### Международна научна конференция

"МУЛТИДИСЦИПЛИНАРНИ ИНОВАЦИИ ЗА СОЦИАЛНИ ПРОМЕНИ: ОБРАЗОВАТЕЛНИ ТРАНСФОРМАЦИИ И ПРЕЛПРИЕМАЧЕСТВО" – 2024

# CONCURRENT VALIDITY OF THE PARTNER'S ABUSE SCALE: AN IPV MEASUREMENT ALTERNATIVE

Javier Andrés Gómez Diaz, PhD. (ORCID: 0000-0002-9729-7837) LeonardoFranciscoBaronBirchenall, PhD. (ORCID: 0000-0002-4286-3424) Corporación Universitaria Minuto de Dios - UNIMINUTO

Abstract: Objective: This study aimed to establish the concurrent validity of the Partners Abuse Scale (PAS) with the Revised Conflict Tactics Scales (CTS2). Subjects: A cross-sectional design was employed with 246 men and 399 women (mean age: 24.34 years for men, 26.40 years for women). Procedure: Participants were contacted through an opportunistic (snowball or referral) sampling method and provided informed consent before completing both instruments. Results: Exploratory factor analysis (EFA) with an oblimin rotation revealed that both instruments explained a similar percentage of variance. Discussion: The CTS2 maintained its hypothesized factor structure, while the PAS developed two new variables.

**Keywords**: Intimate Partner Violence, Partner's Abuse Scale, Revised Conflict Tactics Scales, Validity, Psychometric Properties.

## Introduction

Intimate Partner Violence (IPV) has been declared a public health problem that primarily affects women (WHO, 2024, March 25) and must be addressed with a preventive approach. Early identification of individuals experiencing violence is crucial to providing comprehensive, holistic, and empathetic services. A practical method for identifying IPV situations is the use of psychometric tests that include not only typical variables but also those that help screen for the most critical factors to target appropriate interventions.

The Revised Conflict Tactics Scale (CTS2; Straus & Douglas, 2004) is one of the most used scales to quickly measure IPV. It includes variables related to negotiation, psychological aggression, physical assault, injury, and sexual coercion, where participants report how frequently each behavior occurred. Each item uses both "I" and "my partner" to measure who was engaged in specific actions. This instrument has been adapted for various populations, including female incarcerated individuals (Jones et al., 2002), exposure to violence between parents (Ibabe et al., 2020), perpetration and victimization within the family (Thornton et al., 2024), as well as to measure IPV in different languages (Loinaz et al., 2012; Hasselmann & Reichenheim, 2003; Mirghafourvand, 2016).

Although the CTS2 is a valid instrument for measuring IPV, it does not consider topics such as economic abuse, cyber-abuse, or sexual abuse through partner devaluation. To address these other types of abuse, these variables were included in the Partner's Abuse Scale (PAS; Barajas et al., 2021). Nevertheless, to perform a concurrent validity test, the purpose of this paper is to show the equivalences between the CTS2 and the PAS in the scales that both tests measure. This type of validity is based on the internal structure as a source of validity, by analyzing the relationship between the content of a test and the construct it is intended to measure. Thus, evidence based on test content can be obtained according to AERA, APA, & NCME standards (2014).

### Method

Subjects and Design: Within a cross-sectional design, 645 individuals (men = 246; women = 399) of legal age (18 to 58 years old) participated, with a mean age of 26.50 years (SD = 8.38) for men and 25.39 years (SD = 8.49) for women. The sample primarily consisted of young adults. All participants had been in a relationship for at least 6 months. At the time of the study, 66.2% were in a current relationship, while 33.8% had been in a relationship but were not at the time of the study. On average, relationships lasted 5 years and 2.62 months for those currently in a relationship and 2 years and 3.54 months for those who had been in a relationship prior to the study. A majority (54.73%) of the sample belonged to the median socio-economic group. Regarding relationship status, 37.67% were single, 33.80% were married, 25.43% were widowed or divorced, and 3.1% were in a nonformal relationship. Concerning the level of schooling, 22.33% had a low level, 70.39% had a medium level, and 7.29% had a high level.

### Instruments

Revised Conflict Tactics Scales (CTS2): The CTS2 is a 78-item, self-reported frequency scale (0 = Never happened; 1 = Happened once; 2 = Happened twice; 3 = Happened 3 to 5 times; 4 = Happened 6 to 10 times; 5 = Happened 11 to 20 times; 7 = Never in the last year, but happened before). The variables measured include negotiation (6 items), psychological aggression (8 items), physical assault (12 items), injury (6 items), and sexual coercion (7 items). The items are written in both the victim and perpetrator directions, doubling the total number of items for each variable. The range goes from 0 (no conflict) to 546 (highest level of conflict). The Spanish validated version of this scale was used (Loinaz et al., 2012).

Partner's Abuse Scale (PAS): The PAS consists of 59 self-reported items (0 = Never; 1 = At least once; 2 = More than once; 3 = Several times). The instrument includes a dichotomous item assessing whether the respondent would have behaved similarly towards their partner. The variables measured include Psychological Abuse (14 items), Economic Abuse (12 items), Physical Abuse (11 items), Cyber-abuse (8 items), Sexual Devaluation (6 items), and Sexual Coercion (8 items). The score range goes from 0 (no partner abuse) to 177 (highest partner abuse) points.

### Procedure

The sample was obtained through a snowball or referral sampling technique, whereby individuals who had been in a relationship for more than six months were identified and invited to participate. Prior to responding to each scale, all participants were required to read and accept an informed consent document that outlined both their rights and responsibilities regarding the study. Additionally, a psychological first aid protocol was established in advance to address any potential adverse reactions resulting from participation. The data were subjected to an audit to ensure all participants met the inclusion criteria. For example, individuals taking psychiatric medications or who had been diagnosed with a psychiatric disorder were excluded from the data set. Exploratory Factor Analysis (EFA) was performed on both scales, including only those variables that approximately measure the same constructs: for CTS2, physical assault + injury, psychological aggression, and sexual coercion; and for PAS, physical abuse, psychological abuse, and sexual coercion.

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### Results

The internal consistency of the CTS2 and the PAS exhibited equivalent reliability but low item correlation (Table 1). Unlike the CTS2, the PAS simultaneously measures both behaviors and consequences of physical abuse.

CTS2 PAS Variables MacDonald's ω AIC\* Variables MacDonald's ω AIC\* 0.80 0.87 Physical 0.40 Physical Abuse 0.30 aggression (acts) (both acts and Injury (consequences) 0.74 0.40 consequences) Verbal aggression Psychological 0.87 0.51 0.90 0.34 abuse Sexual coercion 0.91 0.60 Sexual 0.86 0.30

Table 1: Internal consistency of the CTS2 and the PAS

Before performing the EFA, adequacy sample tests were conducted, confirming that each scale met the requirements (CTS2: Kaiser-Meyer-Olkin Test = 0.879; Bartlett's Sphericity (186) = 1203.19; p < 0.001; PAS: Kaiser-Meyer-Olkin Test = 0.887; Bartlett's Sphericity (271) = 760.29; p < 0.001).

(by coercion)

During the EFA, the CTS2 maintained its original structure, while the PAS revealed two new variables (see Table 2).

	CTS2					PAS		
	EV*	Sums of Squared Loads	Proportion of Explained Variance	Cumulative Variance Proportion	EV*	Sums of Squared Loads	Proportion of Explained Variance	Cumulative Variance Proportion
Factor 1	7.188	5.365	0.224	0.224	12.141	5.646	0.171	0.171
Factor 2	4.545	3.740	0.156	0.379	3.176	3.643	0.110	0.281
Factor 3	2.074	2.490	0.104	0.483	1.822	3.585	0.109	0.390
Factor 4	1.055	1.481	0.062	0.545	1.308	2.829	0.086	0.476
Factor 5					1.130	1.629	0.049	0.525

Table 2: Rotated Solutions of CTS2 and PAS Scales

### Discussion

Both scales demonstrated a high level of internal consistency and reliability. However, comparison between the CTS2 and PAS revealed that the former exhibited moderate item correlation, while the latter displayed low item correlation, indicating greater independence among its items.

While the CTS2 maintained its original structure, the PAS underwent a division of the physical abuse scale into two categories: acts and intentions or attempts to injure. Additionally, a new category, vigilance, was introduced as a subtype of psychological abuse. Nevertheless, both scales showed a similar trend in explained variance.

<sup>\*</sup> Average Item Correlation

<sup>\*</sup> Eigenvalues

The CTS2 frequency scale employs a unique approach to measuring behaviors, emphasizing those occurring within the past year, which is more effective than solely relying on recent abuse frequency to identify potential issues. Considering the infrequent occurrence of certain behaviors, it may be prudent to place them towards the lower end of the scale, below the "never happened" option, to avoid scale inflation.

In addition to the aforementioned variables, the PAS encompasses two additional domains: economic and cyber abuse. These additions expand the scope of IPV research. Considering the potential impact of PAS scoring, the authors have considered assigning a lower score when respondents identify themselves as perpetrators. This approach aims to assess the influence of victim-perpetrator perspectives, thereby enhancing measurement accuracy, as part of a new research initiative.

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