



## Complex PTSD in survivors of intimate partner violence: risk factors related to symptoms and diagnoses

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### ABSTRACT

**Background:** In 2018, the World Health Organization proposed a new diagnosis entitled Complex Posttraumatic Stress Disorder (CPTSD) in the ICD-11. It is a diagnosis that encompasses the classic symptoms of PTSD, along with symptoms of disturbances in self-organization (DSO). Although this disorder has been studied in several countries and populations, research on the population of women survivors of intimate partner violence (IPV) is scarce.

**Objectives:** 1) To analyse the prevalence of CPTSD and PTSD according to ICD-11 criteria; 2) To analyse the associations between CPTSD symptomatology and severity of violence, level of fear, resilience and strategies of emotion regulation; 3) To analyse which risk factors (severity of violence, level of fear, resilience and strategies of emotion regulation) may differ between female survivors with CPTSD or PTSD.

**Method:** 162 women IPV survivors who completed a socio-demographic and violence-related interview, as well as questionnaires to assess PTSD and CPTSD, severity of violence, resilience and emotion regulation strategies.

**Results:** The results showed a higher prevalence of CPTSD (39.50%), compared to PTSD (17.90%). Moreover, a high level of fear was related to re-experiencing in the here and now, avoidance, current sense of threat and disturbances in relationships. Low levels of resilience and maladaptive emotion regulation strategies such as expressive suppression were related to affective dysregulation, negative self-concept and disturbances in relationships. Finally, the results showed that maladaptive emotion regulation strategies differentiated between meeting CPTSD and PTSD criteria in women survivors of IPV.

**Conclusion:** The findings of this study indicated that CPTSD was twice as prevalent as PTSD within the sample. Moreover, maladaptive emotion regulation strategy as expressive suppression was the main variable related to experiencing CPTSD, in contrast to PTSD. These findings may have important implications for the design of specific treatments aimed at women survivors of IPV, who also suffer CPTSD.

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### PALABRAS CLAVE

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### 关键词

CPTSD; PTSD; 亲密伴侣暴力; 幸存者; 暴力

### HIGHLIGHTS

- This study provides information on CPTSD according to ICD-11 in women survivors of IPV.
- Results show a higher prevalence of women survivors that meet CPTSD, over PTSD criteria.
- Low level of resilience and expressive suppression are related to DSO symptoms.

## TEPT Complejo en supervivientes de violencia de género: factores de riesgo relacionados con síntomas y diagnósticos

**Antecedentes:** En 2018, la Organización Mundial de la Salud propuso en la CIE-11 un nuevo diagnóstico denominado trastorno de estrés postraumático complejo (TEPTC). Se trata de un diagnóstico que engloba los síntomas clásicos del TEPT y los síntomas de alteraciones de la auto-organización (AAO). Aunque este trastorno se ha estudiado en varios países y poblaciones, la investigación en la población de mujeres supervivientes de violencia de género (VG) es escasa.

**Objetivos:** 1) Analizar los porcentajes de TEPTC y TEPT según los criterios de CIE-11; 2) Analizar las asociaciones entre los síntomas de TEPTC con la gravedad de la violencia, nivel de miedo, resiliencia y estrategias de regulación emocional; 3) Analizar qué factores de riesgo (gravedad de la violencia, nivel de miedo, resiliencia y estrategias de regulación emocional) diferencian entre sufrir TEPTC o TEPT en mujeres supervivientes de VG.

**Método:** Las participantes fueron 162 mujeres supervivientes de VG que completaron una entrevista sociodemográfica y de violencia, así como cuestionarios para evaluar el TEPT y el TEPTC, gravedad de la violencia, resiliencia y estrategias de regulación emocional.

**Resultados:** Los resultados mostraron una mayor prevalencia de TEPTC (39,50%) que de TEPT (17,90%). Además, un alto nivel de miedo se relacionó con la reexperimentación en el aquí y ahora, evitación, sensación actual de amenaza y alteraciones en las relaciones. Bajos niveles de resiliencia y estrategias desadaptativas de regulación emocional como la supresión de la expresión, se relacionaron con los síntomas de desregulación afectiva, autoconcepto negativo y alteraciones en las relaciones. Por último, los resultados mostraron que las estrategias desadaptativas de regulación emocional diferenciaban entre cumplir los criterios de TEPTC y TEPT en mujeres supervivientes de VG.

**Conclusión:** Este estudio mostró que el TEPTC es dos veces más prevalente que el TEPT en la presente muestra de mujeres supervivientes de VG. Además, la estrategia desadaptativa de regulación emocional de supresión de la expresión fue la principal variable relacionada con presentar TEPTC en contraste con el TEPT. Estos hallazgos podrían tener importantes implicaciones para el diseño de tratamientos específicos dirigidos a las mujeres supervivientes de VG que sufren TEPTC.

### 亲密伴侣暴力幸存者的复杂性 PTSD: 与症状和诊断相关的风险因素

**背景:** 2018 年, 世界卫生组织在 ICD-11 (WHO, 2018) 提出了一个叫做复杂性创伤后应激障碍 (CPTSD) 的新诊断。这是一种包括 PTSD 经典症状以及自组织障碍 (DSO) 症状的诊断。尽管已经在多个国家和人群中研究了这种疾病, 对亲密伴侣暴力 (IPV) 女性幸存者人群的研究很少。

**目的:** 1) 根据 ICD-11 标准分析 CPTSD 和 PTSD 的流行率; 2) 分析 CPTSD 症状与暴力严重程度, 恐惧程度, 心理韧性和情绪调节策略之间的关联; 3) 分析哪些风险因素 (暴力的严重程度, 恐惧程度, 心理韧性和情绪调节策略) 可能在患有 CPTSD 或 PTSD 的女性幸存者之间有所不同。

**方法:** 162 名 IPV 女性幸存者完成了社会人口统计和暴力相关访谈, 以及评估 PTSD 和 CPTSD, 暴力严重程度, 心理韧性和情绪调节策略的问卷。

**结果:** 结果表明, CPTSD 的流行率 (39.50%) 比 PTSD (17.90%) 更高。此外, 高水平的恐惧与此地地的再体验, 回避, 当前的威胁感和关系困扰有关。低水平的心理韧性和适应不良的情绪调节策略 (如表达抑制) 与情感失调, 负性自我概念和人际关系障碍有关。最后, 结果表明 IPV 女性幸存者中适应不良的情绪调节策略在符合 CPTSD 和 PTSD 标准之间存在差异。

**结论:** 总之, 本研究结果表明, 此样本中 CPTSD 是 PTSD 的两倍。此外, 与 PTSD 不同, 作为表达抑制的适应不良情绪调节策略是与经历 CPTSD 相关的主要变量。这些发现可能对设计针对患有 CPTSD 的 IPV 女性幸存者的特定治疗具有重要意义。

## 1. IPV definition and prevalence

Intimate partner violence (IPV) is a critical international public health problem. It refers to any behaviour within an intimate relationship that causes physical, psychological or sexual harm (World Health Organization [WHO], 2012) and is one of the main causes of death and disability among women worldwide (WHO, 2013).

One out of three women worldwide has suffered physical and/or sexual violence from an intimate partner, and in some regions this rate can reach 38% (WHO, 2013). In Spain, a large-sample survey about violence against women carried out every four years with women ages 16 and over, revealed that 32.4% of the Spanish female population had experienced IPV. Moreover, in a total of 9568 interviewed women survivors of IPV, 11% reported that they had suffered physical violence, 8.9% reported they had suffered sexual violence, 27% had suffered psychological control violence and 23.2% had suffered psychological emotional violence (Ministry of Health, Social Services and Equality, 2020).

### 1.1. PTSD and CPTSD in survivors of IPV

Experiencing interpersonal violence by a partner or ex-partner may increase the risk of onset of mental health disorders (Dillon, Hussain, Loxton, & Rahman, 2013; Sugg, 2015; Thurston & Miller, 2019). This is also the case with PTSD, which appears to be the most common mental health problem that female survivors of IPV may develop. According to Golding (1999), the PTSD prevalence may range from 31% to 84.4% within this population. Subsequent similar studies in different populations of female IPV victims and survivors confirmed similar rates of prevalence of PTSD (e.g. Castello et al., 2016;

Kelly, 2010; Nathanson, Shorey, Tirone, & Rhatigan, 2012; Nerøien & Schei, 2008; Pico-Alfonso et al., 2006).

The definition of PTSD includes symptoms of intrusion and re-experiencing, avoidance and a current sense of threat following a traumatic experience (American Psychiatric Association [APA], 2013). Interpersonal traumatic experiences are associated with an increased risk of PTSD (Kessler et al., 2017), leading the ICD-11 (World Health Organization's International Classification of Diseases, ICD-11, 2018) to propose a distinction between PTSD and Complex Posttraumatic Stress Disorder (CPTSD). Therefore, according to ICD-11, some people could develop PTSD or CPTSD after suffering traumatic events. In addition to the aforementioned PTSD symptoms of re-experiencing, avoidance and current sense of threat, CPTSD contains a set of symptoms called disturbances in self-organization (DSO), which in turn are comprised of affective dysregulation, negative self-concept and disturbances in relationships (Brewin et al., 2017).

Up to now, the studies about CPTSD have been carried out with adult clinical samples (Cloitre et al., 2018; Hyland et al., 2017; Karatzias et al., 2016; Kazlauskas, Gegieckaite, Hyland, Zelviene, & Cloitre, 2018; Simon, Roberts, Lewis, van Gelderen, & Bisson, 2019; Stadtmann, Maercker, Binder, & Schnepf, 2018; van Dijke, Hopman, & Ford, 2018), non-clinical community-based samples (Karatzias, Hyland, Ben-Ezra, & Shevlin, 2018a; Murphy, Elklit, Dokkedahl, & Shevlin, 2018), child and adolescent victims of maltreatment (Bertó et al., 2017), trafficked children (Ottisova, Smith, & Oram, 2018), former child soldiers (Murphy et al., 2018), women's clinical samples (Cloitre, Garvert, Weiss, Carlson, & Bryant, 2014; Hyland, Shevlin, Fyvie,

& Karatzias, 2018), male perpetrators of IPV (Gilbar, Hyland, Cloitre, & Dekel, 2018), refugees (Vallières et al., 2018) and war prisoners (Zerach, Shevlin, Cloitre, & Solomon, 2019). In addition, some of these studies compared PTSD and CPTSD prevalences in the same populations (Cloitre et al., 2014, 2018; Gilbar et al., 2018; Hyland et al., 2017; 2018; Karatzias et al., 2016; Murphy et al., 2018; Simon et al., 2019; Vallières et al., 2018; Zerach et al., 2019). Despite the fact that IPV is a type of interpersonal violence that is difficult to escape for its particular bond between the survivors and perpetrators, and despite its possible consequences, such as low self-esteem and deconstruction of identity (Hyland et al., 2018; Matheson et al., 2015; Pill, Day, & Mildred, 2017), research on CPTSD in women survivors of IPV is scarce. So far there is only one study that has studied the presence of CPTSD in this population (Dokkedahl, Kristensen, Murphy, & Elklit, 2021), which found a prevalence of PTSD = 56.5% and CPTSD = 21.1% in a Danish sample recruited in four shelters. Therefore, the present study aims to explore the prevalence of PTSD and CPTSD, as well as the variables that could increase the risk of the onset of this disorder and its symptomatology among women survivors of IPV who attend women's information centres but who are not currently living in shelters.

### **1.2. Risk factors related to PTSD and CPTSD after suffering IPV**

An important factor that may facilitate the onset or aggravation of PTSD symptoms is the severity of the violence experienced (Lagdon, Armour, & Stringer, 2014). In a study carried out by Ferrari et al. (2016), three-quarters of the female participants who had experienced high levels of recent violence showed PTSD scores above the clinical threshold. This is consistent with the argument that the risk of PTSD is higher than of any of the other mental health issues experienced by IPV survivors (Howarth & Feder, 2013). Furthermore, the amount of time passed since the event may also influence the current manifestation of the PTSD symptoms (Badour, Resnick, & Kilpatrick, 2017). In terms of remission, it should be noted that treatment could be a factor influencing symptom remission. However, most remission studies do not include populations that have received a specific PTSD treatment. On the other hand, it has been observed that the average time to remission of PTSD symptoms is longer in people who have experienced interpersonal trauma, in comparison to those who have experienced a non-interpersonal trauma (Chapman et al., 2012; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995).

Several studies have shown a positive association between the level of fear experienced and subsequent

appearance of PTSD symptoms (Hebenstreit, Maguen, Koo, & DePrince, 2015), as well as with the number of symptoms presented (Amstadter, Nugent, & Koenen, 2009; Mahan & Ressler, 2012; Milad et al., 2008). However, fear has not been linked yet to the DSO symptoms of CPTSD, since PTSD is conceptualized as a fear-based disorder, whereas CPTSD is conceptualized as a broader clinical disorder that is defined by the impact of trauma on emotion regulation, identity, and the interpersonal domain (Hyland et al., 2017).

A variable that has been shown to be a protective factor in risky situations and post-trauma is resilience (Horn & Feder, 2018). According to Connor and Davidson (2003), resilience embodies the personal qualities that enable one to thrive in the face of adversity (measure tenacity, pressure and control, adaptability and support, control and purpose, and spirituality). Therefore, resilience could be understood as a measure of a successful stress-coping ability. In line with this, other authors reported that active coping strategies were negatively related to the development of PTSD symptoms, as opposed to negative coping (Thompson, Fiorillo, Rothbaum, Ressler, & Michopoulos, 2018). In women survivors of IPV, possessing fewer effective coping strategies was related to a greater number of PTSD symptoms (Sullivan, Weiss, Price, Pugh, & Hansen, 2018).

Finally, emotion regulation strategies is another important variable in IPV related to affect, cognition and behaviour and it is defined as an attempt, whether implicit or explicit, to modify one's emotional response (Werner & Gross, 2010). It has been shown that greater emotion regulation difficulties and maladaptive strategies were related to greater severity of PTSD (Chang, Kaczurkin, McLean, & Foa, 2018; Moore, Zoellner, & Mollenholt, 2008; Short, Boffa, Clancy, & Schmidt, 2018; Weiss et al., 2012). Likewise, higher levels of emotion dysregulation difficulties were related to more severe PTSD symptoms in IPV survivors (Lilly & Lim, 2012). In the case of emotion regulation strategies and CPTSD, there is only one study that indicates that emotion regulation maladaptive strategies were significantly related to receiving a CPTSD diagnosis. That maladaptive strategy was expressive suppression, which is understood as efforts to conceal, inhibit or reduce emotional expression (Karatzias et al., 2018b). Nevertheless, these results should be considered with caution in relation to CPTSD, due to the lack of CPTSD measures and the cross-sectional designs of the previous studies.

In summary, even though factors such as severity of violence, level of fear, resilience and emotion regulation strategies have been shown to be related to PTSD and in the case of emotion regulation to CPTSD too, these factors have not been studied in relation to CPTSD within women survivors of IPV. The current study attempts to fill the gap in research since it is crucial to explore the

presence of CPTSD in this population and to also look into whether the aforementioned PTSD factors could be related to CPTSD symptoms.

### 1.3. Objectives and hypotheses

The first objective was to analyse the prevalence of women survivors of IPV who met the criteria for PTSD or CPTSD. It was hypothesized that the frequency of CPTSD would be higher than PTSD due to the characteristics of the violence suffered by these women. This was based on the fact that IPV is a repeated trauma that involves a difficulty in escaping the situation and the violence is perpetrated by someone within the context of an intimate relationship. This high CPTSD prevalence was also observed on other populations of survivors and victims of interpersonal violence (Cloitre et al., 2014, 2018; Hyland et al., 2017, 2018; Karatzias et al., 2016; Murphy et al., 2018; Simon et al., 2019; Vallières et al., 2018). However, Dokkedahl et al. (2021) found the opposite. We therefore consider it is important to analyse the prevalence of both diagnoses according to ICD-11 criteria in the present sample of women survivors.

The second objective was to analyse whether the severity of violence, the level of fear, resilience and emotion regulation strategies were related to CPTSD symptomatology. Based on previous literature, we hypothesized that women who suffer more severe violence, show a higher level of fear, show dysfunctional emotion regulation strategies and a low level of resilience, would present a higher level of CPTSD symptoms.

Finally, we analysed which risk factors may be the deciding ones between presenting with CPTSD and presenting with PTSD after suffering IPV. Although there are no previous studies on this topic, we hypothesized that maladaptive emotion regulation strategies could be considered risk factors that would be associated with CPTSD symptoms.

## 2. Method

### 2.1. Participants and procedures

Participants were 162 women who had suffered IPV from their ex-partners at some point in their lives. They were recruited in associations and women's centres from 30 localities in six different regions of Spain (Andalucía, Asturias, Castilla la Mancha, Castilla y León, Extremadura and Comunidad Valenciana). All of them were over 18 years old ( $M = 41.42$  years old;  $SD = 11.55$ ; age range: 20–75), survivors of IPV (psychological, physical and/or sexual) perpetrated by ex-partners, none of them were still in the relationship or lived with the perpetrator and all spoke and wrote fluent Spanish ( $M = 46.11$  months from the end of the relationship until the assessment;  $SD = 61.54$ ). The exclusion criteria were: not having suffered IPV by

their partner/ex-partner, being under 18 years old and not being able to read, understand and write in Spanish.

The sample was composed entirely of women residents in Spain (including native Spanish from other nationalities such as Venezuela ( $N = 1$ ), Morocco ( $N = 3$ ), Russia ( $N = 1$ ) and Ecuador ( $N = 1$ ). Data on the nationalities of the non-Spanish women were not provided by all centres. They had a  $M = 14.30$  of academic years of studies ( $SD = 5.25$ ) and 83.33% shared children with their violent ex partners. Table 1 shows other socio-demographic and violence-related information.

The study was approved by the Ethics Committee of the University of Granada (933/CEIH/2019. Ethics Committee on Human Research, CEIH) and the data were collected after agreeing on a collaboration with the centres and associations where women attended. Contact with the women's centres and associations was made by telephone and email. Firstly, information about the study was given and collaboration was proposed. The centres dependent on regional or local governments needed permission from the authorities in order to be able to proceed with the assessments. In the case of non-governmental associations, permission was given by the associations themselves.

From the different centres that were contacted, the professionals informed us of their acceptance to participate in the study and they referred the women to us for evaluation. The professionals of the women's centres made the first contact and the women who agreed to know about the study were informed in detail by members of our research team. Our team directly requested the women's permission to participate by means of informed consent, previously approved by the ethics committee. Participants were invited to collaborate in the study on a voluntary and anonymous basis and they had the right to withdraw from the study at any time. Of the total number of women, only one was unable to take part in the assessment despite her willingness to do so, due to severe symptoms of disorientation and memory loss. The evaluation consisted of completing a brief interview and self-reporting questionnaires and participants were assessed by at least one

**Table 1.** Socio-demographic and violence data.

	<i>N</i>	%
Primary Education	42	25.90%
Secondary Education	41	25.30%
Vocational Training	48	29.60%
University Degree	25	15.40%
Master's Degree	5	3.10%
Doctorate (PhD)	1	0.60%
Intimate partner violence	162	100%
Psychological violence	159	98.15%
Physical violence	115	70.99%
Sexual violence	54	33.33%
Other trauma	76	49.91%
Other interpersonal trauma	45	27.78%
Contact with perpetrator due to common issues	60	37.03%
Current legal proceeding with perpetrator	101	62.34%
Current perpetrator restraining order	71	43.87%

psychologist during all evaluations. The data collection period was from November 2019 to January 2021. They did not receive incentives or payments for their participation. Confidentiality was kept and guaranteed according to the Spanish legislation on personal data protection (Organic Law 15/13 December 1999).

## 2.2. Measures

### 2.2.1. Socio-demographic and violence interview

The research team developed a self-reported structured interview in which they collected socio-demographic data (date of birth, information about children, total years of school attendance, level of education, current education); yes/no questions about the violent relationship (types of violence suffered, duration of the violence, number of violent relationships); previous trauma and its type, current relationship status with the perpetrator (i.e. Are you still in the relationship?; Are you currently living together?); contact with perpetrator due to common issues (legal issues, parenting, custody) (i.e. text messages, conversations with the aggressor and what they may involve or indirect messages through the children); ongoing legal proceedings (i.e. Are you currently in any kind of legal proceedings with your partner/ex-partner?; Does he currently have a restraining order?; Has your partner/ex-partner been or is currently in prison?); or whether they have contact with the perpetrator because they have legal issues in regards to shared children (i.e. Do you and your partner/former partner have children in common?; Are your children under 18 years old?; and a description about the type of custody and whether they see ex-partners at legal meeting points).

### 2.2.2. Fear

The level of current fear they feel towards the perpetrators was assessed with a Likert scale developed where they reported the level of fear that they felt in the moment of the assessment in one of the six levels of fear proposed, ranging from 'no fear at all' to 'the most intense possible fear': no fear (0), very slight fear (1), mild fear (2), moderate fear (3), intense fear (4), very intense fear (5) and the most intense possible fear (6).

### 2.2.3. ICD-11 CPTSD and PTSD

The International Trauma Questionnaire (ITQ) (Cloitre et al., 2018) was used to measure PTSD and CPTSD. This is a brief measure of CPTSD (free access) developed at an international level according to ICD-11 (WHO) criteria. The ITQ Spanish adapted version was used (Fernández-Fillol, Hidalgo-Ruzzante, Pérez-García, & Daugherty, 2020; International Test Commission [ITC], 2018). It includes 18 items (9 PTSD symptoms and 9 DSO items) and six items related to functional impairment of PTSD symptoms and functional impairment of DSO symptoms. PTSD diagnosis requires the endorsement of one of two symptoms (scores more than 2)

from each PTSD cluster, plus endorsement of functional impairment associated with these symptoms. Diagnosis of CPTSD requires the endorsement of one of two symptoms from each of the six PTSD and DSO clusters, plus endorsement of functional impairment associated with these symptoms. According to the ICD-11 taxonomic structure, ITQ only allows one diagnosis of PTSD or CPTSD, but not both. The internal reliability for both scales is satisfactory, with Cronbach's  $\alpha \geq 0.79$  in a community sample (Cloitre et al., 2018).

### 2.2.4. Severity of IPV

The Composite Abuse Scale (Revised)-Short Form (CASR-SF) (Ford-Gilboe et al., 2016) was used for this variable. This is a 15-item self-report measure that assesses the severity and intensity of intimate partner violence in the past 12 months. It includes measures for psychological, physical and sexual violence. CASR-SF assesses the frequency of each type of violence on a scale of 0–5 with a range of 0–75 (higher total score means a higher severity of violence). The original CASR-SF has an internal consistency of 0.942 (Ford-Gilboe et al., 2016) and was translated into Spanish for the sample of this study following the International Test Commission Guidelines for Translating and Adapting Tests Second Edition (ITC, 2018). Since many women had suffered violence for years but not in the last year, we also used this measure for a period prior to the last 12 months, in order to know the type of violence and its frequency.

### 2.2.5. Resilience

The Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) was used to assess resilience. This measure has different subscales (tenacity, pressure control, adaptability and support, control and purpose, and spirituality) and the sum total of these subscales constitutes the resilience construct. It contains 25 items, each scored on a 5-point scale (0–4), with higher scores reflecting greater resilience (0–100). In terms of internal consistency, Cronbach's  $\alpha$  for the full scale is 0.89 and item-total correlations range from 0.30 to 0.70 (Connor & Davidson, 2003). Similar results are obtained in the Spanish version, Cronbach's  $\alpha$  for the full scale is 0.86 and the mean of the correlations between each item and the total scale was 0.42 (SD = 0.13) (León, González-Gómez, Robles-Ortega, Padilla, & Peralta-Ramirez, 2019).

### 2.2.6. Emotion regulation

The Emotion Regulation Questionnaire (ERQ) (Gross & John, 2003) was used to evaluate the participants' emotion regulation. This is a 10-item scale designed to measure the tendency of respondents to regulate their emotions in two ways: cognitive reappraisal as an adaptive strategy and expressive suppression as maladaptive strategy. The response to each item is given on a 7-point

Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). A higher total score on the cognitive reappraisal subscale means a greater use of adaptive emotion regulation strategies (range 0–42) and a higher total score on the expressive suppression subscale means a greater use of maladaptive emotion regulation strategies (range 0–28). The reliability of the subscales in the validated Spanish version is similar and as adequate as the original version, with Cronbach's  $\alpha = 0.75$  for emotional suppression and 0.79 for cognitive reappraisal strategies (Cabello, Salguero, Fernández-Berrocal, & Gross, 2013).

### 2.3. Data analysis

Data were analysed using the Statistical Package for the Social Sciences, version 26.0 (SPSS; IBM Corp., 2019). For the first objective, we used a frequency analysis to find out the prevalence of women who met the CPTSD or PTSD diagnosis. Through this analysis, the percentage of women who met each of the CPTSD symptoms could also be explored.

For the purpose of analysing which risk factors (severity of violence in two periods, level of fear, resilience and two strategies of emotion regulation as Independent Variables (IV)) were related with the presence of each one of the CPTSD symptoms (re-experiencing, avoidance, current sense of threat, affective dysregulation, negative self-concept and disturbances in relationships) as dependent variables (DV), we carried out six logistic regression analyses. For each logistic regression model, the method of entering all variables together as independent variables (IV) was used. Statistical significance of contribution of each IV was obtained using *t* tests. The presence of the symptom was coded as 1 and the absence of the symptom as 0. We used this same analysis to analyse which risk factors were related to the fulfilment of diagnostic

criteria for PTSD to become CPTSD as it has previously been reported in other studies (Karatzias et al., 2018b).

Data and analyses are available on request due to the privacy and safety of research participants.

## 3. Results

### 3.1. Prevalence rates and descriptive statistics

ITQ follows the structure of ICD-11, which allows the diagnosis of CPTSD or PTSD, but not both at the same time. 57.40% ( $N = 93$ ) of women survivors of IPV met the diagnostic criteria for either CPTSD or PTSD. Specifically, 39.50% ( $N = 64$ ) met the diagnostic criteria for CPTSD and 17.90% ( $N = 29$ ) met the criteria for PTSD. Descriptive data and frequencies for each CPTSD symptom are presented in Table 2.

### 3.2. Association between severity of violence, fear, resilience and emotion regulation with manifestation of CPTSD symptoms after suffering IPV

Descriptive data for the totals of each measure used are detailed in Table 3 and the results of the logistic regression analysis for each of the CPTSD symptoms (dependent variables) are shown in Table 4. A higher level of fear was related to the presence of symptoms such as 're-experiencing' ( $R^2 = 0.14$ , OR = 1.33, 95%CI: 1.08–1.63), 'avoidance' ( $R^2 = 0.09$ , OR = 1.43, 95%CI: 1.10–1.87), 'current sense of threat' ( $R^2 = 0.24$ , OR = 1.68, 95%CI: 1.29–2.19) and 'disturbances in relationships' ( $R^2 = 0.15$ , OR = 1.27, 95%CI: 1.03–1.57). On the other hand, lower levels of resilience were related to the presence of symptoms such as 'affective dysregulation' ( $R^2 = 0.14$ , OR = 0.93, 95%CI: 0.89–0.97), 'negative self-concept'

**Table 2.** Descriptive data and frequencies according to CPTSD symptomatology.

CPTSD symptom	Item	<i>N</i>	<i>M</i> ( <i>SD</i> )	Women who meet symptom criteria ( <i>N</i> )	Women who meet symptom criteria (%)
Re-experiencing in the here and now (RE)	Total (RE)	162	3.60 (2.36)	113	69.75%
	ITQ P1		1.65 (1.36)		
	ITQ P2		1.95 (1.27)		
Avoidance (AV)	Total (AV)	162	4.93 (2.28)	138	85.18%
	ITQ P3		2.40 (1.20)		
	ITQ P4		2.54 (1.26)		
Current sense of threat (TH)	Total (TH)	162	4.83 (2.66)	124	76.54%
	ITQ P5		2.45 (1.43)		
	ITQ P6		2.38 (1.39)		
Affective dysregulation (AD)	Total (AD)	162	4.32 (1.91)	138	85.18%
	ITQ C1		1.99 (1.04)		
	ITQ C2		2.33 (1.21)		
Negative self-concept (NSC)	Total (NSC)	162	3.52 (2.66)	99	61.11%
	ITQ C3		2 (1.39)		
	ITQ C4		1.52 (1.41)		
Disturbances in relationships (DR)	Total (DR)	162	3.45 (2.43)	105	64.81%
	ITQ C5		1.77 (1.29)		
	ITQ C6		1.69 (1.33)		

ITQ P1 = Re-experiencing in the here and now item 1; ITQ P2 = Re-experiencing in the here and now item 2; ITQ P3 = Avoidance item 1; ITQ P4 = Avoidance item 2; ITQ P5 = Current sense of threat item 1; ITQ P6 = Current sense of threat item 2; ITQ C1 = Affective dysregulation item 1; ITQ C2 = Affective dysregulation item 2; ITQ C3 = Negative self-concept item 1; ITQ C4 = Negative self-concept item 2; ITQ C5 = Disturbances in relationships item 1; ITQ C6 = Disturbances in relationships item 2.

( $R^2 = 0.23$ ,  $OR = 0.93$ , 95%CI: 0.90–0.96) and ‘disturbances in relationships’ ( $R^2 = 0.15$ ,  $OR = 0.96$ , 95%CI: 0.93–0.99). Finally, a higher level of expressive suppression was related to ‘affective dysregulation’ ( $R^2 = 0.14$ ,  $OR = 1.08$ , 95%CI: 1.00–1.17), ‘negative self-concept’ ( $R^2 = 0.23$ ,  $OR = 1.07$ , 95%CI: 1.01–1.14) and ‘disturbances in relationships’ ( $R^2 = 0.15$ ,  $OR = 1.07$ , 95%CI: 1.01–1.14).

### 3.3. Risk factors associated with the development of PTSD or CPTSD after IPV

The results of a final logistic regression showed that high expressive suppression scores were related to a CPTSD diagnosis, compared to a PTSD diagnosis in women survivors of IPV ( $\beta = 0.14$ ,  $SE = .048$ ,  $Wald = 8.64$ ,  $p = .003$ ,  $R^2 = 0.14$ ,  $OR = 1.15$ , 95%CI: 1.04–1.26).

**Table 3.** Descriptive data for each measure.

Measure	M(SD)
CD-RISC (Resilience)	63.42 (1.29)
CASR-A (Severity of violence in the last year)	29.90 (1.30)
CASR-B (Severity of violence over a year ago)	10.34 (1.11)
ERQ-CR (Cognitive reappraisal strategies)	28.63 (0.64)
ERQ-ES (Expressive suppression strategies)	15.84 (0.50)
Level of Fear	3.33 (0.15)

## 4. Discussion

To the authors’ knowledge, there is only one previous study that has analysed the presence of CPTSD in women survivors of IPV and this is the first study to analyse the different risk factors related to its symptomatology. Although CPTSD has been addressed in other victims and survivors that have experienced continuous interpersonal violence (Kessler et al., 2017), the studies of this disorder in this population are scarce. Moreover, it is important to emphasize that women survivors of IPV usually seek care in victim and survivor’s services to cope with issues associated with emotion regulation, self-esteem and interpersonal relationships (Lilly & Lim, 2012; Matheson et al., 2015; St. Vil, Carter, & Johnson, 2018), which are all related to CPTSD symptomatology.

The main results of this study showed that the prevalence of CPTSD was twice (39.50%) the prevalence of PTSD (17.90%). Moreover, results indicated that high levels of fear were related to re-experiencing, avoidance, current sense of threat and relationship disturbances. Low resilience and high expressive suppression were related to affective dysregulation, negative self-concept and disturbances in relationships. Finally, a high tendency towards the maladaptive emotion regulation

**Table 4.** Risk factors related to the presence of CPTSD symptoms.

Symptom	Risk factor	$\beta$	$SE \beta$	Wald’s $\chi^2$	$p$	$e^\beta$	95%CI for $e^\beta$	$R^2$
Re-experiencing in the here and now	Resilience	-0.02	0.01	2.92	0.087	0.97	(0.95–1.00)	0.14
	Fear	0.28	0.10	7.20	0.007	1.33	(1.08–1.63)	0.14
	CASR-A	0.02	0.01	2.37	0.12	1.02	(0.99–1.06)	0.14
	CASR-B	0.01	0.01	1.65	0.19	1.01	(0.94–1.04)	0.14
	ERQ-CR	-0.01	0.02	0.05	0.81	0.99	(0.94–1.04)	0.14
	ERQ-ES	0.01	0.03	0.27	0.60	1.01	(0.95–1.07)	0.14
Avoidance	Resilience	-0.01	0.17	0.21	0.64	0.99	(0.96–1.02)	0.09
	Fear	0.36	0.13	7.08	0.008	1.43	(1.10–1.87)	0.09
	CASR-A	0.03	0.02	1.69	0.19	1.03	(0.98–1.09)	0.09
	CASR-B	-0.00	0.01	0.02	0.87	0.99	(0.96–1.02)	0.09
	ERQ-CR	0.02	0.03	0.43	0.51	1.02	(0.95–1.09)	0.09
	ERQ-ES	0.01	0.03	0.22	0.63	1.01	(0.94–1.09)	0.09
Current sense of threat	Resilience	-0.01	0.01	1.17	0.27	0.98	(0.95–1.01)	0.24
	Fear	0.52	0.13	15.30	<0.001	1.68	(1.29–2.19)	0.24
	CASR-A	0.04	0.02	2.79	0.09	1.04	(0.99–1.10)	0.24
	CASR-B	0.01	0.01	1.40	0.23	1.01	(0.98–1.04)	0.24
	ERQ-CR	0.16	0.03	0.27	0.59	1.01	(0.95–1.08)	0.24
	ERQ-ES	0.05	0.03	2.30	0.12	1.05	(0.98–1.13)	0.24
Affective dysregulation	Resilience	-0.73	0.02	10.67	0.001	0.93	(0.89–0.97)	0.14
	Fear	-0.17	0.13	0.01	0.905	0.98	(0.75–1.29)	0.14
	CASR-A	-0.11	0.01	0.38	0.53	0.98	(0.95–1.02)	0.14
	CASR-B	-0.00	0.01	0.01	0.91	0.99	(0.96–1.02)	0.14
	ERQ-CR	-0.02	0.03	0.28	0.59	0.98	(0.91–1.05)	0.14
	ERQ-ES	0.83	0.04	4.00	0.045	1.08	(1.00–1.17)	0.14
Negative self-concept	Resilience	-0.06	0.01	18.15	<0.001	0.93	(0.90–0.96)	0.23
	Fear	0.00	0.10	0.00	0.96	1.00	(0.81–1.23)	0.23
	CASR-A	0.00	0.01	0.16	0.68	1.00	(0.97–1.03)	0.23
	CASR-B	-0.00	0.01	0.62	0.43	0.99	(0.96–1.019)	0.23
	ERQ-CR	-0.02	0.02	0.68	0.40	0.97	(0.92–1.03)	0.23
	ERQ-SE	0.07	0.03	5.27	0.022	1.07	(1.01–1.14)	0.23
Disturbances in relationships	Resilience	-0.37	0.01	6.95	0.008	0.96	(0.93–0.99)	0.15
	Fear	0.24	0.10	5.35	0.021	1.27	(1.03–1.57)	0.15
	CASR-A	-0.01	0.01	0.72	0.39	0.98	(0.96–1.01)	0.15
	CASR-B	0.00	0.01	0.01	0.90	1.00	(0.97–1.02)	0.15
	ERQ-CR	0.00	0.02	0.00	0.98	1.00	(0.95–1.05)	0.15
	ERQ-SE	0.75	0.03	6.18	0.013	1.07	(1.01–1.14)	0.15

CASR-A = Severity of violence in the last year; CASR-B = Severity of violence over a year ago; ERQ-CR = Cognitive reappraisal strategies; ERQ-SE = Expressive suppression strategies.

strategy of suppressing expression made the difference between PTSD and CPTSD in women survivors of IPV.

In line with previous studies of PTSD, our results indicated that more than half of the women survivors of IPV developed a disorder related to posttraumatic stress (Golding, 1999; Kastello et al., 2016; Kelly, 2010; Nathanson et al., 2012; Nerøien & Schei, 2008; Pico-Alfonso et al., 2006). However, in our sample, CPTSD was the most common type of traumatic stress disorder. Thus, this possible sequela which occurs in a very considerable prevalence, could be currently under-diagnosed within the population and therefore, not receiving targeted treatment. In respect to the only previous study showing the prevalence of PTSD and CPTSD in women survivors (Dokkedahl et al., 2021), the results obtained in the present study show opposite prevalences. One possible reason for this difference may be that although the ITQ test was used in both studies, the versions of the test were not the same. For example, there were differences in the number of items, the name and number of symptoms, as well as the diagnostic criteria for the two disorders. In the study of Dokkedahl et al. (2021), they used a prior version of the ITQ to the publication of the WHO ICD-11 criteria (Cloitre et al., 2015 in Dokkedahl et al., 2021). To the contrary, the present study used a more updated version of the ITQ, which follows ICD-11 criteria established by the WHO, that was psychometrically and internationally supported (Cloitre et al., 2018). The diagnostic criteria used in the present study, as described in the methods section above, are different from the previous version and this may be the reason for the difference in the results in terms of prevalence. Despite this possible explanation, it is important to further explore the prevalence of both diagnoses in order to clarify the extent to which they occur in the population of women survivors of IPV.

Additionally, we explored how each of the symptoms that makes up CPTSD was presented in this population. To analyse their presence after experiencing IPV, we studied the factors related to the six CPTSD symptoms. We found that high levels of fear of the perpetrator were especially important in presenting symptoms of re-experiencing, avoidance, current sense of threat and alterations in social relationships. The present results are consistent with the aforementioned three PTSD symptoms, and with PTSD being understood as a fear-based disorder according to the ICD-11 (Hyland et al., 2017). The associations of these factors with the three PTSD symptoms could be explained by the proximity of the perpetrator, considered as the source of violence (Hecker, Ainamani, Hermenau, Haefele, & Elbert, 2017). This would explain the tendency to avoid anything related to the perpetrators, while also experiencing fear or a current sense of threat when continuing to be in contact due to judicial matters or because of a lack of a restraining order that would provide a sense of safety. In the present study, fear was also related to

disturbances in relationships, a DSO symptom. This could be explained by the fact that fear can be very present after IPV and interfere with establishing or maintaining new relationships, for a fear of repetition of the abuse (Flasch, Murray, & Crowe, 2015; St. Vil et al., 2018).

Furthermore, a low level of resilience was found to be a factor related to the occurrence of all three DSO symptoms. These findings are in line with other studies that analysed interpersonal violence survivor populations. Such studies concluded that resilience was related to dysregulation, self-esteem and social relationships after trauma (Gao et al., 2019; Poole, Dobson, & Pusch, 2017). Low scores on resilience that involve non-use of adaptive coping strategies (tenacity, pressure and control, adaptability and support, control and purpose, and spirituality) (Connor & Davidson, 2003) could be explained by the helplessness experienced after suffering deliberate repeated interpersonal violence from men who were their partners.

Another variable that may underpin each DSO symptoms and made the most difference between meeting PTSD and meeting CPTSD criteria, was the maladaptive emotion regulation strategy of expressive suppression. Matheson et al. (2015) found that expressive suppression in IPV survivors may be explained by the devastation of self-esteem and identity. Therefore, survivors may feel a lack of self-importance and may tend to suppress emotional expression, which is a maladaptive strategy. Likewise, this could explain why expressive suppression was a variable related to the occurrence of disturbances in social responses and relationships (Tackman & Srivastava, 2016). This result may be attributed to women survivors of IPV having difficulties in regulating positive emotions (Weiss, Dixon-Gordon, Peasant, & Sullivan, 2018) and it could also be related to the fact that survivors may prefer not to express or to avoid judgements, may reserve their intimacy, or they may feel vulnerable and seek to protect themselves from others (Cloitre, Cohen, Ortigo, Jackson, & Koenen, 2020).

Considering these results, a double pattern may emerge. On one hand, risk factors related to the circumstances of the violence and/or to specific events in time (e.g. fear of being assaulted again by the abuser) may be more related to classic PTSD symptoms such as re-experiencing, avoidance and arousal. On the other hand, risk factors related to the psychological resources of survivors such as resilience and emotion regulation strategies would be related to DSO but not to classic PTSD symptoms. Future studies should further explore this hypothesis.

Finally, it is essential to identify the factors that make the difference between receiving a PTSD or CPTSD diagnosis. The present results indicate that expressive suppression is the variable that most contributes to the difference between both diagnoses. It should be noted that this result is congruent with the fact that the variable



related to all symptoms of DSO may be also related to the frequency of the most common CPTSD symptoms in this study: avoidance and affective dysregulation. Hence, it could be considered that high avoidance may be related to the suppressive component and in turn, these maladaptive emotion strategies may be implicated in all emotional problems related to DSO symptoms.

## 5. Limitations and future directions

The sample size is the main limitation of this study. For this reason, it is necessary to continue these assessments and replicate this study to obtain information from a larger sample of women survivors of IPV. This would allow to study the prevalence of both diagnoses after suffering IPV and to investigate in depth the risk factors that are related to symptoms and diagnoses, with the aim of improving targeted treatments in this population. For example, this could include adapting specific treatments that have been effective in other interpersonal trauma populations presenting with DSO symptoms, to CPTSD symptoms. For instance, the STAIR-MPE treatment (Cloitre et al., 2020). It would also be necessary to study the present findings in other interpersonal violence survivor populations, as the characteristics of the sample in this study are very specific and the results cannot be generalized to other populations. Another limitation of this study could be that it is a cross-sectional design and, therefore, cause-effect relationships cannot be established. Other limitations may include the absence of specific diagnostic interviews for CPTSD that do not currently exist in Spanish, the use of retrospective reports and the inability to access the census of women victims and survivors and all nationalities in each of the 30 centres. Finally, there may be some conceptual overlap in measures referring in some way to emotion regulation and future studies should explore this. These limitations have to be taken into account in order to improve future studies.

## 6. Conclusion

This study shows that CPTSD is a mental health issue that a high percentage of the women survivors of IPV of this sample are suffering from. These results may reflect what could be happening within this population. IPV survivors may be suffering from symptoms that have so far not been assessed and, therefore, not properly treated. This disorder may disrupt their lives in numerous ways, while factors such as fear of the perpetrator, low levels of resilience and, in particular, a tendency to suppress the expression of emotions may increase the risk of them developing symptoms of CPTSD. The results of this study highlight the need for multidisciplinary action focused on increasing women's protection to reduce fear of perpetrators, as well as the need for specific interventions in CPTSD. This could include treatments focused on

emotion regulation through the improvement of adaptive strategies, while reducing maladaptive strategies.

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No potential conflict of interest was reported by the author(s).

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## Data availability statement

Data and analyses are available on request due to the privacy and safety of research participants.

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