

Gender differences in unidirectional and bidirectional intimate partner violence in
addictions

Running head: Bidirectional intimate partner violence in addictions

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ABSTRACT: Background: Few studies have analysed the specific characteristics related to uni/bidirectional intimate partner violence (IPV) in patients with addiction problems. Knowing the specific profiles of these patients would allow the development of effective tailored interventions. Objective: This study assessed gender differences in unidirectional and bidirectional IPV among patients undergoing drug addiction treatment. Method: We sampled 122 patients (91 male and 31 female) who sought treatment in an addiction treatment centre, and collected cross-sectional self-reported data on violent behaviours (physical, sexual and psychological violence), sociodemographic factors, distorted thoughts about women and violence, impulsiveness, and anger. Results: Ninety-one percent of participants reported experience of IPV (any type and any direction). Sixty-three percent of participants reported bidirectional violence, which was more common among women (83.9%) than men (56.1%). Unidirectional (perpetration only) IPV was reported in 28.7% of participants, and it was more common among men (34.1%) than women (12.9%). No one reported unidirectional (victimization-only) IPV. When only physical and/or sexual violence was considered, bidirectional violence affected 32.0% of the sample; 23.8% were only victims, and 3.3% were only perpetrators (all of them men). Participants who reported bidirectional violence had higher scores for impulsiveness, anger, and distorted thoughts. Conclusions: Bidirectional IPV is commonly reported among patients seeking treatment for addiction, particularly among women, and should be considered in future research and clinical practice. The results of this study are discussed in the context of

literature on gender differences in the use of violence. **Keywords:** Drug addiction; intimate partner violence; gender; bidirectional violence; prevalence

INTRODUCTION

Violence and addictions are two closely related phenomena. Several studies have shown high rates of violent behaviours among patients with drug addiction problems (1-4). More specifically, high rates of intimate partner violence perpetration (IPV-P) have been found in patients seeking treatment for addiction problems (5, 6). Generally, in these studies, patients with both substance use disorder and IPV-P present with a more severe addiction profile and poor therapeutic progression (7-10).

Although intimate partner violence (IPV) has historically been reported with a male-perpetrator and female-victim pattern (11-14), some recent studies show that IPV can be frequently bidirectional (15-18). Some studies have shown differences in the motivations of men and women to engage in IPV, being self-defence the most frequent reason for violence in women (18, 19). This bidirectional IPV is relevant in the field of addiction, with a high number of men and women with addiction problems being simultaneously aggressors and victims (7, 20). For example, in the study of Arteaga et al. (7), 98.4% of the patients with both addiction problems and IPV showed bidirectional violence. However, there are scarce studies analysing the bidirectional or mutual IPV in addiction treatment centres.

The specific direction of violence (unidirectional vs. bidirectional) should be determined. The presence of IPV, both as perpetrator and victim, in patients with addiction problems is related to a higher treatment dropout and a worse therapeutic result (6, 21, 22). From a clinical perspective, it is relevant to analyse the differential characteristics of patients according to the violence involved (15): unidirectional (perpetrator or victim) or bidirectional. Moreover, beyond providing general prevalence rates, it is relevant to assess accurately the specific violent behaviours used by patients

with substance use disorder involved in intimate partner relationships, considering gender based differences, as well as the associated differential characteristics. Specifically, IPV in patients with drug addiction problems is usually related to high scores in impulsiveness, anger, and distorted thoughts about violence and women (7). Knowing how these characteristics are distributed according to the type and direction of violence would allow the development of tailored intervention strategies to address the specific violent profiles of these types of patients.

The objectives of this study were: 1) To describe the prevalence of intimate partner violence behaviours by gender; 2) To describe the prevalence of unidirectional (perpetration or victimization) and bidirectional IPV, and; 3) To compare the characteristics of patients who did not experience IPV, patients who reported perpetration of IPV, patients who reported victimization of IPV, and patients who reported bidirectional IPV. The findings of this study can contribute empirical evidence to clinical practice and enables a better understanding of the IPV history in patients undergoing addiction treatment.

METHODS

The protocol for this study was approved by the ethics committees of the XXX (identifying information removed) and of the XXX (identifying information removed). The informed consent form was signed by all participants.

Participants

The initial sample consisted of 180 conveniently-sampled patients who presented in consecutive order, seeking treatment for addiction in the XXX (identifying information removed) addiction treatment programme in Spain between June 2016 and December 2017. This programme has a cognitive-behavioural basis and is geared

towards abstinence. It is public and attended by patients who are representative of Spanish patients with addiction problems from all over the region. All patients who attended the clinical centre during the selection period were considered for study inclusion.

Study admission criteria included the following: a) meeting diagnostic criteria for alcohol and/or substance use disorder according to DSM-5 (23), b) being between 18 and 65 years old, and c) giving consent to participate in the study. Exclusion criteria were the following: a) the existence of serious mental illness that would contraindicate study participation (e.g., psychotic disorders), and b) a lack of knowledge of the Spanish language.

Following the abovementioned admission and exclusion criteria, 40 people (22.2%) were excluded from the study, and 18 (10.0%) refused to participate in it. Therefore, 122 subjects (67.8% of the total) were studied.

Instruments

The Revised Conflicts Tactics Scales (CTS-2) (24), which consists of 78 items, measures the degree to which people commit and/or suffer from IPV, as well as the use of negotiation to resolve partner conflicts. This scale consists of five subscales: a) reasoning/negotiation; b) physical aggression; c) psychological abuse; d) sexual coercion; and e) injuries (i.e., “used a knife or gun on my partner”). In this study, the last four subscales, which are related to violent behaviours and are simultaneously subdivided into minor and major violent behaviours, were used. The “ever prevalence score”, with dichotomous responses (0, absent; 1, present), was calculated and indicated whether the behaviours that compose the scale had occurred during one’s lifetime. The internal consistency ranges from .83 to .84. Cronbach’s alpha for the current sample

was .946. This instrument has been found valid to measure IPV in different populations (25).

The Inventory of Distorted Thoughts about Women (IDT-W) (26) is a Spanish tool that consists of 13 binary items aimed to detect irrational or distorted thoughts related to sexual roles and the inferiority of women (i.e., “women are inferior to men”, “a woman should not contradict her husband”). 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 consistency is .87, and the test-retest reliability is .92. Cronbach’s alpha for the current sample was .715. This instrument has been found valid to measure distorted thoughts about women in Spanish population (27).

The Inventory of Distorted Thoughts about the Use of Violence (IDT-V) (26) is a Spanish tool that consists of 16 binary items aimed to detect irrational or distorted thoughts related to the use of violence as an acceptable means to resolve conflicts (i.e., “if a child hits your child, he/she should respond in the same way”, “slapping is sometimes necessary”). 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 consistency is .94, and the test-retest reliability is .89. Cronbach’s alpha for the current sample was .718. This instrument has been found valid to measure distorted thoughts about the use of violence in Spanish population (27).

The Barratt Impulsiveness Scale (BIS-10) (28) 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 non-planning (i.e., “I do things without thinking”). The total score ranges from 0 to 132. The internal consistency is .84. Cronbach’s alpha

for the current sample was .844. This instrument has been found valid to measure impulsiveness in Spanish population (29).

The State-Trait Anger Expression Inventory (STAXI) (30) consists of 10 items related to state-anger (intensity of the emotion of anger in a particular situation) (i.e., “I feel like hitting someone”) and another 10 that refer to trait-anger (individual disposition to feel anger) (i.e., “I have an irritable character”). The scores range from 10 to 40 on each scale. In the Spanish version, the test-retest reliability is .71, and the internal consistency ranges from .82 to .89. Cronbach’s alpha for the current sample were .894 (state-anger) and .853 (trait-anger). This instrument has been found valid to measure anger in Spanish population (31).

Procedure

The sample was assessed in two sessions before beginning the treatment for addiction. All patients were interviewed individually by clinical psychologists who had ten or more years of experience in assessing and treating addictions and had been trained by the research team in the use of the assessment tools. In these sessions, data related to socio-demographic characteristics and drug consumption were collected. Moreover, CTS-2, IDT-W, IDT-V, BIS-10 and STAXI were administered with the presence and support of the interviewers to resolve any doubt patients could have about the completion of the questionnaires.

Data analysis

Descriptive analyses were performed for all variables. In the comparison analyses, χ^2 or ANOVA tests were used, depending on the nature of the variables analysed. Moreover, the effect size (Cohen’s f) or Phi coefficient was obtained for all analyses. We did not impute for missing data and used the complete case analysis

approach. A difference of $p < .05$ was considered significant. All statistical analyses were performed using SPSS (v. 24.0) software.

RESULTS

Characteristics of the sample

The sample of the study was composed of 122 participants: 74.6% were men ($n = 91$), and 25.4% were women ($n = 31$). The mean age of the individuals included in the study was 36.6 years ($SD = 8.8$). The socioeconomic levels were middle to lower-middle class. The main substances that motivated treatment were alcohol ($n = 51$; 41.8%) and cocaine ($n = 50$; 41.0%), followed by other substances (e.g., heroin, cannabis, amphetamine) at lower incidences ($n = 21$; 17.2%).

Prevalence of IPV behaviours perpetrated and gender differences

The most prevalent violent behaviours perpetrated by the patients of the sample were psychological aggressions. Specifically, minor psychological aggression was carried out by 86.9% ($n = 106$) of the patients, without gender differences, and severe psychological aggression was performed by 70.5% ($n = 86$), with more prevalence in women than in men (Table 1).

TABLE 1

Regarding physical aggressions, minor physical assault was observed in 40.7% ($n = 50$) of the sample and severe physical assault in 27.9% ($n = 34$), with a greater prevalence in women than in men for both types of aggression. On the other hand, 35.2% ($n = 43$) of the sample had perpetrated minor sexual coercion, and 2.5% ($n = 3$) had perpetrated severe sexual coercion; there were no gender differences for either type of sexual coercion. Because of the IPV perpetrated, minor injuries were observed in

19.7% ($n = 24$) of cases (in more women than in men), and severe injuries in 9.0% ($n = 11$) (without gender differences).

Prevalence of IPV behaviours suffered and gender differences

From a victimization perspective, the most prevalent violent behaviours suffered by the patients of the sample were psychological aggressions. Specifically, minor psychological aggression affected 86.1% ($n = 105$) of the patients, and severe psychological aggression affected 69.7% ($n = 85$). No gender differences were observed in the two global rates (Table 2).

TABLE 2

Regarding physical aggressions, minor physical assault was suffered by 52.5% ($n = 64$) of the sample and severe assault by 37.7% ($n = 46$). For both types of assault, gender differences were observed, with more women than men being victims of physical abuse. On the other hand, minor sexual coercion was suffered by 32.8% ($n = 40$) of the patients and severe sexual coercion by 9.8% ($n = 12$). In both cases, women were more frequently victims than were men. Because of the IPV-V, minor injuries were observed in 23.8% ($n = 29$) of the sample and severe injuries in 20.4% ($n = 23$), with a higher prevalence in women than in men.

Prevalence of unidirectional/bidirectional violence

Once the types of violent behaviours perpetrated and suffered were analysed, the prevalence of unidirectional and bidirectional violence among the patients of the sample was studied. Bidirectional violence was observed in 77 cases (63.1% of the total sample), with a significantly higher prevalence in women (83.9%; $n = 26$) than men (56.1%; $n = 51$). Thirty-five patients (28.7% of the sample) were only IPV perpetrators; more of these perpetrators were men than women. The rest of the sample ($n = 10$; 8.2%)

did not perpetrate or suffer any type of IPV. No one in the sample was solely a victim of IPV. Therefore, IPV affected 91.8% ($n = 112$) of the sample.

Comparisons between the three groups of patients showed statistically significant differences in some variables (Table 3). Specifically, 83.9% ($n = 26$) of women versus 56.0% ($n = 51$) of men belonged to the group with bidirectional violence. On the other hand, 9.9% ($n = 9$) of men and 3.2% ($n = 1$) of women presented neither IPV-P nor IPV-V. Moreover, the group with bidirectional violence showed higher scores than the group with unidirectional violence (only aggressors) in impulsiveness (total scale) and anger (both state and trait anger); the group with bidirectional violence had higher scores than the other two groups in motor impulsiveness.

TABLE 3

Prevalence of unidirectional/bidirectional physical and/or sexual violence

Due to the high prevalence rate of psychological aggression in the sample, the same data were analysed considering only physical and/or sexual violence. Bidirectional violence was observed in 39 cases (32.0% of the total sample), with significantly more women than men belonging to this category. Four male patients (3.3% of the sample) were only IPV perpetrators, and 29 patients (23.8%) were only victims of IPV. The rest of the sample ($n = 50$; 41.0%) did not perpetrate or suffer physical and/or sexual IPV.

Comparisons between the three groups of patients (the “only aggressors” category was excluded due to the small number of cases) showed statistically significant differences in some variables (Table 4). Specifically, 61.3% ($n = 19$) of women versus 22.0% ($n = 20$) of men belonged to the group with bidirectional violence. On the other hand, 46.2% ($n = 42$) of men and 25.8% ($n = 8$) of women did not present either physical or sexual IPV. In general, the group without violence showed lower scores in

the variables studied than did the other two groups, and no statistically significant differences were found between the unidirectional (only victims) and bidirectional groups.

TABLE 4

DISCUSSION

This paper describes the specific IPV behaviours perpetrated and suffered by patients seeking treatment in a drug-addiction intervention programme. Moreover, it establishes the prevalence of unidirectional and bidirectional violence, considering the gender based differences. Finally, the specific profiles associated with these violent behaviours are studied. This study constitutes one of the few studies on this subject in the international context of addiction (7, 20). Moreover, it is the first time that the differential profiles according to the type and direction of IPV are compared, using a specific combination of standardized assessment tools.

The results of the current study indicate that both perpetration and victimization are prevalent phenomena in patients with addiction problems, and the rate of patients with bidirectional violent behaviours is high. To date, several studies have shown the high prevalence of IPV-P (2, 8, 10, 32) or IPV-V (33, 34) in addictions, but only a few studies have analysed the occurrence of bidirectional violence (20). The results of this study provide strong evidence for bidirectional IPV among patients in addiction programmes. Specifically, bidirectional IPV was observed in the 63.1% of the sample. This rate is similar to the 61.0% rate of bidirectional violence found in the study of Drapkin et al. (20). Although more studies are needed, bidirectional IPV seems to be a relevant issue that should be considered as these patients undergo clinical intervention. The presence of IPV in patients with addiction problems is related to a higher treatment

dropout and a worse therapeutic result. Consequently, IPV should be specifically assessed in drug addiction treatment programmes. A tailored intervention with these patients seems to improve the treatment results and the retention rate (6).

This high rate of bidirectional IPV includes any type of psychological aggression. According to our results, 86.9% of the sample had perpetrated some minor psychological aggression, and 86.1% had suffered it. When considering only physical and/or sexual violence, self-reported bidirectional violence remained present in 32.0% of the sample. These rates are worrying, and few studies have looked at bidirectional violence in patients with substance use disorder (15). Moreover, according to the results obtained in this study, patients with substance use disorder who presented bidirectional violence showed more impulsiveness and associated anger. This information should be considered to develop specific intervention strategies for addiction treatment centres. Studies that include combined IPV and addiction treatment show better treatment progression in patients affected by both problems (5, 6, 35).

On the other hand, most of the violent behaviours analysed in this study are more prevalent in women than in men, when both perpetration and victimization have been studied. Although IPV has traditionally been associated with a male-perpetrator and female-victim pattern, it has been suggested that women's perpetration of violence should be studied even in populations where women are severely victimized (16). Some studies have shown that women who are victimized are more likely to be perpetrators of violence in their intimate relationships than non-victimized women (13, 18, 36). Practitioners should consider the high prevalence of victimization and traumatic events in patients with substance use disorders. Accurate assessments of these patients should

be developed and tailored interventions according to the trauma-informed care perspective should be provided (37).

Anyway, this violent behaviour in women probably indicates a maladaptive coping strategy or survival mechanism. Actually, the main women's motives found for IPV-P are related to expression of negative emotions (such as anger and frustration), self-defence, attempts to control their partners, or jealousy (19). The results of this study support this idea, as patients with bidirectional violence of our sample presented with higher scores for impulsiveness and anger. This bidirectional violence seems to be especially relevant in the addiction field (7, 32). However, there are not specific studies about bidirectional violence with patients with addiction problems.

This study has several limitations. First, the sample is limited and only addresses a specific population and context: patients with drug addiction problems who seek treatment in a specialized centre in Spain. Therefore, the results should be generalized with caution. Second, because few women were included in the sample, more studies considering gender issues are needed. It is true that they represent the rate of women in addiction clinical centres and almost all studies about drug dependence include largely male samples, but this should nevertheless be taken into account when generalising the results obtained. Third, in this study, sexual orientation of the partners (same sex or heterosexual couples) was not considered. This could bias the generalization of the results obtained, because specific characteristics in same sex IPV have been found (38). Fourth, this is a cross-sectional study, and the results do not facilitate establishing causal relationships between drug abuse and IPV behaviours. Thus, longitudinal studies that analyse the role of different variables in the development of IPV are necessary. Fifth, in this study, IPV behaviours have been determined using the CTS-2. Although it is one of

the most internationally used self-report instruments to assess violent behaviours in intimate partner relationships, the CTS-2 has been criticized recently for overreporting the rate of violence identified (39). Therefore, these data should be replicated in future studies with additional assessment methods. Sixth, identification of violent behaviours has been self-reported, without considering the partners' opinion. Some studies have shown that females are prone to report more violence for themselves and their partners than males are (13). Reports from both partners should be considered when IPV behaviours are analysed in the addiction field. Finally, this study did not consider the motives and context of IPV behaviours, nor structural and community-level factors. Addressing motives that women and men themselves see as underlying their use of violence has been proposed as a promising approach for prevention IPV behaviours (19).

In summary, findings of this study highlight the high prevalence of IPV in patients with drug addiction problems, and, more specifically, the gender-based differences found in IPV, with more women than men being perpetrators and victims of abuse. Therefore, bidirectional violence in addictions constitutes a major direction for future research (15, 16). From a clinical perspective, the study of this bidirectional violence should be continued due to the more severe profile found in patients involved in bidirectional violence.

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Table 1

Prevalence and comparisons by gender of intimate partner violence behaviours perpetrated

Variable	Total (N = 122)		Men (n = 91)		Women (n = 31)		χ^2 (df = 1)	p	Phi
	N	%	N	%	N	%			
Minor physical assault									
I pushed or shoved my partner	41	33.6%	24	26.4%	17	54.8%	8.4	.004	0.26
I grabbed my partner	33	27.0%	23	25.3%	10	32.3%	0.6	.450	0.07
I slapped my partner	25	20.5%	11	12.1%	14	45.2%	15.5	< .001	0.36
I threw something at my partner that could hurt	24	19.7%	12	13.2%	12	38.7%	9.5	.002	0.28
I twisted my partner's arm or hair	20	16.4%	14	15.4%	6	19.4%	0.3	.606	0.05
Perpetration of minor physical assault (any type)	50	40.7%	30	33.0%	20	64.5%	9.8	.002	0.28
Severe physical assault									
I punched or hit my partner with something that could hurt	16	13.1%	8	8.8%	8	25.8%	5.9	.015	0.22
I slammed my partner against a wall	16	13.1%	7	7.7%	9	29.0%	9.2	.002	0.27
I kicked my partner	16	13.1%	8	8.8%	8	25.8%	5.9	.015	0.22
I choked my partner	10	8.2%	8	8.8%	2	6.5%	0.2	.682	-0.04
I used a knife or gun on my partner	9	7.4%	3	3.3%	6	19.4%	8.7	.003	0.27
I beat up my partner	3	2.5%	1	1.1%	2	6.5%	n.a.		
I burned or scalded my partner on purpose	1	0.8%	0	--	1	3.2%	n.a.		
Perpetration of severe physical assault (any type)	34	27.9%	19	20.9%	15	48.4%	8.7	.003	0.27
Minor psychological aggression									
I shouted or yelled at my partner	95	77.9%	66	72.5%	29	93.5%	5.9	.015	0.22
I stomped out of the room or house or yard during a disagreement	90	73.8%	63	69.2%	27	87.1%	3.8	.051	0.18
I insulted or swore at my partner	82	67.2%	56	61.5%	26	83.9%	5.2	.022	0.21
I did something to spite my partner	64	52.5%	43	47.3%	21	67.7%	3.9	.049	0.18
Perpetration of minor psychological aggression (any type)	106	86.9%	76	83.5%	30	96.8%	3.6	.059	0.17
Severe psychological aggression									
I called my partner fat or ugly	51	41.8%	37	40.7%	14	45.2%	0.2	.661	0.04
I destroyed something belonging to my partner	30	24.6%	21	23.1%	9	29.0%	0.4	.506	0.06
I threatened to hit or throw something at my partner	27	22.1%	15	16.5%	12	38.7%	6.6	.010	0.23
I accused my partner of being a lousy lover	24	19.7%	13	14.3%	11	35.5%	6.6	.010	0.23

Perpetration of severe psychological aggression (any type)	86	70.5%	59	64.8%	27	87.1%	5.5	.019	0.21
Minor sexual coercion									
I insisted on sex when my partner did not want to (but did not use physical force)	30	24.6%	24	26.4%	6	19.4%	0.6	.433	-0.07
I insisted my partner have oral or anal sex (but did not use physical force)	17	13.9%	15	16.5%	2	6.5%	1.9	.164	-0.13
I made my partner have sex without a condom	8	6.6%	3	3.3%	5	16.1%	6.2	.013	0.23
Perpetration of minor sexual coercion (any type)	43	35.2%	34	37.4%	9	29.0%	0.7	.402	-0.07
Severe sexual coercion									
I used force (like hitting, holding down, or using a weapon) to make my partner have sex	2	1.6%	1	1.1%	1	3.2%	0.6	.421	0.07
I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex	1	0.8%	0	--	1	3.2%	n.a.		
I used threats to make my partner have oral or anal sex	1	0.8%	0	--	1	3.2%	n.a.		
I used threats to make my partner have sex	1	0.8%	0	--	1	3.2%	n.a.		
Perpetration of severe sexual coercion (any type)	3	2.5%	1	1.1%	2	6.5%	n.a.		
Minor injuries									
My partner had a sprain, bruise, or small cut because of a fight with me	21	17.2%	12	13.2%	9	29.0%	4.1	.040	0.18
My partner still felt physical pain the next day because of a fight we had	12	9.8%	6	6.6%	6	19.4%	4.3	.039	0.19
Perpetration of minor injuries (any type)	24	19.7%	13	14.3%	11	35.5%	6.6	.010	0.23
Severe injuries									
My partner went to a doctor because of a fight with me	6	4.9%	4	4.4%	2	6.5%	0.2	.648	0.04
My partner needed to see a doctor because of a fight with me, but did not	6	4.9%	5	5.5%	1	3.2%	0.3	.614	-0.05
My partner passed out from being hit on the head in a fight with me	4	3.3%	3	3.3%	1	3.2%	0	.985	-0.00
My partner had a broken bone from a fight with me	3	2.5%	2	2.2%	1	3.2%	n.a.		
Perpetration of severe injuries (any type)	11	9.0%	8	8.8%	3	9.7%	0.1	.882	0.13

n.a: not applicable

Table 2*Prevalence and comparisons by gender of intimate partner violence behaviours suffered*

Variable	Total (N = 122)		Men (n = 91)		Women (n = 31)		χ^2 (df=1)	p	Phi
	N	%	N	%	N	%			
Minor physical assault									
My partner pushed or shoved me	51	41.8%	32	35.2%	19	61.3%	6.5	.011	0.23
My partner threw something at me that could hurt	39	32.0%	23	25.3%	16	51.6%	7.4	.007	0.25
My partner grabbed me	39	32.0%	25	27.5%	14	45.2%	3.3	.068	0.17
My partner slapped me	35	28.7%	23	25.3%	12	38.7%	2.0	.153	0.13
My partner twisted my arm or hair	33	27.0%	21	23.1%	12	38.7%	2.9	.091	0.15
Victimization of minor physical assault (any type)	64	52.5%	41	45.1%	23	74.2%	7.9	.005	0.25
Severe physical assault									
My partner punched or hit me with something that could hurt	33	27.0%	19	20.9%	14	45.2%	6.9	.009	0.24
My partner slammed me against a wall	25	20.5%	11	12.1%	14	45.2%	15.5	< .001	0.36
My partner kicked me	25	20.5%	15	16.5%	10	32.3%	3.5	.060	0.17
My partner choked me	19	15.6%	9	9.9%	10	32.3%	8.8	.003	0.27
My partner used a knife or gun on me	13	10.7%	9	9.9%	4	12.9%	0.2	.639	0.04
My partner beat up me	12	9.8%	3	3.3%	9	29.0%	17.3	< .001	0.38
My partner burned or scalded me on purpose	4	3.3%	3	3.3%	1	3.2%	0	.985	-0.00
Victimization of severe physical assault (any type)	46	37.7%	28	30.8%	18	58.1%	7.3	.007	0.25
Minor psychological aggression									
My partner shouted or yelled at me	92	75.4%	66	72.5%	26	83.9%	1.6	.205	0.11
My partner insulted or swore at me	79	64.8%	54	59.3%	25	80.6%	4.6	.032	0.19
My partner stomped out of the room or house or yard during a disagreement	74	60.7%	48	52.7%	26	83.9%	9.4	.002	0.28
My partner did something to spite me	64	52.5%	43	47.3%	21	67.7%	3.9	.049	0.18
Victimization of minor psychological aggression (any type)	105	86.1%	77	84.6%	28	90.3%	0.6	.428	0.07
Severe psychological aggression									
My partner called me fat or ugly	56	45.9%	37	40.7%	19	61.3%	4.0	.046	0.18
My partner destroyed something belonging to me	36	29.5%	24	26.4%	12	38.7%	1.7	.193	0.12
My partner threatened to hit or throw something at me	35	28.7%	21	23.1%	14	45.2%	5.5	.019	0.21

My partner accused me of being a lousy lover	21	17.2%	13	14.3%	8	25.8%	2.1	.142	0.13
Victimization of severe psychological aggression (any type)	85	69.7%	60	65.9%	25	80.6%	2.4	.124	0.14
Minor sexual coercion									
My partner insisted on sex when I did not want to (but did not use physical force)	28	23.0%	19	20.9%	9	29.0%	0.9	.351	0.08
My partner made me have sex without a condom	15	12.3%	5	5.5%	10	32.3%	15.4	< .001	0.36
My partner insisted on having oral or anal sex (but did not use physical force)	13	10.7%	6	6.6%	7	22.6%	6.2	.013	0.23
Victimization of minor sexual coercion (any type)	40	32.8%	23	25.3%	17	54.8%	9.2	.002	0.27
Severe sexual coercion									
My partner used force (like hitting, holding down, or using a weapon) to make me have oral or anal sex	9	7.4%	4	4.4%	5	16.1%	4.7	.031	0.20
My partner used force (like hitting, holding down, or using a weapon) to make me have sex	6	4.9%	4	4.4%	2	6.5%	0.2	.648	0.04
My partner used threats to make me have sex	6	4.9%	2	2.2%	4	12.9%	5.7	.017	0.19
My partner used threats to make me have oral or anal sex	0	--	0	--	0	--	n.a.		
Victimization of severe sexual coercion (any type)	12	9.8%	6	6.6%	6	19.4%	4.2	.039	0.19
Minor injuries									
I had a sprain, bruise, or small cut because of a fight with my partner	26	21.3%	11	12.1%	15	48.4%	18.2	< .001	0.39
I felt physical pain that still hurt the next day because of a fight with my partner	18	14.8%	5	5.5%	13	41.9%	24.4	< .001	0.45
Victimization of minor injuries (any type)	29	23.8%	12	13.2%	17	54.8%	22.1	< .001	0.43
Severe injuries									
I needed to see a doctor because of a fight with my partner, but I did not	15	12.3%	5	5.5%	10	32.3%	15.4	< .001	0.36
I went to a doctor because of a fight with my partner	12	9.8%	3	3.3%	9	29.0%	17.3	< .001	0.38
I passed out from being hit on the head by my partner in a fight	6	4.9%	2	2.2%	4	12.9%	5.7	.017	0.22
I had a broken bone from a fight with my partner	5	4.1%	2	2.2%	3	9.7%	3.3	.070	0.17
Victimization of severe injuries (any type)	23	20.4%	10	12.0%	13	41.9%	13.3	< .001	0.35

n.a: not applicable

Table 3

Comparisons according to absence/unidirectional/bidirectional violence

Variables	Without violence (a) (n = 10)		Only aggressor (b) (n = 35)		Aggressor + Victim (c) (n = 77)		χ^2	Phi	Post hoc
	n	%	n	%	n	%			
Sex									
Men	9	9.9%	31	34.1%	51	56.0%	7.7*	0.25	a, b > c
Women	1	3.2%	4	12.9%	26	83.9%			
Marital status									
Single	10	13.3%	18	24.0%	47	62.7%	6.9	0.24	
Married	0	--	9	37.5%	15	62.5%			
Separated/Divorced	0	--	6	35.3%	11	64.7%			
Substance motivating treatment									
Alcohol	4	11.1%	10	27.8%	22	61.1%	1.6	0.12	
Stimulants	4	8.0%	15	30.0%	31	62.0%			
Other	1	3.3%	8	26.7%	21	70.0%			
	<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>Post hoc</i>
Age	42.60	12.39	36.26	7.74	35.93	8.48	2.6	0.21	
Impulsiveness									
Total (0-132)	51.00	16.04	51.11	15.01	61.39	17.41	5.4**	0.29	c > b**
Motor (0-44)	13.90	5.72	14.74	6.81	20.71	8.01	9.5***	0.37	c > a***, b**
Cognitive (0-44)	19.40	6.26	19.77	5.25	22.29	6.71	2.4	0.19	
Non-planning (0-44)	17.70	7.42	16.60	6.09	18.39	6.53	0.9	0.12	
Anger									
State (10-40)	13.00	4.30	11.63	2.60	16.29	6.38	9.4***	0.37	c > b***
Trait (10-40)	18.90	5.22	16.89	3.37	21.87	5.95	11.1***	0.39	c > b***
Distorted thoughts									
Violence (16-64)	33.20	3.97	29.34	5.65	30.82	6.53	1.7	0.16	
Women (13-52)	24.00	5.93	20.44	5.63	22.38	4.85	2.5	0.20	

*p < .05

**p < .01

***p < .001

Table 4

Comparisons according to absence/unidirectional/bidirectional physical and/or sexual violence

Variable	Only aggressors ¹ (n = 4)		Without violence (a) (n = 50)		Only victims (b) (n = 29)		Aggressor + Victim (c) (n = 39)		χ^2	Phi	Post hoc
	n	%	n	%	n	%	n	%			
Sex											
Men	4	4.4%	42	46.2%	25	27.5%	20	22.0%	15.2***	0.36	a, b > c
Women	0	--	8	25.8%	4	12.9%	19	61.3%			
Marital status											
Single	3	4.0%	30	40.0%	16	21.3%	26	34.7%	2.8	0.16	
Married	0	--	10	41.7%	8	33.3%	6	25.0%			
Separated/Divorced	1	5.9%	8	16.7%	2	11.8%	6	35.3%			
Substance motivating treatment											
Alcohol	0	--	18	50.0%	9	25.0%	9	25.0%	2.5	0.15	
Stimulants	4	8.0%	17	34.0%	10	20.0%	19	38.0%			
Other	0	--	12	40.0%	7	23.3%	11	36.7%			
	<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>Post hoc</i>
Age	36.26	7.73	37.96	9.13	36.83	10.71	34.87	6.92	1.3	0.15	
Impulsiveness											
Total (0-132)	46.00	10.30	52.98	15.38	59.17	15.48	63.31	19.42	4.2*	0.26	c** > a
Motor (0-44)	14.25	6.50	15.40	6.91	19.93	8.32	21.90	8.07	8.4***	0.36	b*, c*** > a
Cognitive (0-44)	16.50	1.29	20.16	5.23	21.76	6.31	22.69	7.51	1.8	0.17	
Non-planning (0-44)	15.25	5.31	17.42	6.56	17.48	5.80	18.72	7.03	0.5	0.09	
Anger											
State (10-40)	10.75	1.50	13.08	4.44	15.66	6.32	16.68	6.58	4.6*	0.28	c > a**
Trait (10-40)	20.00	1.50	17.66	4.33	21.97	6.21	22.41	6.02	10.3***	0.40	b**, c*** > a
Distorted thoughts											
Violence (16-64)	32.50	5.69	29.58	5.41	32.66	7.15	30.05	6.11	2.5	0.20	b* > a
Women (13-52)	26.00	9.02	20.37	5.17	23.00	5.41	22.81	4.24	3.6*	0.24	b*, c* > a

¹This category was not included in the statistical comparisons due to the small number of cases.

*p < .05 **p < .01 ***p < .001