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Differential profiles of drug-addicted patients according to gender and the perpetration of intimate partner violence

Running head: Drug addiction and intimate partner violence

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Abstract

Background: This study explored the differential profiles of drug-addicted patients according to gender and the perpetration of intimate partner violence (IPV). **Methods:** The study assessed a sample of 127 drug-addicted patients (84 male and 43 female) who sought treatment. Information about socio-demographic and consumption characteristics, IPV, psychopathological symptoms, personality characteristics and maladjustment variables was obtained. Four groups were created according to gender and the presence or absence of the perpetration of IPV: a) men with IPV (n = 41), b) women with IPV (n = 29), c) men without IPV (n = 43), and d) women without IPV (n = 14). The four groups were compared in terms of all of studied variables. **Results:** There were significant differences between the groups in the severity of the addiction and personality characteristics. In general, the drug-addicted patients with associated IPV perpetration exhibited greater scores for nearly all of the studied variables, independent of gender. Moreover, the differences among groups were more strongly related to perpetration of IPV than to the gender of the patients. **Conclusions:** According to the results obtained, treatment programs for drug addiction are a suitable context for identifying the presence of IPV, but IPV is typically unnoticed in addiction treatment programs. The implications of these results for future research and clinical practice are discussed.

Keywords: Drug addiction; intimate partner violence; gender; comorbidity; assessment.

1. INTRODUCTION

High rates of intimate partner violence (IPV) have been found in drug-addicted patients (Arteaga et al., 2012; Clements and Schumacher, 2010; Fernández-Montalvo et al., 2011; Moore et al., 2008; Stuart et al., 2009). According to different studies, between 40% and 60% of people in treatment for drug addiction have histories of episodes of IPV within the year prior to the initiation of treatment (Easton et al., 2000; O'Farrell and Murphy, 1995). These rates are significantly higher than those found in studies conducted in the general population (Devries et al., 2013; European Union Agency for Fundamental Rights, 2014).

Although IPV has traditionally been associated with a male-perpetrator and female-victim pattern, an increasing number of studies have also revealed the occurrence of violence committed by women against men (Carney et al., 2007; Dixon et al., 2012; Dutton, 2012). Some studies have even indicated a greater prevalence of these violent behaviours in women than in men (Archer, 2000) and the existence of differential aggressor profiles according to gender (Archer, 2002).

This same phenomenon was recently observed in a study that was specifically developed with drug-addicted patients in treatment (Arteaga et al., 2012). In this study, nearly two in three women in the sample (63.3%) had committed IPV. This figure was significantly higher than that found in the men (24.2% of cases) and doubled the rate of female aggressors in the general population (31% according to Palmetto, Davidson, Breitbart, & Rickert, 2013).

These data showing the high rates of IPV by drug-addicted women are worrisome. On the one hand, studies that have examined the differential profiles according to gender have shown that women who attend programs for drug addicts exhibit more severe profiles than men (Fernández-Montalvo et al., 2014; Grella et al., Arteaga, A., López-Goñi, J.J., y Fernández-Montalvo, J. (2015). Differential profiles of drug-addicted patients according to gender and the perpetration of intimate partner violence. *Drug and Alcohol Dependence*, 155, 183-189. <http://dx.doi.org/10.1016/j.drugalcdep.2015.07.018>

2005; Hser et al., 2003). Women develop more severe addictions in terms of consumption and associated psychopathological symptomatology, particularly regarding anxiety and mood disorders (Greenfield et al., 2010; Landa et al., 2006).

Studies that have compared drug-addicted patients with and without histories of IPV have reported important differences. Specifically, drug-addicted patients with IPV present with greater numbers of psychopathological symptoms and personality disorders (Arteaga et al., 2012). The same results have been obtained in studies conducted with non-addicted abusers in which the presence of IPV has been related to increased associated psychopathology and personality problems (Echeburúa et al., 2003; Novo et al., 2012; Wolfe et al., 2004).

According to the abovementioned results, it can be hypothesised that women who have perpetrated IPV will present with more severe addiction profiles. Nevertheless, issues related to IPV often go unnoticed in treatment programs for addictions, which mainly focus on specific consumption problems. From a psychological treatment perspective, it is very relevant to ascertain the different and specific characteristics of these types of drug-addicted patients while simultaneously accounting for both gender and the perpetration of IPV. This knowledge will allow therapists to implement individually tailored treatment strategies according to the most relevant aspects that characterise these patients. Consequently, the main purpose of this study was to assess and compare the specific characteristics of four groups of drug-addicted patients that were defined in terms of gender and the perpetration of IPV (i.e., men with IPV, women with IPV, men without IPV and women without IPV).

2. MATERIAL AND METHODS

The protocol for this study was approved by the ethics committees of the Public University of Navarra and the Fundación Proyecto Hombre de Navarra.

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2.1. Participants

The initial sample consisted of 182 addicted patients who sought treatment at the *Proyecto Hombre* Addiction Treatment Programme in Pamplona, Spain from May 2010 to December 2012.

The admission criteria were as follows: a) meeting the diagnostic criteria for substance dependence disorder of the DSM-IV-TR (American Psychiatric Association, 2000), b) being between 18 and 65 years old, and c) providing consent to participate in the study. The exclusion criteria were as follows: a) the presence of a serious mental illness that would contraindicate participation in the study, b) a statement by professionals advising that the patient should not be interviewed due to his or her stage in the treatment process, and c) a lack of knowledge of the Spanish language. Following these criteria, 39 people (18%) were excluded from the study, and 16 (7.4%) refused to participate. Therefore, the final sample was composed of 127 subjects.

Male patients without IPV are most prevalent in addiction clinical settings. Therefore, the following procedure was used to select the patients in this study to acquire well-balanced groups. First, all of the women who met the admission criteria were directly included in the study and divided into two groups according to the perpetration of IPV. Second, all the men who had perpetrated IPV and met the admission criteria were included within the third group. Finally, the fourth group was composed of the men without IPV who sought treatment consecutively until the size of this group was similar to the largest of the other groups.

The mean age of the individuals included in the study was 35.7 years ($SD = 7.8$). The sample included 84 (66.1%) men and 43 (33.9%) women. The socioeconomic levels were middle to lower-middle class. The main substances that motivated treatment were cocaine (40.3% of the sample) and alcohol (33.6% of the sample), followed by

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other substances (e.g., heroin, cannabis, amphetamine, etc.) at lower incidences (26% of the sample).

2.2. Instruments

The European Addiction Severity Index (EuropASI; Kokkevi and Hartgers, 1995) is the European version of the Addiction Severity Index (ASI; McLellan et al., 1980). The Spanish version that was used was created by Bobes, González, Sáiz, and Bousoño (1996). This interview assesses a patient's treatment needs based on seven different areas: a) general medical condition; b) employment and financial situations; c) alcohol consumption; d) use of other drugs; e) legal problems; f) family and social relationships; and g) psychological state. The Interviewer Severity Rating (ISR), which has proven useful in different studies conducted in the treatment context (López-Goñi et al., 2012; López-Goñi et al., 2010), was used. The score for each area ranged from 0 (no problem) to 9 (extreme problem). The short-term test-retest reliabilities of the ASI severity ratings have been reported to be greater than or equal to .92 for all domains (McLellan et al., 1985). The alpha coefficient for the current sample was .70.

The Revised Conflict Tactics Scale-2 (CTS-2) (Straus et al., 1996), which consists of 78 items, measures the degree to which individuals commit/suffer from IPV and the use of negotiation to resolve conflicts. This instrument consists of five scales: a) reasoning/negotiation; b) physical aggression; c) psychological abuse; d) sexual coercion; and e) injuries. In this study, the last four scales, which are related to violent behaviours, were used, and only the items in these scales that refer to the perpetration of IPV were included. The dichotomous-response version was applied (i.e., 0, absent; 1, present), and the responses indicated whether the behaviours that composed the scale had ever occurred. The internal consistence ranges from .83 to .84.

The Inventory of Distorted Thoughts about Women (IDT-W) (Echeburúa and Fernández-Montalvo, 1998) consists of a list of 13 binary items that aim to detect irrational thoughts related to sexual roles and the inferiority of women. A four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree) was used. The results range from 13 to 52. The internal consistence is .87 and the test-retest reliability is .92.

The Inventory of Distorted Thoughts about the Use of Violence (IDT-V) (Echeburúa and Fernández-Montalvo, 1998) consists of a list of 16 binary items that aim to detect irrational thoughts related to the use of violence as an acceptable means to resolve conflicts. A four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree) was used. The results range from 16 to 64. The internal consistence is .94 and the test-retest reliability is .89.

The Symptom Checklist (SCL-90-R) (Derogatis, 1992; González de Rivera, 2002) is a self-administered questionnaire for general psychopathological assessment. This questionnaire consists of 90 items that are rated on a five-point Likert scale that ranges from 0 (not at all) to 4 (extremely). This questionnaire aims to reflect the symptoms of psychological distress and consists of nine primary symptom dimensions: somatisation, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Additionally, this questionnaire provides three global indices that reflect the overall severities of the subject's symptoms: the Global Severity Index (GSI) reflects the overall symptom severity, the Positive Symptom Distress Index (PSDI) indicates the symptom intensity, and the Positive Symptom Total (PST), which is the number of items with scores different from 0. The internal consistency ranges from .70 to .90. In this study, the percentiles of each dimension were considered.

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The Millon Clinical Multiaxial Inventory (MCMI-III) (Cardenal and Sánchez, 2007; Millon, 2004) is a clinical questionnaire that is used to assess personality disorders. It consists of 175 dichotomous response items (true/false) that provide information about 11 basic personality scales (i.e., schizoid, avoidant, depressive, dependent, histrionic, narcissistic, antisocial, aggressive-sadistic, compulsive, passive-aggressive, and self-destructive), three pathological personality scales (i.e., schizoid, borderline, and paranoid), and 10 clinical syndromes (i.e., anxiety, somatoform, bipolar disorder, dysthymia, alcohol abuse, drug abuse, posttraumatic stress disorder, thought disorder, major depression, and delusional disorder). The internal consistency ranges from .66 to .89, and the test-retest reliability ranges from .85 to .93.

The Barratt Impulsiveness Scale (BIS-10) (Barratt, 1985) aims to assess the degree of impulsiveness of the subject. It consists of 33 items that are scored from 0 to 4 on a five-point Likert scale and provides information about three different dimensions of impulsiveness: motor, cognitive, and nonplanning. The total score ranges from 0 to 132. The internal consistency is .84.

The State-Trait Anger Expression Inventory (STAXI) (Spielberger, 1988) consists of 10 items related to state-anger (intensity of the emotion of anger in a particular situation) and another 10 that refer to trait-anger (individual disposition to feel anger). The scores range from 10 to 40 on each scale. In the Spanish version test-retest reliability is .71 and the internal consistency ranges from .82 to .89.

The Maladjustment Scale (Echeburúa et al., 2000) reflects the degree to which the problems of each patient affects the different areas of everyday life (i.e., labour, social, spare time, partner, family and general). It consists of six items that are rated from 0 (not at all) to 5 (extremely) on a six-point Likert scale. The total scale range is 0-30. The internal consistency is .94.

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2.3. Procedure

Once the clinical sample was selected using the previously described criteria, the assessment of the sample was performed in three sessions before the initiation of treatment. The sessions occurred once per week for three weeks, and the time interval between sessions was the same for each participant. In the first session, data related to socio-demographic characteristics and drug consumption were collected using the *EuropAsi*. Moreover, the presence of IPV was assessed by conducting a semi-structured interview and completing the CTS-2. In the second session, the two questionnaires that assess the psychopathological and personality variables (SCL-90-R and MCMI-III) were completed. In the third session, the questionnaires that assess other personality characteristics were administered.

After assessing all patients, four groups were formed according to the variables of gender and the presence/absence of the perpetration of IPV. Thus, the following 4 groups were studied: a) men with IPV (n = 41), b) women with IPV (n = 29), c) men without IPV (n = 43), and d) women without IPV (n = 14). This research considered a patient to have a history of violent behaviour if one of the following criteria was met: 1) recognition by the patient of IPV problems; 2) a positive score on specific scales of the CTS-2 (i.e., severe physical aggression, severe sexual coercion, item 15 for minor sexual coercion, minor injuries, and severe injuries); 3) having been reported in the past for a crime of IPV; 4) having a restraining order based on IPV; and 5) the clinical impression based on the existence of IPV by the therapeutic team responsible for the drug addiction treatment. In cases of doubt or conflict, the last criterion prevailed.

2.4. Data Analysis

Descriptive analyses were conducted for all of the variables. Comparisons between groups were performed with ANOVAs, and least significant difference (LSD)

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test was used for the post-hoc analyses. Moreover, the effect size was obtained for all analyses. When conditions for normality and homoscedasticity of the sample were not fulfilled, non-parametric test were used (Kruskal-Wallis). Differences of $p < .05$ were considered significant. The statistical analyses were performed with SPSS (version 15.0 for Windows).

3. RESULTS

3.1. Comparisons of the socio-demographic and consumption variables between groups

There were no differences in the assessed socio-demographic variables between the groups (Table 1).

PLACE TABLE 1 HERE

3.2. of the severities of consumption, distorted thoughts and psychopathological symptoms between the groups

There were several differences in the EuropAsi scores between the groups (Table 2). The patients (male and female) who had perpetrated IPV had higher scores on nearly all of the studied variables. Specifically, the men with IPV presented the highest scores in the areas related to drug consumption and legal problems, and the women with IPV perpetration exhibited higher scores in the medical and family/social areas. The group composed of women without IPV presented with the lowest need for treatment.

PLACE TABLE 2 HERE

The results for the variables related to distorted thoughts revealed no differences between the four studied groups. However, the men who had perpetrated IPV presented with a greater number of biased thoughts about the use of violence as an acceptable means of resolving conflicts.

Regarding the psychopathological variables, the results of the SCL-90-R symptom inventory revealed only a moderate level of psychopathological symptoms in the studied subjects. In terms of differentiating between the four subgroups in the areas assessed by the SCL-90-R, significant differences were found in only one dimension; i.e., the Positive Symptoms Distress Index. The post-hoc analysis revealed that the women with IPV exhibited higher scores than the men with IPV.

3.3. Comparisons of the personality variables between groups

Overall, the male and female drug-addicted patients with IPV perpetration presented with higher scores on nearly all of the studied MCMI-III variables (Table 3). A more detailed study of the specific results of the MCMI-III revealed that the men with IPV scored significantly higher than the men without IPV on the following scales: antisocial, aggressive, negativistic, and paranoid. Among the women, comparisons between the IPV perpetrators and non-perpetrators indicated differences in the antisocial, aggressive and negativistic scales; the women with IPV scored higher on all of scales.

PLACE TABLE 3 HERE

3.4. Comparisons of maladjustment and other personality variables between the groups

The results of the comparisons of some of the other personality variables were similar. Generally, the patients with IPV exhibited higher scores for the variables related to impulsiveness and anger independent of gender (Table 4). The main differences were observed between the women with and without IPV perpetration.

PLACE TABLE 4 HERE

Finally, the women without IPV were observed to exhibit greater levels of adjustment to daily life.

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4. DISCUSSION

In this study, the differential profiles of drug-addicted patients according to gender and IPV perpetration were explored. According to previous research, the women with IPV perpetration were predicted to present with more severe addiction profiles; indeed, this was the main hypothesis of this study. The results revealed that the drug-addicted patients with IPV perpetration exhibited greater scores than the patients without IPV for nearly all of the variables related to consumption, violence, psychopathology and personality. However, regarding gender, no relevant differences were observed. Therefore, the differences between groups were more strongly related to the perpetration of IPV than to gender. Consequently, the initial hypothesis was not confirmed.

Regardless, the results related to the differences according to IPV perpetration observed in this study support the data obtained in previous studies that address the relationship between IPV and addictive behaviours (Clements and Schumacher, 2010; Easton et al., 2000; Fernández-Montalvo et al., 2011; Moore et al., 2008; Stuart et al., 2009). More specifically, these data support the relationship between the perpetration of IPV and addiction (Arteaga et al., 2012). In all of these previous studies, the drug-addicted patients with associated IPV (either as the victim or the perpetrator) presented with more severe addiction profiles.

Regarding gender, our data do not support the hypothesis of the study. Few differences were found between the men and women. A possible explanation of the lack of differences by gender is that the present study only included patients who sought treatment for their addiction; drug-addicted patients who did not seek treatment were not considered. In this sense, some studies have observed that drug-addicted women

exhibit greater motivations for treatment, greater involvement in self-help activities and

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better therapeutic outcomes (Grella et al., 2005; López-Goñi et al., 2008; Najavits and Lester, 2008), other studies have reported that gender is not directly related to adherence to and/or completion of treatment (Fernández-Montalvo et al., 2007, 2008; Greenfield et al., 2007; Hser et al., 2003).

In addition to these results, a specific contribution of this study is the analyses of violence and gender in drug-addicted patients that were conducted both separately and jointly. Moreover, the study of the two specific groups of women (i.e., those with and without IPV) is also relevant because few women are usually included in studies of addicted patients; such studies typically utilise largely male samples.

This study has a number of limitations. First, due to its exploratory and descriptive nature, the specific causal relations between the main variables studied (i.e., substance consumption, gender, and IPV perpetration) cannot be established. Second, our study included patients who sought treatment at a specialised centre. Undoubtedly, this created a bias that prevents us from generalising the results to all addicted patients. Third, the assessment of the sample was performed in three sessions that occurred once per week. Consequently, the final sample may have been biased because all of the patients had to attend three consecutive sessions over a three-week period. The patients who dropped out before all of the measurements were completed were not included in this study. Fourth, a larger sample, particularly the inclusion of a greater number of women would have resulted in more robust and well-balanced groups. Although in this study, we attempted to increase the number of women, a larger sample size would have made it possible to explore the goals of the study more thoroughly. This aspect is a challenge to drug-addiction research because nearly all studies of drug-addicted patients include largely male samples. Moreover, a larger sample would enable the exploration of the possible association between the substances consumed, gender and the

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commission of IPV. Fifth, although five different criteria to detect IPV aggression have been used in this study, some of them may be subjective. It would be useful to develop more accurate and objective criteria to detect the commission of IPV among patients with drug addiction problems. Finally, future studies should analyse IPV not only from the perspective of the aggressors but also from the perspective of the victims.

Regardless of these limitations, according to the results obtained, treatment programs for drug addiction are a suitable context for identifying the presence of IPV. The detection of this type of violence in drug addicts is critical because addicts have a differential specific profile. Nevertheless, the presence of IPV often goes unnoticed in treatment programs for addictions, which mainly focus on consumption problems.

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Table 1. Comparisons of socio-demographic and consumption variables

	All (N = 127)		Men with violence (n = 41)		Women with violence (n = 29)		Men without violence (n = 43)		Women without violence (n = 14)			
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	<i>F</i>	<i>Cohen's f</i>
	<i>N</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>X² (gl)</i>	
Age	35.7	(7.8)	36.2	(7.8)	34.8	(7.8)	37.3	(8.1)	34.7	(11.0)	0,6	0.13
Marital status												
Married	22	(18.3%)	6	(14.6%)	4	(15.4%)	11	(26.8%)	1	(8.3%)		
Separated/Divorced	19	(15.8%)	10	(24.4%)	5	(19.2%)	2	(4.9%)	2	(16.7%)	8,2 (6)	
Single	79	(65.8%)	25	(61.0%)	17	(65.4%)	28	(68.3%)	9	(75.0%)		
Education level												
Elementary	48	(50.0%)	16	(45.7%)	12	(54.5%)	17	(58.6%)	3	(30.0%)		
Secondary	40	(41.7%)	15	(42.9%)	7	(31.8%)	11	(37.9%)	7	(70.0%)	6.8 (6)	
Higher Education	8	(8.3%)	4	(11.4%)	3	(13.6%)	1	(3.4%)	0	--		
Substance motivating treatment												
Alcohol	40	(33.6%)	9	(22.5%)	8	(30.8%)	18	(43.9%)	5	(41.7%)		
Cocaine	48	(40.3%)	20	(50.0%)	9	(34.6%)	14	(34.1%)	5	(41.7%)	6.0 (6)	
Other	31	(26.0%)	11	(62.5%)	9	(34.6%)	9	(21.9%)	2	(16.7%)		

Cohen's *f* = Effect Size

Table 2. Comparisons of the severities of consumption, distorted thoughts, and psychopathological symptoms

	All (N = 127)	Men with violence (a) (n = 41)	Women with violence (b) (n = 29)	Men without violence (c) (n = 43)	Women without violence (d) (n = 14)	Test ¹	Cohen's <i>f</i>	Comparisons one-to-one
EuropASI								
Medical	3.0 (1.8)	3.0 (1.7)	3.4 (2.3)	2.9 (1.7)	2.1 (1.4)	F = 1,5	0.20	b > d*
Employment/Support	3.8 (2.0)	3.7 (1.9)	4.3 (1.9)	3.7 (2.0)	3.0 (2.0)	F = 1,3	0.18	
Alcohol	4.5 (2.2)	4.7 (2.0)	4.3 (2.5)	4.6 (2.1)	3.6 (2.1)	F = 0,9	0.15	
Drug	4.5 (2.1)	5.0 (1.7)	4.6 (2.4)	4.2 (2.1)	3.4 (2.3)	F = 2,2	0.24	a > d*
Legal	2.6 (2.0)	3.3 (2.2)	2.4 (2.2)	2.3 (1.8)	1.3 (0.7)	H = 9.7*	--	a > c*, d**
Family/Social	5.0 (1.8)	5.1 (1.7)	5.8 (1.6)	4.5 (1.9)	4.5 (1.7)	H = 8.2*	--	b > c**, d*
Psychiatric	4.5 (1.6)	4.4 (1.8)	4.8 (1.4)	4.5 (1.7)	4.3 (1.4)	F = 0,4	0.10	
Distorted thoughts								
About women (IDT-W)	22.7 (5.1)	23.5 (5.2)	23.4 (5.0)	22.0 (4.9)	20.7 (4.6)	F = 1,5	0.19	
About violence (IDT-V)	31.0 (5.9)	32.2 (6.6)	30.7 (6.4)	31.0 (5.0)	28.6 (4.5)	F = 1,4	0.18	a > d*
SCL-90-R								
Global Severity Index	73.9 (29.9)	76.7 (24.5)	75.2 (32.5)	67.8 (34.3)	79.1 (27.4)	F = 0,7	0.14	
Positive Symptoms Distress Index	51.5 (29.8)	47.1 (27.7)	63.8 (33.4)	48.9 (27.7)	45.6 (29.7)	F = 2,0	0.23	b > a*
Positive Symptoms Total	77.6 (28.2)	80.6 (22.7)	76.6 (29.7)	71.9 (33.2)	86.5 (25.1)	F = 1,0	0.17	
Somatisation	66.3 (30.9)	66.0 (30.5)	66.0 (29.3)	66.7 (34.7)	66.4 (28.2)	F = 0,0	0.0	
Obsession-compulsion	66.7 (31.8)	66.0 (28.7)	71.4 (33.0)	59.5 (35.7)	78.3 (23.9)	F = 1,3	0.19	
Interpersonal sensitivity	71.6 (30.7)	75.6 (26.4)	73.1 (33.3)	64.3 (33.7)	76.7 (29.1)	F = 1,0	0.17	
Depression	72.4 (28.2)	73.8 (25.6)	75.2 (29.1)	66.7 (32.5)	77.7 (21.7)	F = 0,7	0.14	

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Anxiety	69.1 (31.7)	67.8 (31.6)	75.4 (31.4)	64.1 (33.6)	72.8 (28.5)	F = 0,7	0.14
Hostility	57.3 (32.2)	59.6 (30.2)	60.9 (34.3)	51.9 (33.0)	57.2 (33.5)	F = 0,5	0.12
Phobic anxiety	55.4 (39.3)	51.5 (39.1)	55.5 (40.8)	54.7 (39.0)	69.3 (39.8)	F = 0,6	0.13
Paranoid ideation	70.5 (31.8)	74.9 (28.1)	71.8 (35.8)	62.6 (33.9)	75.6 (26.8)	F = 1,0	0.17
Psychoticism	74.2 (29.1)	77.0 (22.4)	77.1 (27.7)	65.2 (35.8)	83.7 (27.1)	F = 1,7	0.22

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

¹F = ANOVA; H = Kruskal-Wallis

Cohen's f = Effect Size

Table 3. Comparisons of personality variables (MCMI-III)

	All (N = 127)		Men with violence (a) (n = 41)		Women with violence (b) (n = 29)		Men without violence (c) (n = 43)		Women without violence (d) (n = 14)		Test ¹	Cohen's <i>f</i>	Comparisons one-to-one
	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)			
Schizoid	47.1	(18.6)	50.2	(16.5)	42.3	(18.5)	47.6	(19.9)	47.3	(21.2)	F = 0.9	0.16	
Avoidant	46.1	(24.1)	47.9	(18.9)	42.8	(28.2)	45.8	(22.0)	48.8	(33.5)	H = 0.5	--	
Depressive	48.0	(23.4)	48.7	(22.4)	49.3	(18.3)	48.8	(25.9)	40.9	(31.0)	H = 0.6	--	
Dependent	47.1	(22.8)	44.9	(22.1)	45.2	(23.8)	48.1	(20.0)	55.1	(29.1)	F = 0.7	0.14	
Histrionic	44.4	(19.7)	40.4	(15.7)	56.6	(18.7)	36.4	(17.6)	49.4	(25.0)	F = 6.6***	0.40	b > a**, c***; d > c*
Narcissistic	59.4	(14.5)	63.1	(12.6)	57.9	(13.3)	60.3	(12.9)	49.8	(21.3)	F = 2.8*	0.27	a**, c* > d
Antisocial	67.3	(12.3)	72.4	(11.6)	67.9	(11.7)	64.4	(8.1)	57.8	(17.1)	F = 5.7**	0.37	a > c, ** d***; b > d*
Aggressive (Sadistic)	56.5	(16.9)	62.2	(8.1)	62.3	(20.6)	49.1	(14.5)	45.3	(21.6)	H = 16.6**	--	(a, b) > (c, d)**;
Compulsive	45.6	(18.2)	36.2	(11.5)	52.8	(21.9)	45.2	(13.9)	58.8	(21.1)	H = 21.6***	--	d > a***, c**; b***, c* > a
Negativistic	47.6	(19.8)	51.6	(17.0)	53.2	(14.7)	41.2	(22.7)	39.2	(24.0)	H = 6.2	--	(a, b) > c*; b > d*
Self-destructive	43.8	(21.9)	48.2	(18.6)	42.7	(22.0)	41.3	(24.0)	39.8	(26.2)	H = 1.0	--	
Schizotypal	40.5	(25.5)	44.6	(21.9)	40.2	(25.9)	36.8	(27.5)	38.2	(30.4)	H = 0.5	--	
Borderline	52.2	(19.0)	57.3	(15.1)	50.9	(20.4)	51.1	(19.1)	42.9	(23.8)	F = 1.9	0.23	a > d*
Paranoid	49.9	(24.7)	56.4	(21.6)	52.7	(22.9)	40.4	(28.0)	47.5	(24.1)	F = 2.5	0.27	a > c*
Anxiety disorder	60.3	(31.0)	62.1	(28.8)	60.8	(30.2)	58.2	(33.3)	58.8	(36.5)	F = 0.1	0.05	
Somatoform disorder	33.2	(23.5)	36.3	(22.7)	32.7	(22.4)	27.9	(24.4)	37.8	(26.1)	F = 0.9	0.16	
Bipolar disorder	57.3	(21.2)	59.4	(21.1)	62.7	(17.7)	49.3	(24.5)	58.8	(16.3)	F = 2.1	0.26	b > c*
Dysthymic disorder	45.2	(24.1)	46.4	(21.6)	50.5	(22.5)	41.1	(25.2)	40.7	(31.4)	F = 0.9	0.16	
Alcohol dependence	74.1	(21.1)	76.2	(17.8)	79.3	(22.3)	69.9	(19.7)	67.2	(28.1)	F = 1.5	0.20	
Substance dependence	82.9	(12.4)	89.6	(10.4)	79.1	(10.9)	82.1	(12.7)	73.5	(10.8)	F = 7.9***	0.42	a > (b, c)**; d***; c > d*
Posttraumatic stress	45.5	(23.1)	47.2	(19.8)	51.2	(19.9)	42.1	(27.3)	36.4	(26.4)	H = 1.4	--	
Thought disorder	42.4	(26.4)	45.9	(26.3)	40.0	(24.0)	42.8	(28.8)	36.7	(27.7)	F = 0.5	0.11	
Major depression	34.2	(27.1)	34.5	(25.8)	35.4	(25.9)	33.8	(30.7)	32.1	(27.4)	F = 0.0	0.03	
Delusional disorder	47.4	(30.6)	51.9	(29.4)	54.2	(28.1)	38.1	(32.9)	42.0	(31.4)	F = 1.7	0.23	

p* < .05; *p* < .01; ****p* < .001 ¹F = ANOVA; H = Kruskal-Wallis

Cohen's *f* = Effect Size

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Table 4. Comparisons of maladjustment and other personality variables

	All (N = 127)		Men with violence (a) (n = 41)		Women with violence (b) (n = 29)		Men without violence (c) (n = 43)		Women without violence (d) (n = 14)				
	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	<i>M</i>	(<i>DT</i>)	Test ¹	Cohen's <i>f</i>	Comparisons one-to-one
BIS-10 – Impulsiveness	58.4	(17.1)	60.2	(16.3)	62.4	(20.9)	56.7	(14.4)	49.8	(16.1)	F = 2.1	0.22	(a, b) > d*
Motor	19.3	(7.5)	20.6	(7.1)	21.1	(8.6)	17.6	(6.7)	16.8	(7.6)	F = 2.3	0.23	
Cognitive	21.4	(6.3)	21.5	(6.9)	22.8	(6.2)	21.2	(5.6)	18.5	(6.3)	F = 1.5	0.19	b > d*
Non-planning	17.7	(6.7)	18.1	(5.8)	18.5	(8.7)	17.9	(6.4)	14.5	(5.2)	F = 1.3	0.17	
STAXI - State-anger	14.6	(5.7)	14.3	(4.8)	16.4	(8.1)	14.4	(5.2)	12.4	(2.2)	H = 1.4	--	b > d*
STAXI - Trait-anger	20.8	(5.7)	21.9	(6.1)	22.0	(5.5)	18.9	(5.5)	20.6	(4.6)	F = 2.6	0.25	(a, b) > c*
Maladjustment Scale	20.4	(7.1)	21.1	(6.7)	20.9	(6.5)	20.2	(7.8)	17.6	(7.5)	F = 0.9	0.15	
Labour	3.3	(1.7)	3.4	(1.5)	3.4	(1.8)	3.3	(1.8)	2.2	(1.8)	F = 2.0	0.22	d > (a, b, c)*
Social	3.2	(1.5)	3.3	(1.4)	3.3	(1.5)	3.3	(1.4)	2.6	(1.8)	F = 1.1	0.15	
Spare time	3.4	(1.4)	3.5	(1.2)	3.3	(1.4)	3.4	(1.5)	3.2	(1.7)	F = 0.2	0.07	
Partner	3.4	(1.6)	3.6	(1.5)	3.6	(1.7)	3.0	(1.8)	3.4	(1.5)	F = 1.0	0.17	
Family	3.4	(1.4)	3.3	(1.3)	3.4	(1.2)	3.5	(1.5)	2.9	(1.6)	F = 0.7	0.13	
General	3.8	(1.3)	4.0	(1.2)	3.9	(1.1)	3.8	(1.4)	3.4	(1.3)	F = 0.9	0.13	

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

¹F = ANOVA; H = Kruskal-Wallis

Cohen's f = Effect Size