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Anxiety, Depression, and Comorbid Symptomatology: Different Forms and Severity of Intimate Partner Violence Perpetrated by Men Seeking Help

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Intimate partner violence (IPV) is a serious public health issue associated with numerous deleterious outcomes. Previous studies highlighted the relevance of documenting psychological predictors of IPV to identify prevention strategies. This study examined the links between anxious and depressive symptomatology and perpetrated physical, psychological, and sexual violence among 494 French–Canadian men seeking help for IPV-related difficulties. Differences in the frequency of perpetrated IPV were examined across four groups: (a) no anxious or depressive symptoms reaching a cutoff of high distress, (b) symptoms of anxiety, (c) symptoms of depression, and (d) comorbid symptoms. Results highlighted that men with comorbid symptoms perpetrated significantly more severe violent acts compared to the other groups. This study underscores the importance of targeting the reduction of psychological distress when treating men who perpetrated IPV.

Keywords: psychological distress; violence; aggression; help seeking; clinical population

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Intimate partner violence (IPV) is a major social public health issue associated with deleterious personal and relational outcomes in both partners and indirect victims (e.g., family; Black, 2011). According to the World Health Organization (2019), about 35% of women worldwide report having sustained IPV in their lifetime. Similar rates are reported in North America, with the majority of victims being women (79%) and 80% of perpetrators being men (Breiding et al., 2015; Ministry of Public Safety, 2017). In Canada, the annual economic impact of IPV issue is estimated at CAN$7.4 billion (Zhang et al., 2013). To reduce the occurrence of IPV and improve clinical resources, a growing body of research has been dedicated to identifying the contribution of potential factors that increase the risk of perpetrating IPV (see Capaldi et al., 2012). Recently, the role of psychological distress in the perpetration of IPV has been highlighted (Shorey et al., 2012; Spencer et al., 2019), showing that the more distressed men are, the more severe their violence is (Corvo & Johnson, 2013). Yet, most studies examining this risk marker have focused on only one form of IPV (e.g., physical) and have not differentiated results according to severity, and few have studied clinical populations seeking help. Considering that men seeking help are key actors to target in order to decrease the occurrence of IPV and prevent its recurrence (Delage et al., 2012), the examination of their psychological distress related to their use of IPV is necessary. Indeed, research has shown that men seeking help for IPV-related difficulties report high levels of psychological distress (Di Piazza et al., 2017; Maiuro et al., 1988). The present study aims to explore whether specific symptoms of psychological distress—depression, anxiety, or both—might help differentiate the forms and severity of IPV acts perpetrated by these men.

FORM AND SEVERITY OF INTIMATE PARTNER VIOLENCE

IPV describes a variety of behaviors used by an intimate partner or ex-partner, including dating partners, and that causes harm to the dignity and the physical, psychological, sexual, or moral integrity of victims (Garcia-Moreno et al., 2006). Physical, psychological, and sexual violence are three main forms of IPV (Breiding et al., 2015). Physical IPV describes all behaviors that aim to hurt the physical integrity of the partner and includes minor (e.g., shoving, slapping, and grabbing) and severe acts of violence (e.g., kicking, threatening with a firearm, and strangling), with or without direct contact (e.g., throwing objects). Psychological IPV refers to the use of verbal and nonverbal communication to hurt the feelings or self-esteem of the partner and includes minor (e.g., insulting and yelling) and severe violence (e.g., threatening and depreciating). Sexual IPV describes behaviors used to engage in sexual intercourse despite the lack of consent of the partner and includes minor (e.g., insisting and forcing to have sex without protection) and severe violence (e.g., using physical force or weapons).

In addition to these various forms of IPV, researchers and clinicians have emphasized the relevance of considering the severity (minor and severe) of IPV (Woodin & O'Leary, 2006). Smith et al. (2014) argued that acts of IPV can be understood on a continuum of severity, where the perpetration of IPV increases the probability of further perpetration. Including severity in the examination of IPV risk markers makes it possible to identify different paths that can lead to the perpetration of one or another form of IPV (e.g., Domenech Del Rio & Sirvent Garcia Del Valle, 2019). From a clinical perspective, investigating the factors associated with minor and severe IPV has been proposed

to allow distinct treatment considerations to be addressed before directly targeting a violent behavior (Cantos & O'Leary, 2014). In this regard, studies have suggested that the perpetration of severe IPV would be associated with the presence of more severe psychopathology (Corvo & Johnson, 2013).

Exploring the Role of Psychological Distress

Early work by Maiuro et al. (1988) has revealed that men perpetrators of IPV had significantly higher depressive symptoms than generally violent men and nonviolent men. In recent years, a growing body of research has paid special attention to the psychological distress experienced by perpetrators of IPV. Indeed, psychological distress may be one of the most significant explanations for IPV perpetration, with IPV being understood as a manifestation of externalized symptoms of men's psychological distress experienced by those with anxious and/or depressive symptoms (Corvo & Johnson, 2013; Spencer et al., 2019). Researchers have observed that men who perpetrated any form of IPV are more likely to present anxiety (pathological fear, worry, restlessness, irritability, etc.) and depression (sad or irritable mood, loss of interest or pleasure, pessimism, self-depreciation, etc.) symptoms when compared to men from the general population. According to Shorey et al. (2012), startling prevalence rates suggesting probable diagnoses (e.g., GAD, PTSD, and depression) can be observed in men arrested and court-referred for IPV, with 15.2% to 27.6% of them reporting anxious symptoms and 19.9% depressive symptoms. Di Piazza et al. (2017) report that approximately 70% of men in IPV treatment experience moderate to high symptoms of depression according to the Beck Depression Inventory (Beck et al., 1988). These high prevalence rates support the relevance of considering anxious and depressive symptomatology in perpetrators of IPV, as it may explain their use of violence toward a partner, and the need to address mental health in treating IPV.

Authors have shown that men who report symptoms of psychological distress (anxiety or depression) also report perpetrating different forms of IPV. For instance, in their recent meta-analysis, Spencer et al. (2019) explored the associations between physical IPV perpetration and psychological distress, which included studies that evaluated symptoms of mental disorders with and without a clinical diagnosis. Findings highlighted small but consistent associations between both anxiety (r = .14, k = 23) and depression (r = .21, k = 52) symptoms and perpetration of physical IPV in men. Another meta-analysis conducted by Oram et al. (2014) revealed similar results and indicated that men with anxiety were 3.2 times more likely to perpetrate physical IPV and men with depression were 2.8 times more likely to perpetrate physical IPV than men without these symptoms. Although they support the relevance of examining anxiety and depression as risk markers of IPV perpetration, these meta-analyses overlooked psychological and sexual IPV, which are also highly prevalent. According to Shorey et al. (2012), men who report symptoms of depression—but not anxiety—are at risk of perpetrating more psychological and sexual violence than those who do not. Other studies have found positive links between anxiety and the perpetration of physical IPV (Ngo et al., 2018). A general observation emerges with regard to these studies: They compared men with symptoms of psychological distress (anxiety and depression) to those who have low or no symptoms, without comparing these different symptoms to each other.

Although researchers in this area support that the presence of psychological distress symptoms might differentiate IPV perpetrators from men who do not perpetrate such

violence, current studies nevertheless present some caveats. First, most studies examining psychological distress as a risk marker have been conducted using either population-based (e.g., McKenzie et al., 2018), incarcerated (e.g., Buitelaar et al., 2020), or psychiatric samples of men, but very few have focused on men seeking help for their IPV behaviors (e.g., Palmstierna et al., 2012). Therefore, their results may not apply to all clinical samples, such as men who are seeking psychological help—especially those who voluntarily choose to enter therapy. Asking for help may imply that men feel a sufficiently high level of distress to do so. Indeed, men are less likely to seek help services when they are experiencing difficulties (e.g., McKenzie et al., 2018), and they often seek help as the last resort or if they feel they are obligated to do so by their partner or by the law (e.g., court-ordered therapy).

Second, past studies have not considered more subtle or less studied forms of IPV and its severity (e.g., psychological and sexual). By examining the psychological distress experienced by men and comparing them on the use of different forms and severity of IPV, we may gather knowledge that will offer strategic insights into factors that can either enhance or decrease the occurrence of IPV. This may also help disentangle the mixed findings regarding anxiety, as studies have found positive associations between anxiety and physical IPV (Ngo et al., 2018), while others have not found significant association (Shorey et al., 2012).

Third, although many studies using clinical samples have shown that the majority of individuals who report depressive symptoms also report high anxiety (Zhou et al., 2017), we know little about the ways comorbid anxious and depressive symptoms are experienced in men who perpetrate IPV. To our knowledge, no research has yet examined the comorbidity of anxiety and depression in the study of psychological distress and IPV. However, it is well known that the comorbidity of anxiety and depression is one of the most common and prevalent in adults (Lamers et al., 2011). Some authors even argued that the presence of this comorbidity is associated with a persistence of symptoms over time (Prenoveau et al., 2013) and that their pathological interaction may promote more severe and persistent levels of psychological distress which requires specific therapeutic adjustments (Lamers et al., 2011). Considering previous research has shown that, compared to the sole presence of depressive and anxious symptoms, their comorbidity is associated with lower physical and psychological quality of life (Zhou et al., 2017), and considering that highly distressed men are known to use more severe acts of IPV (Corvo & Johnson, 2013), the examination of how depressive and anxious symptoms and their comorbidity relate to IPV perpetration is necessary.

The experience of psychological distress alone cannot explain the IPV perpetrated. Among the variables recognized to increase the risks of perpetrating IPV, the literature highlights the role of exposure to violence in childhood (e.g., Godbout et al., 2019), anger management difficulties (e.g., Brassard et al., 2014; Maiuro et al., 1988), and substance use (e.g., Cafferky et al., 2018). It would thus be an important exploratory avenue to examine whether these key variables also differ according to psychological distress groups in men seeking help.

Objectives and Hypotheses

The aim of this study is to understand IPV perpetrated by men seeking help for their violent behavior by examining the joint roles of significant symptoms of depression and anxiety as potential risk markers. Precisely, this study addresses the following question:

Do IPV perpetration frequency and severity vary according to anxious and depressive symptomatology in a sample of men seeking help? In line with previous research, it was hypothesized that men with a comorbidity of both anxiety and depression symptoms would report a higher frequency and severity of perpetrated IPV than men with any of those symptoms (i.e., anxiety *or* depression) or with symptoms below cutoff (i.e., low symptoms). As an exploratory question, we also examined whether men with a comorbidity of symptoms would differ from men with anxiety or depressive symptoms or with symptoms that measure below the cutoff with regard to their reported level of childhood maltreatment experiences, anger management difficulties, and substances use (alcohol/drugs).

MATERIALS AND METHODS

Participants and Procedure

The sample was comprised of 494 men aged between 18 and 71 years old who were seeking help in a community organization specialized in the prevention and treatment of IPV. Sociodemographic information on the sample is presented in Table 1. Data for this study were collected from 2009 to 2019 with the collaboration of a community organization specialized in IPV-related difficulties in the province of Quebec, Canada. To be included in the study, men had to be at least 18 years old, be in a relationship during the last 12 months, and understand French. During the first appointment, therapists invited men to answer a series of questionnaires as part of the organization's standard assessment protocol. Men had to complete a 50-minute paper–pencil self-administered questionnaire to receive treatment but were free to take part in the research or not. Participants were informed that a summary of their response would be transmitted to their therapist through an alphanumeric code. Their participation in the study (or refusal) did not affect the services they received. The study was approved by the ethics committee of the researchers' institution.

Measures

Sociodemographic Questionnaire. A sociodemographic questionnaire assessed the men's characteristics (e.g., age, education, and occupation), childhood maltreatment experiences, and substance use (alcohol/drugs). Three brief Yes/No questions assessed the experience of childhood sexual abuse, physical abuse, and witnessing parental physical IPV. Two additional items assessed the weekly frequency of alcohol and drug (e.g., speed, ecstasy, and cannabis) use.

Intimate Partner Violence. The *Revised Conflict Tactics Scales* (CTS2; Lussier, 1997; Straus et al., 1996) assessed the victimization and the perpetration of IPV in the past 12 months, with 78 items rated on a scale ranging from 0 "this has never happened" to 6 "more than 20 times." Subscales assess physical (24 items), psychological (16 items), and sexual violence (14 items), including minor and severe acts. Total scores for each type of IPV are obtained by summing the midpoint of the frequency; higher scores indicate higher frequencies of these behaviors during the last year. Validity and internal consistency of the scales are adequate with Cronbach's alpha coefficients varying between .79 and .86 (Lussier, 1997). Similar reliability indices were found in this sample (see Table 2).

TABLE 1. Demographic Characteristics of the Sample According to the Four Groups of Men Seeking Help

Variable	χ^2/F	Group 1 (N = 75) Low Symptoms		Group 2 (N = 97) Anxiety		Group 3 (N = 17) Depression		Group 4 (N = 305) Comorbid	
		% (n)	*M (SD)*	*% (n)*	*M (SD)*	*% (n)*	*M (SD)*	*% (n)*	*M (SD)*
Age	2.03		38.35 (12.20)		36.09 (10.22)		31.29 (11.11)		36.54 (10.86)
Annual income	4.74**		$44.450\ (52.397)_{ab}$		$37.971\ (26.469)_{a}$		$24.514\ (14.947)_{b}$		$30.649\ (20.861)_{ab}$
Education	10.24								
Elementary school		9.0 (6)		10.0 (9)		40.0 (6)		18.8 (49)	
High school		55.2 (37)		55.6 (50)		40.0 (6)		60.1 (157)	
Pre-university degree		23.9 (16)		11.1 (10)		13.3 (2)		11.9 (31)	
University		11.9 (8)		23.3 (21)		6.7 (1)		9.2 (24)	
Occupation	38.23								
Unemployed		21.6 (16)		15.9 (15)		23.5 (4)		29.5 (87)	
Employed		64.9 (48)		74.5 (70)		70.6 (12)		63.7 (188)	
Full-time student		2.7 (2)		9.6 (9)		-		4.4 (13)	
Retired		10.8 (8)		-		5.9 (1)		2.4 (7)	
Relationship status	6.92								
Single		1.4 (1)		2.1 (2)		-		2.0 (6)	
Not cohabiting		13.9 (10)		11.6 (11)		23.5 (4)		16.0 (48)	
Cohabiting		63.9 (46)		63.1 (60)		70.6 (12)		60.2 (180)	
Married		20.8 (15)		21.1 (20)		5.9 (1)		19.1 (57)	
Separated		-		2.1 (2)		-		2.7 (8)	
Duration of relationship	.26		7.71 (8.61)		6.75 (6.33)		6.61 (9.03)		7.25 (7.77)
Previous consultation	7.91*								
No		41.9 (31)		39.6 (38)		37.5 (6)		28.1 (85)	
Yes		58.1 (43)		60.4 (58)		62.5 (10)		71.9 (217)	

(*Continued*)

TABLE 1. Demographic Characteristics of the Sample According to the Four Groups of Men Seeking Help (*Continued*)

Variable	χ^2/F	Group 1 (N = 75) Low Symptoms		Group 2 (N = 97) Anxiety		Group 3 (N = 17) Depression		Group 4 (N = 305) Comorbid	
		% (n)	M (SD)	% (n)	M (SD)	% (n)	M (SD)	% (n)	M (SD)
Referral source	14.31								
Themselves		22.2 (16)		17.7 (17)		11.8 (2)		17.2 (51)	
Family/friends		9.7 (7)		15.6 (15)		5.9 (1)		13.8 (41)	
Health professional		16.7 (12)		25.0 (24)		29.4 (5)		31.0 (92)	
Court/youth centers		34.7 (25)		26.1 (25)		35.3 (6)		26.9 (80)	
Other		16.7 (12)		15.6 (15)		17.6 (3)		11.1 (33)	
Childhood maltreatment									
Witnessing physical parental violence	8.25*								
No		63.5 (47)		62.8 (59)		82.4 (14)		53.7 (161)	
Yes		36.5 (27)		37.2 (35)		17.6 (3)		46.3 (139)	
Physical abuse	3.51								
No		62.3 (43)		59.3 (51)		68.8 (11)		53.1 (147)	
Yes		37.7 (26)		40.7 (35)		31.3 (5)		46.9 (130)	
Sexual abuse	7.13								
No		93.3 (70)		88.5 (85)		82.4 (14)		82.1 (248)	
Yes		6.7 (5)		11.5 (11)		17.6 (3)		17.9 (54)	

(*Continued*)

TABLE 1. Demographic Characteristics of the Sample According to the Four Groups of Men Seeking Help (*Continued*)

Variable	χ^2/F	Group 1 (N = 75) Low Symptoms		Group 2 (N = 97) Anxiety		Group 3 (N = 17) Depression		Group 4 (N = 305) Comorbid	
		% (*n*)	*M* (*SD*)	% (*n*)	*M* (*SD*)	% (*n*)	*M* (*SD*)	% (*n*)	*M* (*SD*)
Substance use (per week)									
Alcohol	1.41		2.62 (3.62)		3.95 (6.29)		1.88 (3.91)		4.89 (12.10)
Drug	1.84		0.79 (2.36)		1.20 (2.94)		0.59 (1.81)		2.20 (7.05)

Note. Different subscripts indicate significant mean differences between classes according to the Games–Howell post hoc test. *SD* = standard deviation.

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

TABLE 2. Perpetrated Acts of IPV Across the Four Groups of Men Seeking Help

	α	Group 1 (*N* = 75) Low symptoms		Group 2 (*N* = 97) Anxiety		Group 3 (*N* = 17) Depression		Group 4 (*N* = 305) Comorbid		*F*	*p*	η2
		M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*			
Anxiety	.76	13.79	9.41	45.79	13.16	21.35	2.67	64.31	20.55			
Depression	.81	12.80	8.93	19.54	6.96	39.00	7.83	54.71	18.14			
Psychological IPV												
Minor	.74	18.47_{a}	20.32	28.48_{b}	23.82	27.94_{ab}	22.24	32.31_{b}	25.02	10.93	<.001	.063
Severe	.70	2.25_{a}	6.239	2.66_{a}	6.52	5.76_{ab}	9.82	5.47_{b}	11.13	4.073	.007	.024
Physical IPV												
Minor	.81	1.83_{a}	3.81	2.63_{ab}	5.05	3.18_{ab}	3.59	5.59_{b}	13.71	4.53	.004	.027
Severe	.84	0.29_{a}	0.98	0.63_{ab}	1.52	0.47_{ab}	0.80	1.55_{b}	4.98	3.818	.010	.023
Sexual IPV												
Minor	.67	1.93	7.27	1.87	6.15	0.18	0.53	1.73	6.03	0.618	.604	.004
Severe	.89	0.05	0.46	0.34	2.58	0.00	0.00	0.36	3.09	0.778	.507	.005
Anger												
State anger	.85	1.12_{a}	0.30	1.26_{a}	0.53	1.18_{a}	0.31	1.52_{b}	0.71	11.21	<.001	.065
Trait anger	.85	1.81_{a}	0.60	2.01_{a}	0.57	1.96_{ab}	0.65	2.31_{b}	0.61	17.86	<.001	.099
Anger-in	.68	1.88_{a}	0.54	2.11_{b}	0.52	2.10_{abc}	0.48	2.31_{c}	0.52	15.11	<.001	.085
Anger-out	.73	1.91_{a}	0.77	2.10_{ab}	0.69	1.92_{ab}	0.64	2.28_{b}	0.65	7.65	<.001	.045
Anger control	.90	2.65_{a}	0.79	2.55_{a}	0.69	2.35_{ab}	0.58	2.33_{b}	0.65	5.90	.001	.035

Note. Different subscripts indicate significant mean differences between classes according to the Games–Howell post hoc test. IPV = intimate partner violence; *SD* = standard deviation.

Psychological Distress. The brief version (Préville, 1995) of the Psychiatric Symptom Index (PSI; Ilfeld, 1976) was used to assess the presence of anxious and depressive symptoms experienced in the 7 days prior to the completion of the questionnaire, with 14 items rated on a 4-point Likert scale ranging from 0 "not at all" to 3 "very often." This measure does not allow to assess mental illness but rather to assess the frequency and severity of symptoms experienced by participants. Items are summed and transformed so that each scale's score range from 0 to 100; higher scores indicate higher distress. A cutoff score of 30 or more for both anxiety and depression scales would indicate a high psychological distress requiring consultation with a mental health professional (Boyer et al., 1993; Ilfeld, 1976, 1978). Validity and internal consistency are adequate with an alpha coefficient of .89 for both scales (Préville, 1995), as in this sample (see Table 2).

Anger. The Inventory of Anger Experiences in Couples (IAEC; Laughrea et al., 1996) was used to assess the experience and expression of anger with 44 items rated on a 4-point Likert scale ranging from 1 "almost never" to 4 "almost always." Subscales assess state anger (presence and intensity of angry feelings), trait anger (tendency to perceive circumstances as frustrating), anger-in (i.e., tendency to withhold expression of anger), anger-out (tendency to express anger in excessive or inappropriate ways), and anger control (tendency to regulate the experience and expression of anger). Item ratings are averaged to create five subscale scores. Validity and internal consistency are adequate with an alpha coefficient from .74 to .87 for all scales (Laughrea et al., 1996), as in this sample (see Table 2).

Data Analysis Strategy

To compare the perpetration of IPV according to depressive and anxiety symptoms, four groups were created based on cutoff from the PSI questionnaire (Ilfeld, 1976). Participants *without any symptoms reaching the cutoff* formed Group 1 (subsequently referred to as Low Symptoms group). Those with *only high symptoms of anxiety* formed Group 2 (subsequently referred to as Anxiety group), and those with *only high symptoms of depression* formed Group 3 (subsequently referred to as Depression group). Finally, participants with *comorbid anxiety and depression symptoms* formed Group 4 (subsequently referred to as Comorbid group). Because normality of the distributions was not expected for the six scores of perpetrated IPV, log transformations were performed to examine between-group differences with one-way analyses of variance (ANOVAs). Post-hoc comparisons were conducted with Games–Howell tests to maximize power given unequal group sizes and heterogeneity in variances. Chi-square (χ^2) analyses were conducted for categorical variables.

RESULTS

Data were first inspected for missing values, and descriptive statistics were calculated.

Within the sample, only 15% men showed low symptoms of psychological distress that were not reaching the cutoff, while 85% reported high distress with at least one type of symptom. Specifically, 402 (81%) men reported high symptoms of anxiety, and 322 (65%) men reported high symptoms of depression. In addition, 305 (62%) men reported the combination of high anxiety and depression symptoms. Four groups of men were thus created based on these symptoms: 15.2% form the Low Symptoms group, 19.6% the

Anxiety group, 3.5% the Depression group, and 61.7% the Comorbid group. As shown in Table 1, men in these four groups did not differ significantly on sociodemographic variables, with the exception of their annual income (which was lower in the Depression than in the Anxiety group).

Regarding IPV in the past 12 months, men in the Low Symptoms group reported having perpetrated at least one minor and severe act of physical (respectively, 42.7% and 13.3%), psychological (85.3% and 40.0%), and sexual IPV (18.7% and 1.3%). Men in the Anxiety group reported having perpetrated at least one minor and severe act of physical (46.4% and 22.7%), psychological (95.9% and 43.3%), and sexual IPV (24.4% and 4.1%). Men in the Depression group reported having perpetrated at least one minor and severe act of physical (70.6% and 35.3%), psychological (100.0% and 47.1%), and sexual IPV (11.8% and 0.0%). Finally, men in the Comorbid group reported having perpetrated at least one minor and severe act of physical (55.4% and 30.5%), psychological (95.7% and 52.1%), and sexual IPV (22.3% and 5.6%). Mean scores for symptoms and frequency of perpetrated IPV minor and severe acts are presented separately for the four groups in Table 2.

Results of ANOVA and χ^2 analyses revealed that the four groups based on low or high psychological distress (anxiety and depression) allowed to differentiate men according to their perpetration of minor and severe forms of psychological and physical IPV, witnessing physical parental violence as a child, and anger. However, no significant between-group differences were observed for sexual IPV, childhood physical and sexual abuse experiences, and substance use. Specifically, Games–Howell post hoc analyses (see Table 2) indicated that men in the Comorbid group and Anxiety group perpetrated significantly more acts of minor psychological IPV than those in the Low Symptoms group. Men in the Comorbid group perpetrated significantly more acts of severe psychological IPV than men in the Low Symptoms group. In addition, men in the Comorbid group perpetrated significantly more acts of minor and severe physical violence than men in the Low Symptoms group. Men in the Comorbid group reported experiencing and expressing significantly more anger (all subscales) than men in the Low Symptoms group. In addition, men in the Comorbid group reported significantly more state anger than those in the Anxiety and Depression groups and more trait anger, anger-out, and lower anger control than the Depression group.

DISCUSSION

This study aimed to examine whether the forms and severity of IPV perpetration vary according to the presence of high psychological distress evaluated by symptoms of depression, anxiety, and their comorbidity in men seeking help for their violent behaviors. In line with previous studies (e.g., Di Piazza et al., 2017), this study highlights the importance of considering the ways in which psychological distress in men, through anxious and depressive symptoms, might differentiate their perpetration of violent behaviors. Indeed, our study shows an alarming prevalence of psychological distress in male perpetrators of IPV, with 85% of our sample reporting clinically significant distress and 73% of this proportion presenting comorbid symptoms of depression and anxiety. Our results do, however, go a step further than previous research as they allowed us to differentiate the roles of high depressive symptoms, high anxious symptoms, and their comorbidity in the perpetration of varying forms and severities of IPV. More precisely,

results emphasize that men in the Comorbid group perpetrate significantly more frequent and severe acts of physical and psychological IPV than men in the Low Symptoms group. Results also show that, when examining the frequency and severity of IPV perpetrated, men from the Anxiety or Depression groups do not differ significantly from men in the Low Symptoms and Comorbid groups.

Taken together, these results emphasize the fact that men perpetrators of IPV seeking help reported experiencing high psychological distress. Although surprising, these high prevalence rates corroborate those found in previous studies conducted with men. A recent study of an offender population (N = 236; Okoro et al., 2018) found that most of prisoners reported experiencing high anxiety (66.5%) and depression (85.2%) symptoms. Among 24 men from the general population in treatment for IPV difficulties, 66.6% of them reported having moderate to critical depressive symptoms (Di Piazza et al., 2020). However, the high rates of psychological distress observed in our sample could indicate that men waited until their distress levels were critical to seek help, partly because of a tendency to hide their distress and a reluctance to report symptoms (e.g., Smith et al., 2018). In addition, men seeking help for IPV are often court-mandated, which can involve a very distressing legal process (e.g., proceedings, fear of what will happen, and reactions from close ones). This experience of distress allows researchers and clinicians to distinguish perpetrators in their use of IPV according to the different forms and severity of violence. Specifically, what makes it possible to differentiate the use of minor and severe psychological and physical IPV is the presence of comorbidity of high anxiety and depression symptoms versus the low presence or absence of both symptoms. Thus, targeting the intensity of distress experienced by perpetrators of IPV may prove decisive in the assessment phase and may give useful treatment guidelines for clinicians. Specifically, our results suggest the relevance of considering the accumulation and diversification of symptoms more than the presence of one or the other, since the men from the Anxiety and Depression groups did not differ from one another. However, future research replicating these findings are warranted as the small number of participants in each group could explain the lack of differences.

Our main finding indeed suggests that men from the Comorbidity group perpetrated significantly more IPV and reported higher anger management difficulties than men from the Low Symptoms group. Perhaps the comorbid presence of high depressive and anxious symptoms generates a level of internal psychological distress that is especially high in men, and thus difficult to tolerate, compared to having no or few symptoms. This might reflect that the more internal distress men experience, such as those from the Comorbid group, the more they could feel overwhelmed by this distress, which could lead to a dysfunctional regulation via the perpetration of IPV. According to our results, men from the Comorbid group seem to be at higher risk of externalizing their distress through anger and IPV than those from the Low Symptoms group. In line with previous studies, perpetrators of IPV generally tend to have more difficulty regulating negative emotions without externalizing their distress through aggression and violence (Dugal et al., 2018). It is thus plausible that men with even higher levels of internal distress, such as men from the Comorbid group, may resort to more frequent and severe forms of IPV. Indeed, the manifestation of so much distress in these men could promote, in a situation of stress or internal tension, the use of IPV in order to impulsively try to regulate this tension. Thus, men may find themselves without functional and appropriate mechanisms to regulate and mentalize their internal states, and perpetrating this violence could also exacerbate the

distress they are experiencing, especially through the negative repercussions generated by their behavior (e.g., escalation of conflicts, breakup, and police involvement). A potential explanation may be that men in the Comorbid group experienced more difficulties with emotion regulation than those from the Low Symptoms group. Researchers have shown that depression or anxiety disorder is often associated with emotion regulation difficulties (Tull et al., 2009) and that emotional dysregulation is related to IPV perpetration (Brassard et al., 2014). Ngo et al. (2018) have suggested that perpetrating violence could be a way of externalizing negative emotions, such as anger. Others have also suggested that people who experience high psychological distress have more difficulty identifying their own internal emotional states (e.g., Saikkonen et al., 2018) and empathizing with others' perspectives (e.g., Nagamine et al., 2018; Noda et al., 2018). These regulation and empathy deficits in the context of psychological distress might push men to act out their internal distress through violence toward their partner (Di Piazza et al., 2017).

Results also showed that men from the Anxiety group reported using more frequent acts of minor psychological violence than those in the Low Symptoms group. As such, men who feel more nervous, agitated, worried, or tense report they insult or swear at their partner more frequently than those who do not experience clinical symptoms of anxiety or depression. Such results make sense in light of anxiety's role in the activation of the "fight or flight" system, which could explain why those who are more agitated are more likely to react aggressively in response to internal agitation or tension (Falkner & Lin, 2014). The measure used to assess the presence of anxiety symptomatology, however, did not assess the specific nature of the anxiety. The anxiety symptoms assessed in this population could, for example, be the result of posttraumatic stress disorder (PTSD) which is recognized for the perpetration of IPV (e.g., Spencer et al., 2019). It would be relevant for future research to also assess PTSD symptoms.

Yet, these results cannot be extended to the perpetration of sexual IPV. Our results revealed that the frequency and severity of sexual IPV perpetrated did not differ significantly according to the presentation of depressive and anxious symptoms among men seeking help. Despite these nonsignificant results, it should be mentioned that the averages for all groups of men, except the Depression group, indicate the use of acts of minor and severe sexual IPV. These results suggest that risk markers for the use of sexual IPV may differ from those who relate to psychological and physical IPV. Indeed, the use of sexual IPV may be related to more severe forms of psychopathology, such as the antisocial dimension of psychopathy, which is recognized for a lack of remorse and empathy for others, and empirically not related to anxiety nor depressive symptoms (e.g., Smith et al., 2014). Moreover, the absence of between-group differences for sexual IPV could be explained by the fact that psychological and physical IPV are frequently reported by those who state the violence occurs as a result of negative emotions experienced during escalating conflicts (Bonache et al., 2019). Yet, this escalation of conflicts is less supported in etiological models of sexual IPV perpetration (e.g., Bonache et al., 2019; Ha et al., 2019). Finally, considering that sexual IPV is a less prevalent form of IPV, a lack of statistical power may also explain the absence of differences.

Limitations

The present study holds certain limitations that warrant consideration. First, study variables were all assessed using self-report questionnaires, which can be affected by shared method variance, participants' social desirability, or recall bias. Although

the CTS2 shows strong psychometric qualities, we cannot ignore the possibility that participants underreported their perpetration of IPV (Hamby, 2005). These biases could exert unknown influence on the observed associations among variables. Although the measure of psychological distress allows to determine the clinical significance of high anxious and depressive symptoms, an in-person assessment by a licensed mental health specialist is required to make a diagnosis. Second, statistical power is affected by this study's sample size and did not allow us to examine whether the nature of the referral (e.g., court-mandated and self-referred) or specific life situations (e.g., breakup with their partner and loss of children's custody) could impact the level of psychological distress reported by men. Given that contacts with police authorities are experienced by men with great anxiety, and sometimes trauma (Geller et al., 2014), and that breakup is associated with worse mental health outcomes in men compared to women (Kõlves et al., 2010), future studies should explore how these situational factors may contribute to their level of psychological distress. Third, the measure of anxious and depressive symptoms that was used did not allow us to determine the specific nature of the symptoms, for instance, if they were related to starting a therapeutic process for IPV or if they were part of a specific mental health issue (e.g., PTSD and bipolar disorder). Fourth, the results of this study cannot be generalized to other samples with higher proportion of incarcerated or court-mandated men. Fifth, this study used an individual perspective when examining the perpetration of IPV in men, yet studies have emphasized the need to adopt more systemic approaches, for instance, by including data on specific social or cultural variables or data on both partners. Such systemic perspectives could allow us to better understand the contexts in which IPV occurs (i.e., as a result of conflicts or within a cultural context that facilitates control of men over women), which would be of help to describe more finely the links between psychological distress and IPV perpetration in men. Finally, the cross-sectional design makes it impossible to rule on whether the presence of anxiety and depression symptoms would precede IPV or if they are repercussions of having used violence. Longitudinal designs are needed.

Implications

Factors related to the perpetration of IPV in men have been subject to many empirical studies, yet very few have attempted to better understand the psychological well-being of these men. The main contribution of this study consists of its refinement of our understanding of psychological distress experienced by men who consult an organization helping with IPV-related issues. The fact that these men have already started a therapeutic process—mostly on a voluntary basis—constitutes a rich source for the development of empirical-based clinical recommendations, especially for practitioners and community organizations specializing in violence. Indeed, men who are seeking help are more likely to recognize their violent behaviors without denying them than men who are obligated to do so by a court order, and they are usually open to work on themselves to end their use of IPV with professional support (Di Piazza et al., 2017). Moreover, there are also many challenges to recruit these men as part of research as they are less likely to agree to take part in a study or to answer a long series of questionnaires, and they are prone to dropping out early in therapy (Brassard et al., 2021). Thus, having recruited such a large sample is one of the strengths of this study.

In North America, a large majority of organizations that help men with violent behavior adhere to the Duluth model (Pence & Paymar, 1993), a treatment model that

conceptualizes IPV as a patriarchic form of power and control of men over women (Maiuro & Eberle, 2008). Although this approach does hold a valid philosophy, the fact that many organizations discourage, or even forbid, the use of intervention strategies that focus on men's mental health because of the fact it may minimize men's sense of responsibility (Maiuro & Eberle, 2008) is concerning. Indeed, research has shown that treatment of IPV in men is, unfortunately, not as effective as we would like (Murphy & Ting, 2010). These disappointing effects could be explained by the fact that current interventions for violent men do not account for the ways anxious, depressive, or comorbid symptoms may contribute to men's IPV perpetration. By developing more nuanced intervention strategies that consider the specificities of men with such symptoms, especially with comorbid anxious and depressive symptoms, we might be better able to deliver efficient prevention and intervention strategies.

Our findings may be of great use for practitioners involved in the treatment of IPV as they suggest ways in which they can tailor the treatment strategies aimed at reducing the occurrence of IPV, according to the specific reality of these men. Results suggest that facilitators should attend to the presence of depression, anxiety, and their comorbidity in their assessment protocol, allowing to support the selection of effective intervention strategies. It would also be interesting to see, in future studies, whether results from this study can be replicated in the general population, which would guide the development of awareness and prevention programs that include the consideration of psychological distress in perpetrators of IPV.

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