.J., 2019. Treatment effectiveness of intimate partner violence perpetration among patients in a drug addiction program. Psychol. Violence 9 (2), 156–166. https://doi.org/10.1037/vio0000184.

Fernández-Montalvo, J., Echauri, J.A., Siria, S., López-Goñi, J.J., Azcárate, J.M., Martínez, M., 2020. Is psychological treatment equally effective for intimate partner violence perpetrators with and without childhood family violence? Leg. Criminol. Psychol. 1–18. https://doi.org/10.1111/lcrp.12187.

Fernández-Montalvo, J., López-Goñi, J.J., Arteaga, A., 2011. Addressing intimate partner violence in substance-abuse treatment programmes: a challenge for the future. Adicciones 23 (1), 5–9. https://doi.org/10.20882/adicciones.161.

González de Rivera, J.L. , 2002. SCL-90-R. Cuestionario de 90 síntomas. TEA Ediciones.

Grigorian, H.L., Brem, M.J., Garner, A., Florimbio, A.R., Woltbrd-Clevenger, C., Stuart, G.L., 2020. Alcohol use and problems as a potential mediator of the relationship between emotion dysregulation and intimate partner violence perpetration. Psychol. Violence 10 (1), 91–99. https://doi.org/10.1037/vio0000237.

Karakurt, G., Koc, E., Cetinsaya, E.E., Ayluctarhan, Z., Bolen, S., 2019. Meta-analysis and systematic review for the treatment of perpetrators of intimate partner violence. Neurosci. Biobehav. Rev. 105, 220–230. https://doi.org/10.1016/j.neubiorev.2019.08.006.

Kutner, M.H., Nachtsheim, C.J., Neter, J., Li, W., 2005. Applied Linear Statistical Models, fifth ed. McGraw Hill,.

Leonard, K.E., Quigley, B.M., 2017. Thirty years of research show alcohol to be a cause of intimate partner violence: Future research needs to identify who to treat and how to treat them. Drug Alcohol Rev. 36 (1), 7–9. https://doi.org/10.1111/dar.12434.

Lila, M., Gracia, E., Catalá-Miñana, A., 2020. More likely to dropout, but what if they don't? partner violence offenders with alcohol abuse problems completing batterer intervention programs. J. Interpers. Violence 35 (9–10), 1958–1981. https://doi.org/10.1177/0886260517699952.

Lila, M., Gracia, E., Catalá-Miñana, A., Santirso, F.A., Romero-Martínez, A., 2016. Alcohol abuse in Latin American immigrants participating in intervention programs for abusers: the importance of adherence to treatment. Univ. Psychol. 15 (4), 1–16. https://doi.org/10.11144/Javeriana.upsy15-4.caai.

Massa, A.A., Maloney, M.A., Eckhardt, C.I., 2020. Interventions for perpetrators of intimate partner violence: An I-3 model perspective. Partn. Abus. 11 (4), 437–446. https://doi.org/10.1891/pa-2020-0031.

Miguel-Tobal, J.J., Casado, M.I., Cano-Vindel, A., Spielberger, C.D.,2001. Versión española del STAXI-2. TEA Ediciones.

Millon, T. ,1993. Millon Adolescent Clinical Inventory: Manual. National Computer Systems.

Murphy, C.M., Ting, L., 2010. The effects of treatment for substance use problems on intimate partner violence: a review of empirical data. Aggress. Violent Behav. 15 (5), 325–333. https://doi.org/10.1016/j.avb.2010.01.006.

O'Farrell, T.J., Fals-Stewart, W., Murphy, M., Murphy, C.M., 2003. Partner violence before and after individually based alcoholism treatment for male alcoholic patients. J. Consult. Clin. Psychol. 71 (1), 92–102. https://doi.org/10.1037/0022-006x.71.1.92.

R Development Core Team, 2021. R: A language and environment for statistical computing. R Foundation for Statistical Computing. http://www.R-project.org/.

Rizopoulos, D., 2006. ltm: An R package for latent variable modeling and item response theory analyses. J. Stat. Softw. 17 (5), 1–25. https://doi.org/10.18637/jss.v017.i05.

Romero-Martínez, A., Lila, M., Martínez, M., Pedrón-Rico, V., Moya-Albiol, L., 2016. Improvements in empathy and cognitive flexibility after court-mandated intervention program in intimate partner violence perpetrators: the role of alcohol abuse. Int. J. Environ. Res. Public Health 13 (4), 1–13. https://doi.org/10.3390/ijerph13040394.

Satyanarayana, V.A., Nattala, P., Selvam, S., Pradeep, J., Hebbani, S., Hegde, S., Srinivasan, K., 2016. Integrated cognitive behavioral intervention reduces intimate partner violence among alcohol dependent men, and improves mental health outcomes in their spouses: a clinic based randomized controlled trial from South India. J. Subst. Abus. Treat. 64, 29–34. https://doi.org/10.1016/j.jsat.2016.02.005.

Siria, S., Leza, L., Fernández-Montalvo, J., Echauri, J.A., Azkárate, J.M., Martínez, M., 2021. Differential psychopathological profile of male intimate partner violence perpetrators depending on problematic alcohol use. Addict. Behav. 118, 118. https://doi.org/10.1016/j.addbeh.2021.106887.

Spielberger, C.D., 1999. State-Trait Anger Expression Inventory-2. Psychological Assessment Resources.

Stephens-Lewis, D., Johnson, A., Huntley, A., Gilchrist, E., McMurran, M., Henderson, J., Gilchrist, G., 2019. Interventions to reduce intimate partner violence perpetration by men who use substances: a systematic review and meta-analysis of efficacy. Trauma, Violence, Abus. 17, 1262–1278. https://doi.org/10.1177/1524838019882357.

Stuart, G.L., O'Farrell, T.J., Temple, J.R., 2009. Review of the association between treatment for substance misuse and reductions in intimate partner violence. Subst. Use Misuse 44 (9–10), 1298–1317. https://doi.org/10.1080/10826080902961385.

Thomas, M.D., Bennett, L.W., Stoops, C., 2013. The treatment needs of substance abusing batterers: a comparison of men who batter their female partners. J. Fam. Violence 28 (2), 121–129. https://doi.org/10.1007/s10896-012-9479-4.

Travers, A., McDonagh, T., Cunningham, T., Armour, C., Hansen, M., 2021. The effectiveness of interventions to prevent recidivism in perpetrators of intimate partner violence: a systematic review and meta-analysis. Clin. Psychol. Rev. 84. https://doi.org/10.1016/j.cpr.2021.101974.

Walker, K., 2017. The role of alcohol as men desist from physical intimate partner violence. Drug Alcohol Rev. 36 (1), 134–142. https://doi.org/10.1111/dar.12445.