



EGAS MONIZ SCHOOL
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INSTITUTO UNIVERSITÁRIO EGAS MONIZ

MASTER'S DEGREE IN CLINICAL HEALTH PSYCHOLOGY

"ADAPTATION AND PSYCHOMETRIC PROPERTIES EVALUATION OF THE INTIMATE PARTNER VIOLENCE SEVERITY SCALE (WHO VAW-M) IN SPANISH FOR THE BELIEVE BATTERY TARGETING CISGENDER SPANISH WOMEN VICTIMS OF PARTNER OR EX-PARTNER VIOLENCE".

Work submitted by

Lorelei Chauffour to obtain

a Master's degree in Clinical and Health Psychology

October 2025



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Work supervised by

Supervisor: **Professor Luís Querido**

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Abreviation list

- **AERA** : American Educational Research Association
- **APA** : American Psychological Association
- **BELIEVE** : Research Project
- **CAS** : Composite Abuse Scale
- **CEIm** : Comité de Ética de la Investigación Provincial
- **CIMCYC** : Centro de Investigación del Cerebro y Comportamiento
- **CTS** : Conflict Tactics Scales
- **DSM-5**: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
- **EEVG** : European Survey on Gender-Based Violence
- **EMDR**: Eye Movement Desensitization and Reprocessing
- **ESS** : European Statistical System (Système Statistique Européen)
- **GAD-7** : Generalized Anxiety Disorder-7
- **GREVIO** : Grupo de Expertos en la lucha contra la violencia contra las mujeres y la violencia doméstica (GREVIO)
- **ICD-11**: International Classification of Diseases, 11th Revision
- **IPP** : Institut des Politiques Publiques
- **ISA** : Index of Spouse Abuse
- **ITQ** : International Trauma Questionnaire
- **ONVF** : Observatoire National des Violences Faites aux Femmes
- **PCL-5**: PTSD Checklist for DSM-5
- **PHQ-9** : Patient Health Questionnaire-9
- **PTSD** : Post-Traumatic Stress Disorder
- **SD** : Standard Deviation
- **SEM** : Structural Equation Modeling

- **SOD** : Self-Organisation Disturbances
- **TBI** : Traumatic Brain Injury
- **TEPT** : Transtorno de Estrés Pés-Traumático
- **UGT** : Unión General de Trabajadoras y Trabajadores
- **WHO** : World Health Organization
- **WHO VAW-M** : World Health Organization Violence Against Women Modified

Version

Glossary

Cronbach's alpha (α) A statistical index used to measure the internal consistency of a psychometric scale. It assesses the extent to which the items in a questionnaire correlate with each other and measure the same underlying concept. A high score (close to 1) indicates high reliability.

Factor Analysis A statistical method used to identify the latent structure of a set of variables. In psychometrics, it is used to verify whether the items in a questionnaire can be grouped into coherent dimensions (or “factors”), as predicted by theory.

Coercive Control A set of domination strategies (not necessarily physical) used by an abuser to isolate, intimidate and control a victim in an intimate relationship. This includes economic, social and psychological control.

Spearman's Correlation (ρ) A non-parametric statistical measure that assesses the strength and direction of the relationship between two variables. It is used when the data does not follow a normal distribution.

DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition) Diagnostic and statistical manual of mental disorders, published by the American Psychological Association (APA). It is the reference classification for mental disorders used in many countries, particularly for PTSD.

ICD-11 (International Classification of Diseases, 11th Revision) International Classification of Diseases, published by the World Health Organization (WHO). This is the global reference classification for diseases and health problems, which now includes a distinction between PTSD and Complex PTSD.

Psychometrics Branch of psychology devoted to the measurement of psychological characteristics. It encompasses the development, validation and use of psychological tests and questionnaires.

Linear Regression Statistical analysis aimed at modelling and predicting the value of a variable (dependent) from one or more other variables (independent or predictors).

Post-Traumatic Stress Disorder (PTSD) A psychiatric disorder that can occur after exposure to a traumatic event. It is characterized by symptoms of intrusion (flashbacks), avoidance, negative mood and cognitive alterations, and hyperarousal.

Complex Post-Traumatic Stress Disorder (C-PTSD) A form of PTSD, recognized in ICD-11, that results from prolonged or repeated exposure to trauma (such as intimate partner violence). In addition to PTSD symptoms, it includes disturbances in self-organization (difficulties with emotional regulation, negative self-image, and relationship difficulties).

Convergent Validity A type of validity that demonstrates that a new scale correlates well with other existing measures that are supposed to assess the same concept or theoretically related concepts.

Intimate Partner Violence (IPV) Any behavior within an intimate relationship (by a current or former partner) that causes physical, sexual, or psychological harm. This is the specific term used for violence within a couple.

Resumo

A violência por parceiro íntimo (VPI) continua a ser um problema de saúde pública grave em Espanha, apesar de um quadro legislativo progressista. Os dados nacionais confirmam uma prevalência elevada e consequências graves para a saúde mental das mulheres. No entanto, há uma falta de ferramentas psicométricas recentes, especificamente adaptadas e validadas para a população espanhola, que permitam medir em detalhe a gravidade da violência sofrida. O objetivo principal deste estudo foi adaptar e avaliar as propriedades psicométricas da escala de gravidade da violência por parceiro íntimo (WHO VAW-M) para a população feminina espanhola, com vista à sua integração na bateria de avaliação transnacional BELIEVE. Os objetivos específicos incluíam a avaliação da sua fiabilidade (consistência interna) e validade (convergente e preditiva), explorando as suas ligações com sintomas de ansiedade, depressão e stress pós-traumático (TEPT) ou mesmo stress pós-traumático complexo (TEPT-C). Uma amostra de 157 mulheres espanholas voluntárias foi convidada a preencher a escala WHO VAW-M, adaptada para o espanhol, bem como medidas validadas para avaliar a ansiedade (GAD-7), a depressão (PHQ-9) e o TEPT/TEPT complexo (PCL-5, ITQ). A consistência interna foi avaliada utilizando o alfa de Cronbach. A validade convergente foi testada através de correlações de Spearman e a validade preditiva através de análises de regressão linear. A escala principal da WHO VAW-M demonstrou excelente fiabilidade ($\alpha > .95$), e a subescala relativa à gravidez também mostrou fiabilidade aceitável a boa ($\alpha > .71$). Foi estabelecida uma sólida validade convergente, com correlações positivas e significativas entre a gravidade da violência e a ansiedade ($\rho = .39$), a depressão ($\rho = .39$), o TEPT complexo (ITQ, ρ variando de .31 a .33) e, de forma particularmente acentuada, o TEPT (PLC-5, $\rho = .47$, $p < 0,001$). Além disso, a gravidade da violência revelou-se um potencial preditor significativo dos sintomas de TEPT (explicando potencialmente 24% da sua variância) e de TEPT complexo (explicando 11,2% da variância). A adaptação espanhola da escala WHO VAW-M é um instrumento psicométrico que se mostra robusto, fiável e válido para a avaliação da gravidade da violência por parceiros íntimos, tendo em conta o presente estudo e as análises aplicadas. A sua integração na bateria BELIEVE é pertinente, oferecendo assim

uma ferramenta interessante para a prática clínica e a investigação futura sobre a violência de género em Espanha.

Palavras-Chave: victims, Intimate Partner Severity Violence Scale, BELIEVE, WHO VAW-M, ex-partner, partner, neuropsychology, psychopathology

Abstract

Intimate partner violence (IPV) remains a major public health problem in Spain, despite a progressive legislative framework. National data confirm a high prevalence and serious consequences for women's mental health. However, there is a lack of recent psychometric tools specifically adapted and validated for the Spanish population that can measure the severity of the violence suffered in detail. The main objective of this study was to adapt and evaluate the psychometric properties of the Intimate Partner Violence Severity Scale (WHO VAW-M) for the Spanish female population, with a view to its integration into the BELIEVE transnational assessment battery. Specific objectives included assessing its reliability (internal consistency) and validity (convergent and predictive) by exploring its links with symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD) and even complex post-traumatic stress disorder (C-PTSD). A sample of 157 Spanish female volunteers was asked to complete the WHO VAW-M scale, adapted into Spanish, as well as validated measures of anxiety (GAD-7), depression (PHQ-9), and PTSD/C-PTSD (PCL-5, ITQ). Internal consistency was assessed using Cronbach's alpha. Convergent validity was tested using Spearman's correlations, and predictive validity was tested using linear regression analyses. The main scale of the WHO VAW-M demonstrated excellent reliability ($\alpha > .95$), and the pregnancy subscale also showed acceptable to good reliability ($\alpha > .71$). Strong convergent validity was established, with positive and significant correlations between violence severity and anxiety ($\rho = .39$), depression ($\rho = .39$), complex PTSD (ITQ, ρ ranging from .31 to .33), and, most notably, PTSD (PCL-5, $\rho = .47$, $p < .001$). Furthermore, the severity of violence proved to be a significant predictor of PTSD symptoms (potentially explaining 24% of their variance) and complex PTSD (explaining 11.2% of the variance). The Spanish adaptation of the WHO VAW-M scale is a psychometric instrument that has proven to be robust, reliable, and valid for assessing the severity of intimate partner violence in light of the current study and the analyses applied. Its integration into the BELIEVE battery is relevant, thus providing an interesting tool for clinical practice and future research on gender-based violence in Spain.

Keywords: victims, Intimate Partner Severity Violence Scale, BELIEVE, WHO VAW-M, ex-partner, partner, neuropsychology, psychopathology

Introduction

Intimate partner violence – definition, prevalence, risk factors and consequences

Definition of terms

The World Health Organization (Krug et al., 2002) defines violence as follows: "Violence is considered to be the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation." Despite its brevity, this definition presents a number of the core ideas covered in the report. The use of the word "power," which expands the idea beyond just physical force, is an essential component. Thus, this concept includes acts of neglect, intimidation, or threats that are intended to control and cause harm but do not involve physical contact. It is crucial for comprehending the dynamics of psychological violence and coercive control in the context of intimate partner violence (IPV).

The particular context of the relationship between the perpetrator and the victim is the primary factor that sets Intimate Partner Violence (IPV) apart from the broader definition of violence. The definition of intimate partner violence (IPV) is similar to the definition of violence itself. It includes the concepts of physical violence and psychological violence, with a few nuances. According to Krantz & Garcia-Moreno (2005), IPV can take the form of: psychological and verbal (moral harassment, insults, threats, etc.), administrative (refusal to give access to identity cards, residence permits, etc.), physical (assault and battery), sexual (rape, sexual assault, etc.), economic (deprivation of financial resources and maintenance of dependency, etc.). The important thing in this definition is the link between the perpetrator and their victim, without which we would simply be talking about violence.

To understand the systemic nature of the issue, it is essential to first consider the broader framework of "violence against women". In Article 3 of the Istanbul Convention, the Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO, 2024) defines violence against women as follows: "(...) the term violence against women means all acts of gender-based violence that result in, or are likely to result in, physical, sexual, psychological, or economic harm or suffering

to women, including threats to commit such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or private life." IPV is one of its most specific manifestations within this broad definition. Since "coercion" is at the heart of IPV—which is not merely a string of violent acts but a system of control—its inclusion in the GREVIO definition is especially important. As a result, intimate partner violence is more than just a private dispute between a couple; it is essentially a type of gender-based violence in which the power and control dynamics that are discussed in society are acted out in a close relationship. The two concepts are thus inextricably linked. According to Krantz & Garcia-Moreno (2005), violence against women encompasses various types of abuse committed throughout their lives against millions of women every year. Gender-based violence emphasizes the inequality between men and women. Moreover, the most prevalent type of violence that women encounter globally is interpersonal violence (UN Women, 2023). Krantz and Moreno's (2005) presentation of intimate partner violence emphasizes that it can occur between current partners as well as with former partners and will be characterized as IPV in both cases.

The cycle of violence model described by Voyer et al. (2014) is especially helpful in understanding why these circumstances continue. There are usually four stages to this cycle. There is a period of tension building at the start, during which small disputes surface. A period of acute violence, characterized by an increase in aggression, follows this. The aggressor minimizes their actions during the third phase, which is characterized by denial and justification. Before the cycle starts over, there is a "honeymoon" period where the aggressor shows regret and gives false hope. The victim finds it difficult to end the relationship because of the atmosphere of fear and confusion created by repeated exposure to this cycle. The article by Muller-Lagarde (2023) states that when putting protective measures in place, during court proceedings, and when giving care, it's critical to acknowledge the perpetrator's control over their victim. This involves evaluating the perpetrator's control dynamics, which may continue even after they are imprisoned, through mediation or communication interviews, which are occasionally pointless and psychologically damaging to the victims. To effectively address the complexities of intimate partner violence, partner violence, and ex-partner violence, the conclusions emphasize the significance of incorporating the concept of control into legal frameworks and support systems.

Prevalence of IPV in Spain

In Spain, the extent of intimate partner violence is a major public health issue, as successive national surveys have shown. The European Survey on Gender-Based Violence (EEVG), the first survey conducted within the European Statistical System (ESS) and carried out by the Ministerio de Igualdad (2022), provided a detailed database on lifetime prevalence. Approximately 3.7 million women, or 21.0% of the total, reported having been the victim of physical violence at some time in their lives. According to the survey, which focuses on violence in couples, psychological violence is the most prevalent type, impacting 27.8% of women, or roughly 4.6 million people. 12.7% of them (about 2.1 million) reported having experienced physical violence, including threats, and 6.7% of women (about 1.1 million) reported having experienced sexual violence. The report also specifies that, even outside of intimate relationships, the vast majority of perpetrators are men, accounting for 66.4% of physical violence and 94.2% of sexual violence experienced by women.

More recent data from 2024 reports confirm and refine this analysis. The UGT (2024) report paints an alarming overall picture: one in two women has been a victim of some form of gender-based violence during her lifetime. The survey by the Ministerio de Igualdad (2024) specifies that in intimate relationships, nearly one in three women (32.4%) has suffered some form of violence at the hands of their partner, representing nearly 6.7 million women. The report by the Ministry of Equality (2024a) entitled *"Impact of gender-based violence and sexual violence against women in Spain (II): Una valoración de sus costes en 2022"*, based on the 2019 macro-survey, focused in particular on recent violence, affecting 10.8% of women (approximately 2.2 million). This violence takes insidious forms, which are often trivialized. Psychological control, the main tool of coercion, affected 6.6% of women (1.4 million), while emotional psychological violence affected 5.4% (1.1 million). Physical and/or sexual violence affected 1.8% of women over the same period (380,264 victims, including 274,243 for sexual violence and 197,643 for physical violence). A climate of threat and insecurity that permeates the intimate sphere is further evidenced by the 3.7% of women who said they had experienced fear of their partner or ex-partner during the year.

A tragic situation that persists is revealed by the phenomenon's evolution. Femicide, the most severe outcome, killed 1294 women between 2003 and 2024, including 63 children since 2013. With 50 women killed in 2022, 58 in 2023, and 48 in 2024, the yearly count is still remarkably high (Ministerio de Igualdad, 2024b). At the

same time, the institutional response is getting more intense: 199,282 complaints of gender-based violence were filed in 2023, up 9.46% from 2022. That's more than 500 complaints per day. (General Council of the Judiciary, cited in UGT, 2024).

It is important to stress that, despite their already significant numbers, these figures only represent a portion of the reality because victims are still kept silent by systems of shame, fear, and silence. They draw attention to the devaluation of violence in intimate relationships as well as the necessity of institutional, social, and therapeutic acknowledgment that is in line with the scope of the problem. The psychotraumatic effects of this violence necessitate both basic research on the cultural and social representations that support it and appropriate clinical interventions.

Protective and risk factors for violence

The report by Krug et al. (2002) proposes an ecological model for analyzing the origins of violence at four interdependent levels: individual, relational, community and societal. This theoretical framework makes it possible to situate risk and protective factors at different levels. According to the study by Voyer M. et al. (2014), it is possible to identify a number of risk factors that can contribute to intimate partner violence within a couple. Factors can be observed on both the perpetrator's and the victim's side. The risk factors that can lead an individual to become a perpetrator of intimate partner violence, according to the article by Voyer M. et al. (2014, pp.665) are as follows: age (being young is thought to increase the likelihood of violence), low social/economic status and/or low level of education, financial situation, particularly unemployment, a history of sexual and/or physical abuse during childhood, psychiatric or psychological disorders such as personality disorders, etc., substance use: alcohol or drugs, misguided beliefs about violence, and a history of violence. The risk factors for victims of intimate partner violence are largely the same, with the addition of the following criteria: depression (which may increase the risk of finding oneself in an abusive relationship), pregnancy(ies) and a history of victimization. This finding is highlighted by the Institut National de la Santé Publique du Québec (Quebec National Institute of Public Health) in the section entitled "Risk/protective factors for intimate partner violence" from the Quebec Report on Violence and Health published in 2018.

The study by Voyer M. et al. (2014, pp.664) also highlights factors known as "relational risk factors". These factors are not specific to individuals themselves but to the relationships between them. These factors include differences in educational levels,

but also new factors such as infidelity (for the perpetrator of violence), the number of children (for the victim) and, for both individuals, the length of the relationship, marital conflict and marital dissatisfaction. According to the article by Voyer M. et al. (2014, pp.665) studies on the link between childhood abuse and intimate partner violence has shown that "women who experienced physical and/or sexual abuse when they were younger or who witnessed violence against their mothers are at greater risk of victimization in adolescence and adulthood, whether within or outside the couple." The authors go on to explain that women who were physically or sexually abused during childhood are six times more likely to be victims of physical or sexual violence in adulthood.

Obviously, the factors presented above do not show a direct causal link with intimate partner violence, but they do represent areas that may or may not encourage the emergence of violence. Factors such as family, social circle, education, etc. can be important protective factors depending on their quality. It is important to emphasize the individual nature of violence and to consider both the perpetrator and the victim themselves in order to understand what may have led to the act.

Physical, neuropsychological and psychological consequences of violence

Intimate partner violence has multiple and profound consequences, ranging from physical symptoms to psychological disorders, and effecting even the cognition and neuropsychology of victims (Daugherty et al., 2023; Pérez-García et al., 2023). On a physical and somatic level, the repercussions are numerous. They include reproductive and health problems, sexually transmitted infections, gynecological injuries and head trauma (Lebas et al., 2002). More recent studies highlight that victims have a higher incidence of chronic health problems such as hypertension and fibromyalgia. According to Yonfa et al. (2021), the accumulation of abuse also causes a general increase in somatic complaints, which in turn leads to a more frequent use of anxiolytics and antidepressants. According to Voyer et al. (2014), victims who are repeatedly exposed to the cycle of violence may even die as a result of their abuser's physical or sexual abuse.

There are especially serious psychological and psychiatric repercussions. Victimization of intimate partners is directly associated with both suicidal thoughts and post-traumatic stress disorder (PTSD) (Spencer et al., 2024). Depression is also prevalent; a study by Craparo et al. (2014) found that 75% of women in a group of

victims exceeded the threshold for “minimal depression”, with some even classified as “severely depressed”. The same study demonstrated a correlation between alexithymia and the severity of depression, and linked insecure attachment styles to greater difficulty in regulating emotions and coping with stress. This difficulty in managing emotions, which increases with the intensity of the violence, has been confirmed as a factor that can exacerbate post-traumatic symptoms (Taccini et al., 2024). Other common consequences include sleep and eating disorders, low self-esteem, dissociative symptoms, social isolation and substance abuse (Lebas et al., 2002; Voyer et al., 2014).

Finally, the neuropsychological and cognitive impact is increasingly well documented. Twamley et al. (2009) found that more severe PTSD symptoms were associated with slower information processing speed and that high levels of dissociation were correlated with poorer reasoning performance. Expanding on these observations, Torres Garcia et al. (2021) detailed a wide range of cognitive sequelae, including decreased information processing speed and slower motor functioning; impairments in episodic memory, working memory, and short-term memory; significant alterations in executive functions, including difficulties with planning, decision-making, and inhibition of automatic responses; and attention and concentration disorders. These neuropsychological sequelae, which can result from blows to the head but also from intense chronic stress, are inextricably linked to psychological pathologies and are particularly debilitating in everyday life (Daugherty et al., 2023). This vulnerable population therefore requires in-depth psychological and neuropsychological assessment and follow-up in order to mitigate the consequences of the violence they have suffered.

Psychological and neuropsychological assessment in IPV victims – challenges and need for validated tools

Given the depth and variety of the consequences of intimate partner violence, a rigorous and sensitive clinical assessment is an essential and critical first step on the road to recovery. However, this assessment process is fraught with pitfalls, presenting considerable challenges that require clinical expertise and appropriate tools. The first major obstacle is the complexity of clinical presentations. Victims of IPV frequently present with a tangle of overlapping symptoms, forcing clinicians to navigate a fog of potential diagnoses. An increasingly studied issue is the co-occurrence of post-traumatic stress disorder (PTSD) and mild traumatic brain injury (TBI) resulting from blows to

the head or strangulation (Valera et al., 2022). As highlighted by Valera and Kucyi (2017), these “invisible” injuries cause cognitive symptoms (memory and attention disorders, irritability) that can easily be confused with those of PTSD. The extent of this problem and its perception in clinical settings have been studied in detail by Manoranjan et al. (2022).

A second major challenge is the wall of science created by underreporting. A large-scale survey by the World Health Organization (WHO, 2021) confirmed that only a minority of women report the violence they have suffered. This reluctance can be explained by a multitude of powerful factors: fear of reprisals, economic dependence, shame, or even the normalization of violence. Furthermore, the relevance of many standard psychological tools is being questioned. A systematic review by Sprague et al. (2016) on IPV screening tools highlighted the frequent lack of rigorous cross-cultural validation, a point emphasized in the guidelines of the International Test Commission (ITC, 2017).

In the face of these challenges, the use of psychometrically validated and specifically adapted assessment tools is a necessity. According to international standards in psychometrics, the validity of a test is the cornerstone that guarantees the accuracy of inferences made from scores (AERA et al., 2014). In clinical practice, this translates into greater diagnostic accuracy. In a medico-legal (forensic) setting, where protective measures may be at stake, the assessment's rigor is even more important and calls for the use of standardized tools (Ogonah et al., 2023). Finally, for transnational research projects such as the BELIEVE Project, the use of validated tools is the only way to ensure the comparability of the data collected (ITC, 2017). The BELIEVE project was developed specifically to address this need for a thorough, rigorous, and culturally sensitive assessment protocol.

A difficult global context increases the need for trustworthy assessment tools. There have been major setbacks for women's rights in recent years, from the denial of basic rights in Afghanistan (UN Women, 2024; Human Rights Watch, 2024) and the US repeal of the Roe v. Wade ruling (Amnesty International, 2024) to the partial decriminalization of intimate partner violence in Russia (Włodkowska, 2023). Wade ruling in the United States (Amnesty International, 2024), to Russia's partial decriminalization of violence against intimate partners (Włodkowska, 2023). The scientific community has a vital role to play in this era of regression. Every validated

tool and every study documenting the impact of violence becomes an essential contribution to recognizing and combating this systemic problem.

The BELIEVE Battery – aims and structure

The BELIEVE project falls within the field of neuropsychology and psychotraumatology. It was in response to this identified problem that the international BELIEVE research project was launched, offering a structured and scientifically based solution. The project is led by two researchers whose combined expertise in forensic neuropsychology, intercultural neuropsychology, and the development of valid tools for diverse populations (Daugherty et al., 2021) forms the basis of the research. Both professors have previously worked on the specific consequences of gender-based violence and domestic violence. Their previous research forms the “thematic and applied” pillar of the project. This collaboration has established the theoretical framework for the BELIEVE project, as described by Pérez-García et al. (2023). They emphasize that neuropsychological assessments of women who are victims of violence are particularly delicate, as PTSD symptoms can also affect cognitive performance. The BELIEVE project was designed as a protocol to guide clinicians in unravelling this complex interaction and making accurate diagnostic assumptions to enable effective support.

The project's ambition was realized with the official registration of the "Bateria BELIEVE" as intellectual property in 2022 (Daugherty et al., 2022), marking its formalization as a structured clinical tool. The battery is distinguished by its multi-faceted composition, designed for holistic assessment. The battery consists of several elements: a neuropsychological testing section and a psychopathological testing section. This research therefore focuses on a test that falls within the psychopathological sphere. The battery incorporates international reference scales for broad and recognized screening: the International Trauma Questionnaire (ITQ), the PTSD Checklist for DSM-5 (PCL-5), the Patient Health Questionnaire (PHQ-9) for depression and the Generalized Anxiety Disorder-7 (GAD-7) for anxiety are all part of it. At the heart of the protocol is an adapted instrument from a global reference: The World Health Organization's tool on violence against women, the WHO VAW (WHO, 2005). Led by Daugherty and Pérez-García (2024), the adaptation into WHO VAW – Modified Version (WHO VAW-M) was specifically designed for the purposes of neuropsychological and psychopathological assessment, targeting information crucial

for linking the violence suffered to the symptoms observed. To ensure the scientific rigor of the assessment and enable the battery to have forensic value, the battery also includes a test called "The Coin in Hand-Extended Version" (Daugherty et al., 2021). This tool, whose development has focused on multicultural validation, makes it possible to verify that the patient is making a maximum cognitive effort, making the conclusions of the neuropsychological assessment reliable and, due to its forensic weight, bringing even more reliability to the battery.

In short, the main objective of this project is to construct and validate a comprehensive, reliable, free and culturally sensitive test battery. This spirit has given rise to several specific objectives: to provide clinicians with a clear protocol for accurately assessing the consequences of violence (Pérez-García et al., 2023), to ensure the reliability of diagnoses through the integration of validity measures (Daugherty et al., 2021), to make the tool accessible to all professionals by offering it free of charge and translating it into several languages, and to better understand the links between types of violence and their neuropsychological signatures. The strength and originality of the BELIEVE project lie in its extensive international collaboration network. Partner universities, including the University of Granada (Spain), the University of Clermont-Auvergne (France), the University of Lisbon and the Egas Moniz University (Portugal), are the driving force behind the current phase of the project (Project BELIEVE, n.d.). This network enables the research process to be carried out in each country. This approach is essential to ensure that the BELIEVE battery can be used worldwide with the guarantee of its relevance and validity for each population.

The BELIEVE project brings together a multitude of experienced professionals and rigorous institutions to offer an assessment solution adapted to the complex realities of women who are victims of violence. By offering a free, accessible and scientifically validated battery of tests, it offers promising prospects for improving clinical care.

WHO VAW-M instrument – origin, psychometric studies, and importance of cultural validation

The WHO study and related studies

At the heart of the BELIEVE battery is an adapted instrument from a global benchmark: The World Health Organization's scale for measuring violence against women, the WHO VAW. The original instrument, developed from a large multi-country WHO study in 2005, was designed for epidemiological research to obtain comparable

data on the prevalence and risk factors of violence. (García-Moreno et al. 2005) The WHO undertook a study on violence and the severity of violence against women, particularly due to the lack of comparable data, especially in developing countries. This study demonstrated, for example, that rates of forced sexual intercourse vary considerably from one country to another, that trends have been observed in the prevalence of violence based on demographic data, and that many women rationalize violence, reflecting a cultural acceptance of abuse. (García-Moreno et al. 2005) It also shows that women who are victims of violence by their partners have demonstrated poorer health and higher rates of suicidal thoughts. Furthermore, women who seek help face obstacles that prevent them from accessing support and escaping violent environments and situations. The study's findings confirm that violence against women is widespread throughout the world and that action is needed (García-Moreno et al. 2005).

Following this seminal study, the WHO instrument quickly became a global benchmark, giving rise to numerous translation and validation initiatives aimed at adapting it to specific national contexts. To date, three studies on this subject have been found, using the original scale and adapting it to their language and country. The first study on the subject was conducted in Brazil, where a large epidemiological study validated the Portuguese version, reporting excellent internal consistency for the psychological, physical and sexual violence scales (Schraiber et al., 2010). The cross-cultural relevance of the instrument's core was also highlighted by a study done in Sweden on a sample of the general population, which showed the Swedish version's very high reliability with a very high alpha coefficient for psychological violence (Nybergh et al., 2013). Badenes-Sastre and colleagues recently validated the original version of the instrument in the Spanish context (2023). Their study, which was carried out on an online convenience sample, investigated the factorial structure of the scale in addition to confirming its reliability for the Spanish population. Their findings confirm that the WHO instrument is a reliable and pertinent research tool in Spain in its original form. The study's objectives were to make it easier to identify instances of violence against women in Spain and to make international comparisons possible. With 79.7% of participants reporting experiences of violence, the WHO VAW scale prevalence was concerning. The study found that the most prevalent type of violence experienced by the sample's female participants was controlling behaviors. The study calls for further research to explore the different manifestations of violence against women and to

ensure the applicability of the instrument to diverse populations. We therefore intend to add the work carried out by the BELIEVE project to this, in order to provide more information and contribute to research on the subject.

However, although these studies have solidly established the quality of the original version of the scale, there are no studies on the modified version, which is based on the original, and therefore, its robustness cannot be verified. The modified version (WHO VAW-M), specifically developed for the needs of the transnational BELIEVE research project with additional items and its own structure, had not yet been psychometrically evaluated in Spain. The present study therefore aims to contribute something different: it does not seek to replicate existing validations, but to conduct the first known validation of this new modified version, an essential step for its use in the BELIEVE battery.

The Intimate Partner Violence Severity Scale Modified (WHO VAW-M)

Thus, for the purposes of the BELIEVE test project, the WHO VAW scale (WHO, 2005) needed to be reworked in order to meet the requirements and challenges of such a project. It should be noted that the scales tested above, including the original WHO version, focus heavily on acts of physical and sexual violence. The notion of coercive control, which is at the heart of intimate partner violence, is less detailed, whereas the findings of Badenes-Sastre and colleagues (2023) emphasize the importance of this control, which emerges as a key aspect of intimate partner violence. The WHO VAW-M version (Daugherty & Pérez-García, 2024), with its additional items, aims precisely to better capture these strategies of domination (isolation, control of communications, threats, etc.) and to treat them equally to other types of violence, to highlight them with the same importance and to pay particular attention to these mechanisms. Similarly, its items and form make it possible to obtain a wide range of information, with nuance, without losing the complexity of each experience and capturing the reality of violence in the victim's history of violence. The original scale (WHO, 2005) was designed for epidemiological research. The modified version was designed to be integrated into a clinical assessment battery, in this case, the BELIEVE battery. This means that its structure, the types of violence measured, and the way the questions are asked have been designed to work in synergy with other clinical measures, for future support, and to be comparable across countries. These are fundamental differences.

The WHO VAW-M is a comprehensive 41-item scale measuring violence experienced by women from their partners. Its structure allows for a detailed analysis by type of violence, an approach whose relevance has been demonstrated in studies validating the original instrument (e.g., Schraiber et al., 2010; Ribeiro et al., 2014). The first part measures psychological violence, covering humiliation, intimidation and verbal threats. The second part, devoted to physical violence, covers a wide range of acts, from shoving to violence with a weapon. The third part addresses sexual violence, including forced or degrading sexual intercourse. The fourth part is dedicated to coercive control, measuring jealousy, isolation, and control of communications and movements. Finally, the scale assesses economic violence and violence during pregnancy, a particularly vulnerable period. For each item, participants indicate the frequency of the acts on a Likert scale, distinguishing between two periods: “in the last 12 months” and “more than a year ago”. A higher score indicates a greater frequency and variety of acts of violence. This dual temporal dimension is a major clinical asset: it allows for the analysis of trajectories of violence and the differentiation between a current and potentially ongoing situation of violence and past violence. It is therefore a very comprehensive instrument which, thanks to its modified version, places particular emphasis on measuring ‘control’ and provides additional nuances on violence during pregnancy. One of the advantages of the scale is that its 6-category structure allows future research to study different correlations and effects of violence without necessarily resorting to the “total score”. We will discuss this later in this study. (Daugherty & Pérez-García, 2024)

The validation of the WHO VAW-M questionnaire is all the more important because it comes at a time of urgent social and political need. Indeed, the relevance of this tool is particularly evident in crisis contexts, such as post-pandemic Spain, where COVID-19 lockdowns have exacerbated intimate partner violence (Pérez-Martínez & Rodríguez-Fernández, 2024; WHO, 2020; Rocha et al., 2024). While Spain has been a pioneer in the creation of specialized courts, challenges remain, and an objective tool can help guide victims through a complex legal process (García-Hombrados et al., 2024). This trend was not unique to Spain but was a global phenomenon, as demonstrated by a large-scale international study across 30 countries during the same period (Campbell et al., 2023).

Studies and tools for measuring violence in Spain

In this regard, numerous Spanish studies have examined violence within couples. One example is the study by Garcia et al. (2020). This systematic review looked at the results of numerous studies conducted across the European Union on the attitudes of the population towards intimate partner violence against women. Their research shows that, while serious physical violence is condemned in all European countries, a significant proportion of the population maintains attitudes that tolerate, minimize or justify violence in certain circumstances. Furthermore, there is much greater tolerance towards psychological violence, coercive control and harassment than towards physical violence. Many people do not consider these acts to be 'real violence'. This research also highlights that in many studies, attitudes that blame victims rather than support them are evident. (Garcia et al., 2020) These cultural beliefs, identified by the study by Garcia et al. (2020), therefore constitute a major obstacle: they can prevent victims from recognizing their own situation, discourage those around them from intervening, increase guilt and slow down the institutional response. The Spanish context is therefore marked by a high prevalence of IPV (1 in 5 women who have experienced violence from a partner during their lifetime) (Ruiz-Pérez et al., 2017). This exposure to violence has severe and proven clinical consequences on the overall health of victims, particularly in psychological terms, as specifically demonstrated by the study by Vives-Cases et al. (2011). It is precisely this reality, high prevalence and proven clinical consequences, that makes the development of rigorous assessment tools essential.

Research on IPV in Spain is based on the adaptation and validation of several internationally recognized psychometric instruments, which allow the phenomenon to be assessed from different angles. Scales like the Index of Spouse Abuse (ISA), one of the most prominent instruments, have been rigorously validated, demonstrating their applicability in gauging the level of both physical and non-physical violence in the Spanish population (Plazaola-Castaño et al., 2009). At the same time, multidimensional instruments such as the Composite Abuse Scale (CAS) have more recently been validated in Spanish. They provide a thorough understanding of the abuse situation by giving researchers a trustworthy instrument for determining the prevalence of a variety of violent acts, including forms like harassment (Garrido et al., 2023). Last but not least, scales like the Conflict Tactics Scales (CTS) have also been modified and are widely used for the analysis of particular behaviors adopted during marital disputes, especially to study the dynamics of aggression in young adult couple relationships (Muñoz-Rivas et al., 2007). When taken as a whole, these tools offer a strong basis for studying

intimate partner violence in Spain, with each one illuminating the scope and character of the issue. These tools do have some serious drawbacks, though. The temporal distinction of violence is the subject of the first limitation. Most of these scales provide an overall score that reflects violence over a given period (often the last 12 months) or over a lifetime, but they do not always allow for easy differentiation and comparison between the dynamics of recent violence and past violence. This distinction is crucial from a clinical point of view in order to distinguish between a situation of imminent danger and a history of trauma. Secondly, certain specific forms of violence, now recognized as central to coercive control strategies, are not always isolated as separate dimensions. Economic violence, for example, is often underrepresented compared to physical or psychological violence, as is violence experienced during pregnancy, which nevertheless represents a context of extreme vulnerability and violence that is more common than it appears. Finally, scales such as the Conflict Tactics Scales (CTS) (Muñoz-Rivas et al., 2007), by focusing on behaviors within a "conflict", may unintentionally minimize the unilateral and contextual nature of gender-based violence, which is not always a simple "tactic of dispute". There is therefore a need for tools that, while psychometrically robust, offer greater sophistication in the temporal and thematic analysis of the violence experienced.

Present Study- Objectives of our research

Although the WHO Violence Against Women scale (WHO VAW) has been widely used in epidemiological research, the modified clinical version (WHO VAW-M) has not yet been psychometrically validated for the Spanish female population. Considering the neuropsychological and psychopathological consequences of intimate partner violence (Torres García et al., 2021; Torres García et al., 2021) (IPV) and the need for cross-national comparability in the BELIEVE project, a culturally adapted and validated Spanish version of the WHO VAW-M is essential. Therefore, the general objective of this study is to adapt and psychometrically validate the Spanish version of the WHO VAW-M in adult women, within the framework of the BELIEVE project, ensuring its reliability, validity, and clinical/forensic applicability. To achieve this, three specific objectives were defined:

- i) To estimate the internal consistency (Cronbach's α) of the total scale and subscales (psychological, physical, sexual, coercive control, economic,

pregnancy-related violence) across two-time frames (past 12 months vs. more than 12 months).

- ii) To examine convergent validity through correlations between WHO VAW-M scores and psychopathology measures: PCL-5 (PTSD), ITQ (PTSD/CPTSD), PHQ-9 (depression), and GAD-7 (anxiety).
- iii) To explore the ability of the violence severity score (WHO VAW-M) to predict the intensity of psychopathological symptoms (anxiety, depression, PTSD).

Based on the literature, we formulate the following hypotheses:

H1 (Reliability). Based on previous research that has consistently demonstrated high internal consistency in the WHO instrument (e.g., Badenes-Sastre et al., 2023; Nybergh et al., 2013; Schraiber et al., 2010), we hypothesize that the WHO VAW-M will show good to excellent reliability ($\alpha, \omega \geq .80$) for its total scale and subscales.

H2 (Convergent validity). Given the extensive literature establishing relationship between the intimate partner violence and negative mental health outcomes (e.g., Golding, 1999; Vives-Cases et al., 2011), we hypothesize that the WHO VAW-M scores will positively correlate with PCL-5, ITQ, PHQ-9, and GAD-7 ($|r| \geq .30, p < .05$).

H3 (Predictive validity) Building upon the well-documented association between violence severity and symptomatology (e.g., Herman, 2015), we further hypothesize that the violence severity score will be a significant predictor of the severity of anxiety, depression, and PTSD symptoms.

The validation of this instrument and the testing of these hypotheses were conducted through a specific methodological approach, which is outlined in the next section.

Adaptation and psychometric properties evaluation of the intimate partner violence severity scale (who vaw-m) in spanish for the believe battery targeting cisgender spanish women victims of partner or ex-partner violence

Method

This quantitative study focuses on the development, cross-cultural adaptation, and psychometric validation of a measurement instrument WHO VAW-M for the Spanish population. The methodology was organized into four main sections: participants, instruments, procedure, and data analysis.

Participants

To be included in this study, participants had to meet several criteria. They had to be cisgender women, aged 18 or older, and have sufficient command of the Spanish language to understand the questionnaires and respond to them in an informed manner. The study was open to both women with a known history of intimate partner violence and those without. Exclusion criteria were defined to ensure sample homogeneity and response validity. Men were excluded, as were individuals whose physical or mental health, or ongoing pharmacological treatment, could have impaired their ability to complete the assessments. In addition, participants diagnosed with a psychotic disorder, bipolar disorder, or substance use disorder in the 12 months prior to the study were not included. The sample was selected using a non-probability convenience sampling method. Recruitment took place over one academic year at several partner institutions of the University of Granada, Spain. These partners, which include the Centros de Información a la Mujer and the Centro de Investigación del Cerebro y Comportamiento (CIMCYC), were chosen for their privileged access to the study's target population, namely women being treated for various psychological issues, including situations of intimate partner violence. The final study sample included 157 participants. The age range of the sample was 18 to 72 years, with a mean age of $M = 36.23$ years ($SD = 12.97$). The sociodemographic profile reveals that the majority of participants were single (64.3%), nearly half were employed (49.0%), and 43.9% were unemployed. The level of education was heterogeneous: while 10.2% had primary or secondary education, a significant proportion of the sample had a vocational qualification (23.7%) or had pursued higher education, with 21.8% holding an undergraduate degree and 23.7% a postgraduate degree (Master's or Doctorate).

In accordance with the study objectives, participants were divided into two groups based on a self-reported question regarding any history of intimate partner violence. On this basis, 86 participants (54.8%) reported having experienced violence and thus constituted the 'history of violence' group. The remaining 71 participants

(45.2%) initially reported not having experienced violence, forming the control group for comparative analyses. However, it is essential to note that analysis of the detailed responses on the WHO VAW-M scale showed that some women in the control group actually reported experiencing specific acts of violence, even though they did not identify their overall experience as such in the initial question. This distinction between the self-reported label of 'violence' and the behavioral measurement of the acts experienced is an important piece of information. For the sake of clarity in the following analyses, the distribution of groups will be based on the initial declaration, but this nuance will be considered in the interpretation of the results.

Instruments

Sociodemographic questionnaire

A sociodemographic questionnaire, designed specifically for this study, was used to collect descriptive data from the sample. It included variables such as age, marital status, educational level, and employment status.

Generalised Anxiety Disorder 7-item

The Generalised Anxiety Disorder 7-item (GAD-7) scale (Spitzer et al., 2006) was used to assess the severity of generalized anxiety disorder symptoms. This self-assessment instrument consists of 7 items rated on a 4 point Likert scale (from 0 "Never" to 3 "Almost every day"), with a total score ranging from 0 to 21. For this study, the Spanish version validated by García-Campayo et al. (2010) was administered. In their study with a Spanish sample, this version demonstrated excellent internal consistency ($\alpha = .93$).

The Patient Health Questionnaire 9-item

The intensity of depressive symptoms was assessed using the 9-item Patient Health Questionnaire (PHQ-9) scale (Kroenke et al., 2001). The DSM-5 diagnostic criteria are met by this self-administered, nine-item survey. A total score ranging from 0 to 27 is generated by rating each item on a 4-point Likert scale, with 0 representing "Never" and 3 representing "Almost every day." Díez-Quevedo et al. (2001) validated the Spanish version of the scale for the Spanish population, which was used in the study. For the diagnosis of major depressive disorder, their study's internal consistency was good ($\alpha = .86$).

Post Traumatic Stress Disorder Checklist for DSM-5

The PTSD Checklist for DSM-5 (PCL-5) (Weathers et al., 2013) was used to quantify the presence and severity of post-traumatic stress disorder (PTSD) symptoms. This self-report measure comprises 20 items assessing symptom intensity over the past month. The response format is a 5-point Likert scale (from 0 “Not at all” to 4 “Extremely”), for a total score ranging from 0 to 80. For this research, the Spanish version of the scale validated by Jiménez-Fernández et al. (2024) was used. This recent validation confirmed the scale’s high internal consistency ($\alpha = .93$).

The International Trauma Questionnaire

The International Trauma Questionnaire (ITQ) (Cloitre et al., 2018) was administered to assess symptoms of PTSD and Complex PTSD (C-PTSD), in accordance with the diagnostic criteria of the ICD-11. This 18-item self-report tool uses a 5 point Likert scale (from 0 “Not at all” to 4 “Extremely”). For the purposes of the analysis, a dimensional approach was favored, with separate scores calculated for the PTSD subscale and the “Self-Organization Disturbances” (SOD) subscale. Fernández-Fillol et al. (2025) validated the Spanish version of the instrument, which was utilized. Both the Disturbances in Self-Organization (DSO) subscale ($\alpha = .91$) and the PTSD subscale ($\alpha = .92$) showed excellent internal consistency in this validation.

The Intimate Partner Violence Severity Scale

The Intimate Partner Violence Severity Scale (WHO VAW-M) is the central instrument of this study, one of the main objectives of which is its adaptation and validation for the Spanish population (Daugherty & Pérez-Garcia, 2024). This scale, developed from the World Health Organization’s (WHO, 2005) battery of instruments, measures the severity of intimate partner violence. It consists of 41 items that assess a wide range of acts of violence: psychological, physical, sexual, controlling (coercive) and economic. The response format is a 4 point Likert scale that quantifies the frequency of acts experienced (ranging from 0 = “Never” to 3 = “Several times”) during two distinct periods: “in the last 12 months” and “more than a year ago”. The psychometric properties (reliability and validity) of this Spanish version are examined in this study and presented in detail in the ‘Results’ section.

Cross-cultural adaptation of the WHO VAW-M

The cross-cultural adaptation of the WHO VAW-M scale followed a rigorous methodology, in accordance with the guidelines of the International Test Commission (ITC, 2017) and the standard procedures recommended in the scientific literature (Beaton et al., 2000). The process began with a translation of the original English version into Spanish, carried out independently by several bilingual translators. A summary version was then produced by a committee of experts. This version was back-translated into English by a translator who was unfamiliar with the original instrument. The comparison between the back-translated version and the original version ensured semantic and conceptual equivalence, while also allowing for the cultural adaptation of the items. Finally, a pre-test of the finalized Spanish version was conducted with a sample of the target population to validate the clarity and comprehensibility of the questions. The cross-cultural adaptation of the WHO VAW-M followed a rigorous methodology, in accordance with the guidelines of the International Test Commission (ITC, 2017) and standard translation and adaptation procedures (Beaton et al., 2000). The process began with the translation of the items from English into Spanish by several bilingual members of the research team. A consensus version was established, then a back-translation into English was carried out by an independent translator. The comparison between the back-translated version and the original version ensured semantic and conceptual equivalence. Finally, a pre-test of the Spanish version was conducted with a sample of the target population to ensure its clarity, cultural relevance and comprehensibility.

Procedure

Participants were recruited through non-probability convenience sampling within partner institutions of the University of Granada (Spain), notably the *Centros de Información a la Mujer* and the *Centro de Investigación del Cerebro y Comportamiento* (CIMCYC). After receiving comprehensive information about the objectives and conduct of the research, each participant provided her written informed consent before beginning the protocol. Data collection was carried out by trained members of the research team during individual, structured interviews conducted in a setting that guaranteed confidentiality. The questionnaires were administered digitally via the LimeSurvey platform (average completion time: 90 minutes). This research project was approved by the Provincial CEIm of Granada (Reference number: PID2022-143060NB-I00, Date: 28/05/2024). All participants provided their written informed consent prior to

their inclusion in the study, after receiving comprehensive information about its objectives and procedures. Participation was strictly voluntary, and participants were informed of their right to withdraw from the study at any time without prejudice. Data confidentiality and anonymity were guaranteed at all stages; the data collected was anonymized and stored securely, in accordance with current data protection regulations. In addition, the author of this thesis signed a specific confidentiality agreement with Clermont Auvergne University, governing their access to and processing of the information.

Statistical analyses

The data analysis strategy, carried out using IBM SPSS Statistics (Version 30) software, was organized into several sequential steps, ranging from data preparation to verification of research hypotheses. The method used to analyze the pregnancy subscale separately reflects a deliberately rigorous and ethical methodological approach. Due to the limitations of the IBM SPSS Statistics software, which by default excluded other participants who had not had children and therefore did not respond to the entire scale, it was decided to treat this sample separately, which made it possible to validate the reliability of each component of the instrument on the relevant samples. This approach was intended to avoid excluding a part of the population that was also affected by the scale.

Data preparation and normality test

A preliminary analysis focused on data quality and variable distribution. The normality of the WHO VAW-M scale scores was assessed using the Kolmogorov-Smirnov test. As this test revealed a non-normal distribution ($p < .001$), non-parametric tests were chosen for the inferential analyses. This approach is recommended to ensure the validity and robustness of results when normality assumptions are not met (Field, 2023).

Descriptive statistics

First, descriptive analyses were conducted to provide a detailed picture of the sample. Frequencies and percentages were calculated for categorical variables (e.g., marital status, level of education), while means, standard deviations, minimums, and maximums were used to describe continuous variables (e.g., age, scale scores).

Reliability of measurements

An essential step was to verify the psychometric quality of the instruments used in our sample. The internal consistency of each scale was assessed using Cronbach's alpha (α) coefficient, an essential index for ensuring the homogeneity of items (Furr, 2018). In accordance with psychometric conventions, a value greater than or equal to .70 was considered the threshold for acceptable reliability (George & Mallery, 2022).

Validity analyses

To support the construct validity of the WHO VAW-M scale, its convergent validity was examined. To test this, non-parametric correlations (Spearman's rho) were calculated between the WHO VAW-M scores and those of instruments measuring anxiety symptoms (GAD-7), depressive symptoms (PHQ-9), and post-traumatic symptoms (PCL-5, ITQ). The strength of these correlations was interpreted based on the criteria of Cohen (1988).

Regression analyses

Finally, to explore potentially predictive relationships, a series of simple linear regression models was conducted, a method for modelling and quantifying how an independent variable can predict a dependent variable (Tabachnick & Fidell, 2019). The objective was to determine the extent to which the violence severity score, taken as the predictor variable, could explain the variance in psychopathological symptoms (anxiety, depression, PTSD) as dependent variables.

For each model, the quality of the fit was assessed using the F test and the coefficient of determination (R^2), and the relative importance of each predictor was analysed using its standardised coefficient (β).

Results

Sociodemographic data

It is important to present the sample on which these analyses are based and the characteristics of the population tested here. The analysis in Table 1 provides a sociodemographic and clinical portrait of a sample of $N = 157$ participants. Several characteristics emerge and provide the essential context for interpreting the psychometric results of this study.

Table 1

Sociodemographic characteristics and prevalence of violence in the sample ($N = 157$)

Characteristic	Category	Frequency (N)	Percentage (%)
Age (years), M(SD)		36.23 (12.97)	
Country of residence	Spain	139	88.5
	Other country	18	11.5
Marital status	Single	101	64.3
	Married/In a relationship	19	12.1
	Separated/Divorced	36	22.9
	Widowed	1	0.6
Country of origin	Spain*	139	88.5
	Other (13 nationalities)	18	11.5%
Number of children	0	89	56.7
	1	24	15.3
	2	34	21.7%
	3	8	5.1%
	4	2	1.3
Level of education ¹	Primary/secondary education	16	10.2
	Secondary school (Baccalaureate)	30	19.2
	Vocational training (intermediate/advanced)	37	23.7
	University studies (Bachelor's degree/Grado)	34	21.8
	Postgraduate studies (Master's degree)	32	20.5
	Doctorate	5	3.2
	Other	2	1.3
Length of schooling	<i>Average (Standard deviation)</i>	<i>16.27 years (4.57)</i>	-
	<i>Minimum - Maximum</i>	<i>4 years - 30 years</i>	-

Characteristic	Category	Frequency (N)	Percentage (%)
Employment status	In employment	77	49.0
	Unemployed	69	43.9
	On sick leave/retired	11	7.0
Monthly household income	Less than €900	45	28.6
	From €901 to €1,800	62	39.5
	From €1,801 to €3,600	41	26.1
	Over €3,601	9	5.7%
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Experience of gender-based violence	Yes	86	54.8
	No	71	45.2
Situation of victims (out of N=86) ²	Current violence	31	36.0
	Past violence only	55	64.0
Timing of violence (out of N=86) ²	Experienced during adolescence	20	23.3
	Experienced in adulthood	75	87.2

*Country of origin deduced from the PAIS variable (country of residence).

¹ N=156 for this variable due to one participant's non-response. Valid percentages. Categories grouped for clarity.

² The percentages for these categories are calculated based on the sub-sample of 86 women who reported having experienced violence.

Note: N = 157. The age of participants ranged from 18 to 72. The level of education was analyzed on N=156. Some categories have been grouped together for clarity. M = Mean; SD = Standard deviation.

As can be seen from this table, the dominant profile of our sample is that of adult women who are predominantly "young" (average age $M = 36.23$), with a wide range of ages from 18 to 72. The majority of participants were Spanish nationals (88.5%), with 11.5% coming from other countries (see Table A1 for a detailed breakdown of nationalities).

A significant proportion of participants were single at the time of the study (64.3%) and, if we add separated or divorced women (22.9%), we see that nearly 88% of the sample were not in a formal relationship. In addition, more than half of the women in the sample did not have children (56.7%). In terms of education, the sample had a high level of training. Nearly 70% of participants had completed vocational

training or higher education, with an average length of schooling of 16.27 years, which corresponds on average to a university level. The sample is highly polarized: while nearly half of the women are employed (49.0%), an almost equivalent proportion are unemployed (43.9%). Household income was mainly concentrated in the middle range, with nearly 66% of households had monthly incomes between €901 and €3,600. With regard to the violence identified by the sociodemographic test, women who explicitly confirmed that they had experienced gender-based violence accounted for more than half of the participants (54.8%, or 86 women). This number is already considerable but may differ in the results of the following psychometric tests, particularly the WHO VAW-M. Within this group ($N=86$), it is important to note that a majority (64.0%) report past violence only. Nevertheless, more than a third of victims (36.0%) appear to be in a situation of current violence. As presented earlier in this paper, an initial analysis was conducted, namely a normality analysis.

Normality test

The Kolmogorov-Smirnov test was used to determine whether the distribution of violence scores was normal before the inferential analyses. Since the question of score distribution only applies to those with a non-zero violence score, this analysis was done on the subsample of 105 participants who met the trauma criterion required for the psychopathology scales. The findings showed that there was a statistically significant deviation from a normal distribution ($p < .001$) in the distribution of all scores, whether they were for individual subscales or the total scores. A strong positive skewness was confirmed by visual inspection of the histograms. We used basic linear regression for our primary predictive analyses (H3) in spite of this departure from normalcy. The robustness of linear regression to deviations from normalcy, especially with sample sizes like ours ($N > 100$), supports this choice. The non-parametric Spearman's ρ was employed as a more cautious method for the more straightforward correlational analyses (H2).

Cronbach's Alpha test

In order to measure the reliability of the WHO VAW-M test (Daugherty & Pérez-García, 2024), it was decided to perform descriptive statistical analyses and to seek the reliability coefficients of the instruments used in order to compare them. Thus, the characteristics of the measurement instruments used in this study, including descriptive statistics and internal consistency, are presented in Table 2.

Table 2

Descriptive Statistics and Reliability Coefficients (Cronbach's Alpha) of the Instruments (Total N = 157)

Instrument	Valid N	N Missing	Min	Max	M	SD	α
Anxiety (GAD-7)	155	2	0	21	8.01	5.91	.92
Depression (PHQ-9)	156	1	0	27	9.70	7.05	.91
PTSD (PCL-5)	152	5	0	72	29.18	20.66	.96
ITQ							
PTSD (6 items)	152	5	0	24	10.16	6.84	.90
Associated Affects (6 items)	152	5	0	24	10.05	6.08	.87
Violence (WHO-VAW-M)							
Main Scale (more than 1 year)	148	9	0	93	27.33	25.71	.97
Main Scale (last 12 months)	148	9	0	69	7.41	13.96	.95
Pregnancy subscale (more than 1 year)	65	92	0	14	2.18	3.01	.72
Pregnancy subscale (last 12 months)	65	92	0	5	0.11	0.66	.75

Note. Min = Minimum; Max = Maximum; M = Mean; SD = Standard Deviation; α = Cronbach's Alpha. Valid N and Missing N are calculated in relation to the total sample of 157 participants.

Cronbach's alpha (α) was computed for each scale in the sample in order to perform a reliability analysis of the measures. The PHQ-9, GAD-7, ITQ, and PCL-5, standard tools used to evaluate participants' mental health, all showed good to excellent reliability (α ranging from .87 to .96). These results confirm that these tools, previously validated internationally, functioned consistently and reliably for the specific study sample. The violence severity scale (WHO VAW-M) (Daugherty & Pérez-Garcia, 2024) showed "excellent" internal reliability for its main scale, both for the period "during the last 12 months" (α = .95) and the period "more than a year ago" (α = .97). The pregnancy items showed acceptable and good reliability (α from .72 to .75), confirming consistency for the sub-sample concerned.

By including the pregnancy items with the rest of the items, we can observe the following:

Table 3

Reliability of the total violence severity scale (WHO VAW-M) (41 items)

Period measured	Sample (<i>N</i>)	Mean (<i>M</i>)	<i>SD</i>	Alpha (α)
Violence experienced in the last 12 months	65	10.12	16.52	.95
Violence experienced more than a year ago	65	41.34	29.58	.97

We observe that Cronbach's alpha coefficients remain excellent ($\alpha = .95$ and $\alpha = .97$) in the Table 3. However, it is important to note that the sample size, due to the inclusion of all items together, is reduced to $N= 65$. This corresponds to the group of women who responded to the pregnancy items, unfortunately excluding women who were not affected by the issue. Thus, as shown in the previous table, it was considered to separate the pregnancy items in order to allow for a more accurate visualization of the internal consistency of the items.

Correlational analysis

To assess the convergent validity of the WHO VAW-M scale (Daugherty & Pérez-Garcia, 2024), Spearman's correlations were calculated between the total violence score and the psychopathology measures. The results presented in Table 4 support the validity of the instrument.

Table 4

Correlation Matrix (Spearman's ρ), Means and Standard Deviations for Severity of Violence and Mental Health Measures

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Severity of Violence	33.69	34.23	—					
2. Anxiety (GAD-7)	8.01	5.91	.39	—				
3. Depression (PHQ-9)	9.70	7.05	.39**	.74	—			
4. PTSD (PCL)	29.18	20.66	.47**	.66	.75	—		
5. Associated Affects (ITQ)	0.37	0.48	.31**	.50**	.54**	.60**	—	
6. PTSD (ITQ)	0.36	0.48	.33**	.34**	.44**	.62**	—	

Note. PTSD = Post-Traumatic Stress Disorder. The *N* for correlations varies from 141 to 157 due to pairwise exclusion. "Dichotomous variable (0 = no, 1 = yes). ** $p < .01$

The severity of violence is positively and significantly correlated, as expected, particularly with PTSD symptoms, measured by the PCL-5 ($\rho = .47, p < .001$). Moderate but significant links were also found with depression (PHQ-9, $\rho = .39, p < .001$) and anxiety (GAD-7, $\rho = .39, p < .001$). With regard to the ITQ, a positive, significant and moderately strong correlation can be observed. This was observed ($\rho = .33$) for PTSD symptoms and ($\rho = .31$) for Associated Affects, representing Complex PTSD symptoms. Although the links are slightly weaker than those observed with the other scales, they provide additional and important evidence for the convergent validity of the instrument.

Regression Analyses

A series of simple linear regression analyses was conducted to test the ability of violence severity to predict the intensity of psychopathological symptoms. The results, summarized in Table 5, demonstrate that violence is a statistically significant predictor for all of the consequences measured.

Table 5

Simple Linear Regression Analyses Predicting Mental Health Symptoms Based on the Severity of Violence

Dependent Variable	R^2	β	F	p
Anxiety (GAD-7)	.20	.45***	35.39	< .001
Depression (PHQ-9)	.16	.40***	26.13	< .001
PTSD (PCL-5)	.24	.49***	48.98	< .001
PTSD (ITQ)	.16	.40***	29.13	< .001
Associated Affects (ITQ)	.11	.34***	19.58	< .001

Note. R^2 = R-squared; β = Standardized beta. The predictor variable was the severity of violence (WHOVAWMTot) for all models. *** $p < .001$.

Simple linear regressions were performed using psychopathology outcomes as dependent variables in Table 5 in order to evaluate the WHO VAW-M's predictive validity. The degree of violence was a significant predictor of PTSD symptoms (PCL-5, $R^2 = .24, \beta = .49, p < .001$), anxiety (GAD-7, $R^2 = .20, \beta = .45, p < .001$), and depression (PHQ-9, $R^2 = .16, \beta = .40, p < .001$). These outcomes lend credence to the instrument's predictive validity.

Discussion

This study aimed to adapt and validate the WHO VAW-M questionnaire, an instrument for measuring the severity of domestic violence, for use in Spain. The following discussion reviews the main findings regarding the psychometric properties of the scale, including its reliability (H1), convergent validity with measures of psychopathology (H2), and ability to predict clinical symptoms (H3).

In line with our first objective, the psychometric properties of the violence severity scale (WHO VAW-M) were rigorously evaluated. The reliability study revealed “excellent” internal consistency for its main scale, both for the “in the last 12 months” period ($\alpha = 0.95$) and for the “more than a year ago” period ($\alpha = .97$). The pregnancy items showed acceptable and good reliability (α from .72 to 0.75). The psychometric evaluation revealed an excellent internal consistency for the main scale ($\alpha = .95$ and $\alpha = .97$), a finding that confirms our first hypothesis (H1) regarding the instrument’s reliability. These high coefficients are comparable to, or even higher than, those reported in previous validations of the original WHO VAW instrument in other countries, such as Brazil (Schraiber et al., 2010) and Sweden (Nybergh et al., 2013). More directly, our result of .97 is slightly higher than the alpha of .94 reported by Badenes-Sastre et al. (2023) in their recent evaluation of the original scale in Spain, which could suggest that the modified version (WHO VAW-M) provides a particularly homogeneous measurement. While confirmation of (H1) is an important finding, a more detailed comparison with previous validation studies of the WHO VAW instrument reveals significant methodological differences that could explain the particularly high internal consistency found in our study. Three main factors stand out: the version of the instrument, the characteristics of the sample, and the method of administration.

First, our study is the first to validate the modified version (WHO VAW-M) in Spain, which contains 41 items with a greater emphasis on coercive control. In contrast, the studies by Schraiber et al. (2010) in Brazil, Nybergh et al. (2013) in Sweden, and Badenes-Sastre et al. (2023) in Spain all used the original, shorter version of the instrument. It is plausible that the additional items in the WHO VAW-M, by better reflecting the pervasive and systemic nature of coercive control, create a more thematically unified and therefore more internally consistent scale. Second, the characteristics of our sample differ considerably from those of the other studies. The Brazilian and Swedish validations were conducted on large epidemiological samples

from the general population, which are inherently more heterogeneous. Our sample, with $N = 157$, is smaller and was recruited from clinical and support settings, suggesting higher prevalence and severity of trauma. A more homogeneous clinical sample is more likely to produce a higher alpha coefficient, as the shared experience of severe violence may lead to more consistent response patterns. Lastly, a comparison between our study and the other recent Spanish validation makes this difference especially clear. The study by Badenes-Sastre et al. (2023) used an online convenience sample, whereas our data were gathered in a supervised individual administration setting. Our study's supervised environment might have decreased possible data noise (such as item misunderstandings and distractions), which would have raised the reliability score. Consequently, our study's remarkable internal consistency of .97 is probably the consequence of a combination of a rigorous data collection process, a particular clinical sample, and an enhanced instrument, rather than just being a feature of the scale itself. But, such high coefficient invites critical reflection on potential item redundancy (Tavakol & Dennick, 2011), in the context of IPV, it may also reflect the holistic nature of the trauma, where different forms of violence merge into a single oppressive experience. This interpretation is further supported by the finding that even when considering all 41 items together (including the pregnancy subscale), the overall consistency remains excellent, which indicates that the instrument successfully measures the global concept of "severity of violence". In the case of this study, it is true that many items measure similar elements (e.g., hitting, hitting with an object), but this does not detract from their relevance due to the subtlety of the points they assess. The distinction between hitting with bare hands and hitting with an object, for example, has radically different psychological and legal implications.

The convergent validity study fully confirmed the hypotheses, showing a positive and strong association between the severity of violence and all psychopathology scales. Our second hypothesis (H2) is strongly supported by this. In the Spanish context, where research has consistently shown the severe impact of IPV on women's mental health, the significant correlation with PTSD symptoms as measured by the PCL-5 ($\rho = .47, p < 0.001$) is especially relevant (Ruiz-Pérez et al., 2017; Vives-Cases et al., 2011). This conclusion provides a specific statistical value for the dose-response relationship between the severity of violence and PTSD that Golding's meta-analysis (1999) had already identified. Furthermore, it empirically confirms, within our specific sample, the strong association between IPV and poor mental health outcomes

previously established in the general Spanish population by Vives-Cases et al. (2011). Additionally, moderate but significant associations with anxiety (GAD-7, $\rho = .39$, $p < 0.001$) and depression (PHQ-9, $\rho = .39$, $p < 0.001$) were discovered. These correlations have a moderate magnitude, but they are statistically significant ($p < .001$). This demonstrates the scale's capacity to measure the wider range of psychopathological distress linked to IPV, beyond PTSD alone, and validates the proposed relationship. Additionally, regression analyses supported our third hypothesis (H3) by showing that the severity of IPV was linked to 24% of the variance in PTSD symptoms ($R^2 = .24$, $\beta = .49$). The WHO VAW-M questionnaire showed significant predictive power for other common mental health consequences of IPV in addition to its strong prediction of PTSD. Violence severity accounted for 16% of the variance in depressive symptoms (PHQ-9, $R^2 = 0.16$), and 20% of the variance in anxiety symptoms (GAD-7, $R^2 = 0.20$). These R^2 values indicate medium to large effects based on Cohen's criteria (1988), underscoring the relationships' clinical significance. This result is in line with a large body of research showing that anxiety and depression are two of the most prevalent and crippling effects of intimate partner violence. The WHO VAW-M questionnaire demonstrates its value as a tool for identifying a wider range of psychological distress that necessitates clinical attention, in addition to evaluating trauma-specific risks, by capturing this variance.

According to Cohen's criteria (1988), this R^2 value represents a large effect, indicating that the severity of violence is not only a statistically significant factor, but also a clinically significant factor. The finding that IPV severity was associated with 24% of the variance in PTSD symptoms confirms (H3) and provides a powerful quantification of the clinical impact of violence. This substantial R-squared value empirically supports the "dose-response" relationship between violence and PTSD observed in Golding's (1999) meta-analysis, suggesting that violence severity is a major factor associated with post-traumatic symptomatology. This statistical link is likely amplified by underlying neuropsychological factors; a growing body of literature demonstrates that IPV is frequently associated with mild traumatic brain injuries (TBI) and cognitive deficits in memory and executive functions (Twamley et al., 2009; Valera & Kucyi, 2017), which can impair a victim's ability to process trauma. This result is also consistent with the psychotraumatic framework which posits that exposure to such events is a central factor in PTSD (Herman, 2015; Golding, 1999).

The conclusions of this study must be interpreted considering several limitations. The cross-sectional design prevents any causal inference, and the reliance on self-report measure carries a risk of bias (e.g. social desirability, memory bias ...). The sample ($N = 157$) is modest in size and not representative of the entire Spanish population, which limits the generalizability of findings. This is particularly true given the sample's specific socio-economic profile, which showed a significant tension between a high level of education and a high rate of unemployment. Furthermore, this unemployment rate should be interpreted with caution, as the socio-demographic questionnaire had a methodological limitation: it did not include the response option "student", which may have inflated the unemployment figures among younger participants. The specific profile of our sample (young people with high levels of education and high unemployment rates) differs significantly from the general population described in large-scale prevalence studies conducted in Spain, such as that by Ruiz-Pérez et al. (2017), which limits the generalization of our conclusions. Finally, this initial validation does not include factor analysis to study the internal structure of the instrument or test-retest analysis to ensure its temporal stability. Furthermore, a significant nuance regarding the sample composition must be considered. As noted in the method section, several participants initially assigned to the "control group" based on their negative response to a single screening question nevertheless reported specific acts of violence when completing the detailed WHO VAW-M. This highlights a limitation in our grouping strategy and suggests that the true prevalence of violence may be underestimated by simple self-declaration. I also powerfully demonstrate the instrument's sensitivity in capturing experiences that participants themselves may not yet have labeled as "violence". However, it must be stressed that the absence of a factor analysis (EFA/CFA) and a test-retest assessment represents a critical limitation of this initial validation. However, a more detailed analysis of the results reveals certain limitations inherent in the instrument itself. While overall reliability is excellent, examination of the correlations between items and the total score identified certain specific items that perform less well. The item-total statistics (see Appendix D) indicate that some items perform poorly. Item SV15 stands out as it consistently displayed a low corrected item-total correlation for both the recent period ($r = 0.22$) and the previous period ($r = 0.17$). Furthermore, the results for items SV16 ($r = 0.29$) and SV34 ($r = 0.29$) were only marginally acceptable for the recent time frame (see Table D1 and D2). These flaws are more noticeable in the "pregnancy" subscale, which had a lower overall

reliability score ($\alpha = 0.67$). This subscale's item-level analysis showed serious issues. Item SV37 had a very low correlation ($r = 0.10$), while items SV36 and SV39 had zero item-total correlation for the recent period, most likely because of zero variance. Furthermore, for the recent period, items SV38 ($r = 0.27$) and SV41 ($r = 0.27$) had marginal results (see Table D3). Notably, item SV40 also demonstrated weakness over both periods ($r = 0.27$ and $r = 0.28$), indicating that it is not robust (see Table D3). The results suggesting lower performance for certain items indicate that, although generally robust, some items may be poorly understood, less relevant to the Spanish population, or measure a slightly different concept. The zero variance on some items in the pregnancy subscale could mean that these acts have indeed become rare, or that the items are not sensitive enough to capture them. It should be noted, however, that the sample used here is a medium sample size and could partly explain the lack of variance.

Despite these limitations, this research has direct and significant applications. The validation of the WHO VAW-M provides Spanish clinicians and researchers with a validated and reliable instrument for measuring the severity of intimate partner violence. In clinical practice, this is crucial, as the importance of structured screening programs for healthcare professionals to identify at risk women has been systematically highlighted, although these reviews also point to the need for validated and culturally adapted tools like the one in this study (Sprague et al., 2016). The WHO VAW-M can therefore be used as systematic screening tool in mental health center. In forensic contexts, where objective evidence is paramount, its robust psychometric properties can be used to support expert reports. The use of standardized, validated instruments is considered a cornerstone of rigorous assessment in forensic settings (Ogonah et al., 2023), and the WHO VAW-M provides exactly such a tool for quantifying violence severity. Its thorough format can also aid in directing psychological follow-up. Effective psychological support has been shown to be important, and systematic reviews such as Hameed et al. (2020) have highlighted the most promising therapies for this population. Orienting victims to the best care require a thorough assessment using a tool like the WHO VAW-M. By distinguishing between coercive control and physical violence, clinicians can pinpoint specific abuse patterns that call for focused therapeutic interventions. For example, a high coercive control score may suggest that safety planning and autonomy restoration, two concepts essential to comprehending the dynamics of abuse, are needed (Muller-Lagarde, 2023). Its integration into BELIEVE Battery is also a key contribution. It is the foundation that allows for international

comparability of data, a principle emphasized by the International Test Commission (ITC, 2017), and it strengthens the battery's utility in legal and forensic contexts. For mental health professionals, the strength of the associations demonstrated between violence severity and psychopathology indicates that the presence of IPV should be considered an indicator of high risk, reinforcing the need to systematically assess for symptoms of PTSD, anxiety, and depression in this population.

Several research directions can be taken into consideration in order to carry out the BELIEVE project and the violence severity scale (WHO VAW-M) (Daugherty & Pérez-García, 2024). To investigate the internal structure of the instrument, an exploratory and/or confirmatory factor analysis is now essential. A study of temporal stability, test-retest validity, as recommended by APA (2014) standards, is essential to finalize the psychometric validation process. It is imperative to replicate this work on larger and more diverse samples. It would also be pertinent to consider multi-method assessments, for instance by combining the WHO VAW-M questionnaire with structured clinical interviews, in order to mitigate biases associated with self-report and to gain a richer understanding of victims. Finally, the BELIEVE project calls for international expansion; the validation and use of this battery in other countries, particularly France, would enable valuable comparative studies to be conducted to better understand the cultural specificities of violence and its consequences. The urgency of having validated instruments of this type is reflected in France, where reports of intimate partner violence have risen sharply (Rosenstrauch, 2017; ONVF, 2024). A global increase in misogyny and masculinist ideologies (Brossolette et al., 2024; Abrossimov et al., 2024) exacerbates this need and fosters a violent culture.

Conclusion

This research project aimed to address a specific need in Spain by adapting and validating the Intimate Partner Violence Severity Scale (WHO VAW-M) for the Spanish female population, with a view to its integration into BELIEVE battery. The psychometric evaluation confirmed that the Spanish adaptation is an instrument with excellent qualities. Its reliability proved to be excellent, and its validity was solidly established through strong, significant, and theoretically consistent correlations with key measures of psychopathology, such as post-traumatic stress disorder, depression, and anxiety.

Beyond this technical validation, the research quantified the significant impact of violence within the sample. The analysis demonstrated that the severity of violence is associated with psychological distress and serious clinical consequences. The implications of this work are therefore direct and significant. For research, it provides the Spanish-speaking scientific community with a robust tool, promoting new studies and the international comparability of data. For clinical practice, it offers a reliable means of detecting violence, assessing its severity, and better understanding patient's symptoms, with a utility in forensic contexts to support legal proceedings.

These contributions must, however, be considered in light of the study's principal limitations, notably its cross-sectional design, the modest and non-representative sample, and the absence of a full psychometric analysis including factor analysis and test-retest reliability. These limitations directly pave the way for future research, which should prioritize longitudinal studies and a complete validation of the instrument's structure and stability on larger, more diverse samples.

Finally, the rigorous validation of psychometric tools like the WHO VAW-M is not a purely technical goal. This research reminds us that behind every score and every statistic lies a unique human experience, and that improving these measurement tools is a fundamental step toward developing a more attentive, fair, and effective clinical practice in supporting women who are victims of violence.

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Appendice A

Supplementary Tables

Table 1A

Distribution of the sample by country of origin (N=157)

Country of origin	Frequency (N)	Percentage (%)
Spain	139	88.5
Colombia	3	1.9
France	2	1.3
Peru	2	1.3
Venezuela	2	1.3
Germany	1	0.6
Argentina	1	0.6
Chile	1	0.6
Ecuador	1	0.6
Italy	1	0.6
Mexico	1	0.6
Poland	1	0.6
Russia	1	0.6
Total	157	100.0

Table A2

Normality Tests (Kolmogorov-Smirnov) for Violence Scores (N = 105)

Score	D	df	p
Violence experienced more than a year ago			
<i>Psychological</i>	.151	105	< .001
<i>Physical</i>	.267	105	< .001
<i>Sexual</i>	.244	105	< .001
<i>Control</i>	.184	105	< .001
<i>Economic</i>	.350	105	< .001
<i>During pregnancy</i>	.375	105	< .001
Total (more than one year ago)	.173	105	< .001

Score	<i>D</i>	<i>df</i>	<i>p</i>
Violence experienced in the last 12 months			
<i>Psychological</i>	.351	105	< .001
<i>Physical</i>	.462	105	< .001
<i>Sexual</i>	.491	105	< .001
<i>Control</i>	.308	105	< .001
<i>Economy</i>	.507	105	< .001
<i>During pregnancy</i>	.532	105	< .001
Total (last 12 months)	.317	105	< .001

Note. *D* = Kolmogorov-Smirnov test statistic; *df* = degrees of freedom; *p* = significance.

Appendice B

Ethics Committee Approval

CERTIFICADO ACUERDO COMITÉ DE ÉTICA DE LA INVESTIGACIÓN

D/Dña. ANTONIO SALMERON GARCIA, secretario/a del CEIm Provincial de Granada, CEIm acreditado y constituido conforme a los requisitos recogidos en el Decreto 8/2020, de 30 de enero, por el que se regulan los órganos de ética asistencial y de la investigación biomédica en Andalucía (BOJA núm. 24, de 5/2/2020),

CERTIFICA:

que dicho comité, en su sesión número 5/24, celebrada el día 28/05/2024, con la asistencia de los miembros recogidos en el anexo II, ha ponderado los aspectos metodológicos, éticos y legales y el balance de riesgos y beneficios anticipados dimanantes del proyecto de investigación cuyos datos identificativos son referidos a continuación, conforme a lo dispuesto en los artículos 12, de la Ley 14/2007, de 3 de julio, de Investigación Biomédica (BOE núm. 159, de 4/7/2007), y/o 60, del Real Decreto Legislativo 1/2015, de 24 de julio, por el que se aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios (BOE núm. 177, de 25/7/2015), y/o en la disposición adicional decimoséptima de la Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales (BOE núm. 294, de 6/12/2018), y acordado la emisión de su **INFORME FAVORABLE**, con las consideraciones recogidas en el anexo I, según consta todo reflejado en el acta de la sesión.

Y para que conste y surta los efectos oportunos, expide el presente certificado, con la indicación de hacerlo con anterioridad a la aprobación de la correspondiente acta.

Código de la comunicación/solicitud: SICEIA-2024-000912

Tipo de comunicación/solicitud: Inicio de investigación en Andalucía

Título de la investigación: El papel del funcionamiento ejecutivo en el Trastorno de Estrés Postraumático Complejo en mujeres supervivientes de violencia de género (BELIEVE-CPTSD)

Código del estudio: PID2022-143060NB-I00

Promotor: NATALIA HIDALGO RUZZANTE

CRO:

Investigador coordinador o principal: NATALIA HIDALGO RUZZANTE

Versión y fecha de protocolo: de

Versión y fecha de la adenda al protocolo: de

Versión y fecha del consentimiento informado: de

Versión y fecha de la lista de investigadores: de

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ID FIRMA	LFRkOzzbUU		
FECHA REGISTRO ARIES	29/05/2024 20:06	CODIGO DE REGISTRO	202499905431288
			



Anexo I

Consideraciones:

Código seguro de verificación:LFRkOzzbUU Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://ws050.juntadeandalucia.es/verificarFirma/			
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FECHA REGISTRO ARIES	29/05/2024 20:06	CODIGO DE REGISTRO	202499905431288
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Anexo II

Relación de asistentes:

Presidente: D/Dña. AURORA BUENO CAVANILLAS

Vicepresidente: D/Dña. PALOMA MUÑOZ DE RUEDA

Secretario/a: D/Dña. ANTONIO SALMERON GARCIA

Vocales:

- D/Dña. ANGEL COBOS VARGAS
- D/Dña. ANTONIO JIMENEZ PACHECO
- D/Dña. ANTONIO MORALES ROMERO
- D/Dña. ANTONIO JUAN PEREZ FERNANDEZ
- D/Dña. ENCARNACION MARTINEZ GARCIA
- D/Dña. ESTHER ESPINOLA GARCIA
- D/Dña. FRANCISCO LUIS MANZANO MANZANO
- D/Dña. FRANCISCO MANUEL LUQUE MARTINEZ
- D/Dña. JESUS CARDONA CONTRERAS
- D/Dña. JOAQUINA MARTINEZ GALAN
- D/Dña. LUIS MIGUEL DOMENECH GIL
- D/Dña. Mª DE LOS ANGELES GARCIA LIROLA
- D/Dña. MANUEL MARTIN DIAZ
- D/Dña. MARIA DEL ROCIO MORON ROMERO
- D/Dña. MARIA DOLORES GARCIA VALVERDE
- D/Dña. MIGUEL LUIS LOPEZ-GUADALUPE MUÑOZ
- D/Dña. PILAR GUIJOSA CAMPOS
- D/Dña. RAFAEL MARIN JIMENEZ
- D/Dña. SONIA DOMINGUEZ ALMENDROS
- D/Dña. Salvador Arias Santiago
- D/Dña. JUAN RAMON DELGADO PEREZ

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ID FIRMA	LFRkOzzbUU		
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Appendice C

Sociodemographic and consent questionnaire

CONSENTIMIENTO INFORMADO

Proyecto BELIEVE – Mujeres víctimas y supervivientes de violencia de género

- He sido invitada a participar **voluntariamente** en esta fase del estudio por parte del equipo de investigación del proyecto.
- **He leído (o me han leído) la hoja de información de este proyecto.** También he comprendido las explicaciones ofrecidas por el/la investigador/a, y he podido hacer las preguntas que he creído convenientes.
- He recibido (o voy a recibir) **una copia de la hoja de información** donde se explican los objetivos y actividades a realizar durante el estudio “Proyecto BELIEVE - mujeres supervivientes de violencia de género” y los he comprendido plenamente.
- Entiendo que **mi participación es voluntaria y puedo retirarme del estudio en cualquier momento** sin tener que dar ninguna explicación.
- Si decidiera retirarme del estudio, se procederá a la destrucción de los registros codificados y de la información que sobre mí se hubiera obtenido en las tareas. **Sé que se mantendrá en secreto mi identidad** y que se identificarán siempre todos los resultados de las pruebas y actividades que realice con un número codificado.
- Con mi confirmación acepto que los datos recogidos con códigos, y sin mis datos personales, se utilicen y se compartan con otras/os investigadoras/es para análisis secundarios no relacionados directamente con los objetivos del presente estudio, pero sí con la problemática de la violencia de género o del estrés postraumático.

Atendiendo a todas las consideraciones anteriores:

1. He leído y acepto las condiciones para comenzar la evaluación de forma voluntaria en el estudio "PROYECTO BELIEVE - mujeres supervivientes de violencia de género" (Universidad de Granada) y comprendo que puedo retirarme cuando quiera sin tener que dar explicaciones.

- Si
- No

2. ¿Has participado y rellenado los cuestionarios del proyecto BELIEVE-CHILD (menores expuestos a violencia de género)? *

- Sí
- No

3. Confirmo que soy mayor de 18 años. *

- Sí
- No

4. Consentimiento para el tratamiento de datos personales

Responsable: UNIVERSIDAD DE GRANADA

Legitimación: La Universidad se encuentra legitimada para el tratamiento de sus datos personales por ser necesario para el cumplimiento de una misión realizada en interés público o en el ejercicio de los poderes públicos conferidos al responsable del mismo: Art. 6.1 e) RGPD , y art. 6.1.a) RGPD.

Finalidad: Gestionar participación en este estudio de investigación.

Derechos: Tiene derecho a solicitar el acceso, oposición, rectificación, supresión o limitación del tratamiento de sus datos, tal y como se explica en la información adicional.

Información adicional: Puede consultar la información adicional y detallada sobre protección de datos, en el siguiente enlace: <https://secretariageneral.ugr.es/unidades/oficina-proteccion-datos/guia/clausulasinformativas-sobre-proteccion-de-datos/info-adicional-produccion-investigadora>. En cualquier momento podrá retirar el consentimiento para el tratamiento de sus datos personales a través de la sede electrónica de la Universidad de Granada)

En cualquier momento podrá retirar el consentimiento para el tratamiento de sus datos personales a través de la sede electrónica de la Universidad de Granada.

- **SI** autorizo a que mis datos personales sean tratados por la Universidad de Granada.
- **NO** autorizo a que mis datos personales sean tratados por la Universidad de Granada.

5. Por favor, escriba el **CÓDIGO** que le han sido asignado: _____

6. Código postal: _____

CUESTIONARIO SOCIODEMOGRÁFICO

1. Fecha de nacimiento _____

2. Edad _____

3. ¿Cuál es su país de origen?

- España
- Otro país
 - En este caso, indique su país de procedencia: _____
 - ¿Cuántos tiempo lleva en España? (Años y meses): _____

4. ¿Cuál es el principal idioma con el que se comunica?

- Castellano / Español
- Otro idioma
 - En este caso, especifique cuál es su idioma principal o idioma materno: _____
 - En este caso, responda las siguientes preguntas referidas al uso de idiomas:

	Solo en español	Más en español que en su idioma materno	Ambos idiomas por igual	Más en su idioma materno que en español	Solo en su idioma materno
¿En qué idioma habla habitualmente en casa?	☐	☐	☐	☐	☐
¿En qué idioma suele pensar?	☐	☐	☐	☐	☐
¿En qué idioma suele hablar con sus amistades?	☐	☐	☐	☐	☐

5. Dominancia manual: *

- Diestra
- Zurda
- Ambidiestra

6. Estado civil actual (rodea una opción): Soltera - Casada/Pareja de hecho - Separada – Divorciada - Viuda

7. Hijos:

- No
- Si, 1 hijo/a
- Si, 2 hijos/as
- Si, 3 hijos/as
- Si, 4 hijos/as o más

8. **¿Cuántos años ha estudiado en total?** (desde los 6 años hasta que dejó de estudiar, solo estudios oficiales) _____

9. **¿Cuál es el curso/título más alto que ha terminado? ***

- EGB/Educación Primaria
- EGB/Educación Secundaria Obligatoria
- BUP/COU/Bachillerato
- FP Básica/Formación profesional de Grado Medio
- FP Superior/Formación profesional de Grado Superior
- Estudios universitarios (Diplomatura /Licenciatura/Grado)
- Estudios post-universitarios (Máster)
- Doctorado
- Otro
- Ninguno de los anteriores

10. **Situación laboral actual:**

- Tengo trabajo
- No tengo trabajo, estoy en desempleo
- Baja laboral
- Jubilación

11. **Ingresos de la unidad familiar en el último mes:**

- Menos de 360€
- De 361 a 600€
- De 601 a 900€
- De 901 a 1200€
- De 1201 a 1800€
- De 1801 a 3600€
- De 3601 a 6000€
- Más de 6000€

12. **¿Tiene alguna discapacidad reconocida?**

- Si
- No
- En trámite
 - ¿Qué tipo de discapacidad? _____
 - Indique el porcentaje de discapacidad: _____

13. ¿Ha sufrido o sufre violencia de género por parte de su pareja o ex pareja?

- Si
- No

(Si responde si vaya a la pregunta 14.B. Si responde NO, vaya a la pregunta 14.A.)

14.A. A lo largo de tu vida ¿has tenido alguna relación de pareja?

- Si
- No

(Si responde que Si, pasar a la pregunta 14. A. 1. Si responde NO, pasar a la pregunta 28.)

14.A.1. Anote el género (hombre o mujer), la duración en meses o años, y las fechas de inicio y fin aproximada de cada una de las relaciones de pareja que haya tenido a lo largo de su vida.

Por ejemplo:

Pareja 1, hombre, 5 años, marzo 2010 - abril 2015

Pareja 2, hombre, 2 años, 2022-2024

--

14. B ¿Durante la **adolescencia** (entre los 12 y los 17 años) tuvo alguna pareja que le maltratara (p.ej: insultos, empujones, golpes, sexo forzado, etc)?

- Si
- No

14.1. Si responde **SÍ**, anote el género (hombre o mujer) y la **duración en meses o años** de cada una de las relaciones de maltrato que haya tenido en la adolescencia. Por ejemplo: Pareja 1, hombre, 5 años; Pareja 2, mujer, 2 años.

--

14.2. ¿Volviste a **retomar** la relación sentimental con alguna de esa/s pareja/s después de haber terminado la relación?

- Si
- No

15. ¿Durante la **vida adulta** (a partir de los 18 años) tuvo alguna pareja que le maltratara (p.ej: insultos, empujones, golpes, sexo forzado, etc)?

- Si

- No

15.1. Si responde Sí, anote el género (hombre o mujer) y la **duración en meses o años** de cada una de las relaciones de maltrato que haya tenido en la adolescencia. Por ejemplo: Pareja 1, hombre, 5 años; Pareja 2, mujer, 2 años.

--

15.2. ¿Volviste a **retomar** la relación sentimental con alguna de esa/s pareja/s después de haber terminado la relación?

- Si
- No

16. Actualmente, ¿continúa en la relación de violencia?

- Si
- No

17. ¿**Actualmente** continúa sufriendo algún tipo de **violencia, amenaza y/o acoso** por parte de su pareja o expareja?

- Si
- No

18. ¿Está actualmente en algún tipo de proceso legal con su pareja o expareja?

- Si
- No

18.1. Si responde Sí, especifique cuál es el **proceso legal que actualmente** tiene con su pareja o expareja:

--

18.2. ¿Ha sentido como **traumático** algún proceso legal con su pareja o expareja?

- Si
- No

19. ¿Su pareja o expareja ha tenido o tiene **orden de alejamiento**?

- Si
- No

19.1. ¿**Actualmente** su pareja o expareja tiene orden de alejamiento hacia usted? *

- Sí
- No

20. ¿Su pareja o expareja ha estado o está **en prisión**?

- Si
- No

20.1. ¿**Actualmente** su pareja o expareja se encuentra **en prisión**? *

- Sí
- No

21. ¿Sabe dónde vive actualmente su pareja o expareja? *

- No sé dónde vive
- Se dónde vive y vive conmigo
- Se dónde vive y vive en mi ciudad
- Se dónde vive, pero no vive en mi ciudad
- Otro: _____

22. ¿Cambió o ha cambiado usted de domicilio para alejarse de su pareja o expareja?

- No he cambiado de domicilio para alejarme de mi pareja o expareja
- He cambiado de domicilio, pero sigo viviendo en la misma ciudad
- He cambiado de ciudad
- He cambiado de provincia
- He cambiado de comunidad autónoma
- He cambiado de país
- He cambiado de continente

23. Indique con una X el nivel de miedo que usted siente en la actualidad hacia su pareja/ ex pareja:

Sin miedo	Miedo muy leve	Miedo leve	Miedo moderado	Miedo intenso	Miedo muy intenso	El miedo más intenso posible
0	1	2	3	4	5	6

24. **¿Ha sido testigo de comportamiento violento por parte de su pareja/ ex pareja hacia otras personas (hacia hijos, familiares, amigos, desconocidos)?**

- Sí
- No

24.1. Especificar **la relación que tiene usted con la persona víctima de la violencia de su pareja/ ex pareja** (hijos, familiares, amigos, desconocidos)

25. **¿Su pareja/ ex pareja y usted tienen hijos en común?**

- Sí
- No

Si responde **SÍ**, por favor conteste a las siguientes preguntas:

26. **¿Tienen hijos/as en común menores de edad (menores de 18 años)?**

- Sí
- No

Si responde **SÍ**, por favor conteste a las siguientes preguntas:

26.1. Por favor especifique el **tipo de custodia** de sus hijos/as:

26.2. **¿Cómo fue el proceso de guarda y custodia** de sus hijos/as con su pareja o expareja?

- Amistoso
- Conflictivo

26.3. ¿Ha recibido algún tipo de **amenaza** por parte de su pareja o expareja en relación a la custodia de sus hijos/as en común?

- Sí
- No

26.4. Especifique si usted ve en los **puntos de encuentro familiar** a su pareja o expareja:

26.5. ¿Tiene **contacto** con su pareja o expareja por motivos relacionados con sus hijos/as menores de edad?

- Sí
- No

27. ¿Tiene hijos/as en común mayores de edad?

- Sí
- No

Si responde **Sí**, por favor conteste a la siguiente pregunta:

27.1. ¿Tiene **contacto** con su pareja o expareja por motivos relacionados con sus hijos/as mayores de edad?

- Sí
- No

28. Durante su **infancia**, ¿usted presencié como **su propia madre** sufría algún tipo de maltrato (p.ej: insultos, empujones, golpes, etc) por parte de tu padre y/o la pareja de su madre?

- No
- Si, durante la infancia (hasta los 11 años)
- Si, durante la adolescencia (de los 12 a los 17 años)
- Si, durante la infancia y la adolescencia

29. ¿Alguna vez has asistido o has recibido atención por parte de un Centro de Información a la Mujer (CIM)?

- Sí
- No

Si responde Si, preguntar:

¿Actualmente asistes o recibes atención por parte de un Centro de Información a la Mujer?

- Sí
- No

Appendice D

WHO VAW-M (Spanish adaptation)

Due to copyright restrictions, this tool cannot be included in the appendices of this study.

For more information on the use of the Intimate Partner Violence Severity Scale (WHO VAW-M), please refer to the original article.

Table D1*Item-total statistics for the “in the last 12 months” subscale*

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV1	6.62	171.00	.76
SV2	6.93	172.90	.81
SV3	6.89	172.00	.80
SV4	7.14	179.32	.79
SV5	7.26	184.95	.62
SV6	7.31	187.11	.64
SV7	7.26	183.86	.70
SV8	7.16	180.70	.78
SV9	7.36	191.12	.49
SV10	7.32	188.62	.58
SV11	7.36	191.23	.47
SV12	7.33	189.38	.55
SV13	7.36	190.98	.43

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV14	7.37	192.26	.50
SV15	7.40	194.28	.22
SV16	7.38	193.14	.29
SV17	7.36	192.06	.38
SV18	7.29	187.81	.52
SV19	7.21	185.42	.54
SV20	7.30	187.88	.52
SV21	7.24	185.38	.55
SV22	7.00	173.20	.85
SV23	7.24	182.56	.68
SV24	6.94	172.32	.83
SV25	6.72	172.25	.73
SV26	6.97	174.42	.82
SV27	7.04	178.49	.71
SV28	7.36	190.93	.40

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV29	7.36	190.90	.44
SV30	7.20	182.30	.70
SV31	7.11	177.98	.74
SV32	7.14	183.21	.52
SV33	7.20	182.91	.64
SV34	7.35	191.88	.29
SV35	7.31	188.33	.47

Table D2

Item-total statistics for the subscale “more than a year ago”

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV1	25.55	614.18	.76
SV2	25.87	611.92	.75
SV3	26.00	605.22	.83
SV4	26.41	609.09	.82
SV5	26.69	619.71	.73

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV6	26.86	634.20	.57
SV7	26.69	620.96	.73
SV8	26.41	615.25	.80
SV9	26.99	635.81	.61
SV10	26.86	629.00	.70
SV11	27.06	640.51	.55
SV12	26.91	631.73	.66
SV13	27.12	642.19	.52
SV14	27.04	640.45	.60
SV15	27.30	659.32	.17
SV16	27.09	641.07	.59
SV17	27.06	643.40	.50
SV18	26.57	624.17	.63
SV19	26.31	617.63	.69
SV20	26.61	624.28	.67

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV21	26.65	625.54	.64
SV22	26.05	609.22	.78
SV23	26.46	613.94	.75
SV24	25.89	607.95	.78
SV25	25.60	613.33	.75
SV26	25.88	609.13	.76
SV27	26.06	615.58	.71
SV28	27.01	640.83	.50
SV29	26.93	633.41	.61
SV30	26.46	619.43	.71
SV31	26.21	611.60	.77
SV32	26.26	613.28	.70
SV33	26.57	617.62	.72
SV34	26.94	636.53	.52
SV35	26.87	630.18	.60

Table D3*Item-total statistics for the “pregnancy” subscale*

Item	Period	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
SV36	12 mois	2.29	9.80	.00
SV36	> 1 an	2.17	8.36	.40
SV37	12 mois	2.23	9.46	.10
SV37	> 1 an	1.03	5.03	.49
SV38	12 mois	2.28	9.58	.27
SV38	> 1 an	1.80	5.73	.69
SV39	12 mois	2.29	9.80	.00
SV39	> 1 an	2.17	7.77	.54
SV40	12 mois	2.28	9.58	.27
SV40	> 1 an	2.26	9.48	.28
SV41	12 mois	2.28	9.58	.27
SV41	> 1 an	2.14	7.68	.62

