

Validation of the Slovenian Intimate Violence and Traumatic Affect Scale (S-VITA)

Violence Against Women
1–20

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Nina Krohne^{1,2} , Diego De Leo^{1,2} and Vita Poštuvan^{1,2}

Abstract

This study addresses the scarcity of quantitative tools for assessing the mental health consequences of intimate partner violence on women, focusing on validating the Slovenian translation of the Intimate Violence and Traumatic Affect Scale (S-VITA). Using an online cross-sectional design, we surveyed a representative sample of 1,016 Slovenian women, with 275 experiencing intimate partner violence (IPV). Confirmatory factor analysis, performed on the IPV subsample, supported the proposed four-factor model (Fear, Terror, Guilt, and Shame) with strong internal consistency. The scale demonstrated robust construct and divergent, convergent, and cross-cultural validity. With compelling psychometric properties, we recommend its adoption by Slovenian professionals and researchers, suggesting its applicability in diverse linguistic contexts.

Keywords

assessment, domestic violence, intimate partner violence, mental health, trauma

Intimate partner violence (IPV) is a form of interpersonal violence (Krug et al., 2002), involving acts of physical aggression, sexual coercion, psychological abuse, and control (García-Moreno et al., 2015). Worldwide, around 27% of women over the age of 15 who have ever been in a relationship with a man reported experiencing either physical, sexual, or both forms of IPV in their lifetime (Sardinha et al., 2022),

¹Slovene Centre for Suicide Research, Andrej Marušič Institute, University of Primorska, Koper, Slovenia

²Department of Psychology, Faculty of Mathematics, Natural Sciences and Information Technologies, University of Primorska, Koper, Slovenia

Corresponding Author:

Nina Krohne, Slovene Centre for Suicide Research, Andrej Marušič Institute, University of Primorska, Muzejski trg 2, 6000 Koper, Slovenia.

Email: nina.krohne@iam.upr.si

and around 43% of women reported experiencing some form of psychological violence (European Agency for Fundamental Rights, 2015). In Slovenia, more than half of women (56.6%), aged 15 and older, reported experiencing some form of violence (Leskošek et al., 2010).

The evidence associating women's IPV experience with poor mental health outcomes, including anxiety, depression, and post-traumatic stress disorder, is conclusive (Black, 2011; Mechanic et al., 2008). However, despite the well-established association, the instruments assessing the idiosyncratic mental health outcomes in women affected by IPV are scarce. One instrument addressing the subject matter is the Intimate Violence and Traumatic Affect Scale (VITA scale; Troisi, 2018). The scale was developed and used in the Italian context (Troisi, 2018). It was translated into English; however, it is yet to be validated in other linguistic contexts.

To address this gap, we translated and validated the Slovenian version of the scale. Our objectives extend beyond facilitating its use within Slovenia; we also aim to encourage its translation and validation across different linguistic contexts. Given the linguistic and cultural similarities, this translation may prove particularly beneficial for the countries of the former Yugoslavia. Nevertheless, the scale is unique in focusing on IPV-related psychopathology, which is neglected when using scales aimed at assessing more general mental health issues, including anxiety, depression, or post-traumatic stress disorder. Thus, the scale is a valuable aid for psychologists and other professionals to develop targeted therapeutic or public health interventions.

Intimate partner violence (IPV) is not only a major social and public health problem but also a severe violation of basic human rights and liberties. While IPV can impact individuals from various socioeconomic, cultural, and religious backgrounds, it predominantly burdens women (Thompson et al., 2006). Thus, IPV can be understood within a broader public health concern known as violence against women. The term encompasses all forms of gender-based violence that result in or have the potential to result in physical, sexual, or mental harm to women, including acts of violence, threats, coercion, and arbitrary deprivation of liberty, and encompassing both public and private settings (Council of Europe Treaty Series, 2011). Violence against women is rooted in gender-based discrimination, reflecting the unequal power dynamics between the genders, with women being subordinated to men (Hunnicutt, 2009).

The terms "violence" and "abuse" are often used synonymously (Burelomova et al., 2018), including within this article. In certain countries, the term "domestic violence" is employed to refer to IPV. However, domestic violence encompasses a broader scope of abuse, including abuse among household members beyond intimate partners (Barocas et al., 2016; García-Moreno et al., 2012).

The term "victim" is commonly applied to women who have suffered IPV, as documented in several studies (García-Moreno et al., 2015; Kelly & Johnson, 2008; Krug et al., 2002; Leone et al., 2016; McPhail et al., 2007; Swahnberg & Wijma, 2003; Troisi, 2018). However, this label may unintentionally connote passivity and a lack of agency overlooking the individuals' active efforts to manage their circumstances. Given the significant psychological impact of IPV, which can be debilitating (Troisi, 2018), it is crucial to recognize that many women demonstrate remarkable resilience

and proactivity in these situations (Walker, 2016). To reduce stigma and reinforce empowerment, we prefer the terms “women who have experienced IPV,” “women affected by IPV,” or “IPV survivors” throughout this discussion.

Women who experience IPV are at an elevated risk of developing a range of mental health problems. These include depressive and anxiety disorders (Black, 2011; Kopčavar Guček & Selič, 2018; Leskošek et al., 2010), psychosomatic symptoms (Leskošek et al., 2010), and post-traumatic stress disorder (PTSD) (Black, 2011; Mechanic et al., 2008). Additionally, some women may develop battered woman syndrome, a condition characterized by symptoms that resemble those found in PTSD but specifically associated with the experience of IPV (Walker, 2016).

The ramifications of IPV extend beyond the affected women themselves, impacting their children as well. Exposure to IPV is associated with diminished mental health outcomes in children (Kitzmann et al., 2003). Furthermore, mothers subjected to IPV are more likely to display abusive behaviors towards their children, particularly if they are also grappling with their own mental health issues (Casanueva & Martin, 2007; Miranda et al., 2013).

The psychological consequences of IPV are commonly measured using instruments evaluating general mood and mental health status (Troisi, 2018). The post-traumatic symptomatology assessed in IPV survivors often relies on tools originally designed for fundamentally different types of traumatic experiences. As highlighted by Walker (2016), women who experienced IPV exhibit unique symptoms, differing from classic post-traumatic symptomatology, which is characterized by hyperarousal, intrusions (e.g., intrusive thoughts, feelings, sensations, nightmares, etc.), and avoidance (Weiss & Marmar, 1997).

Using unspecified assessment tools may lead to neglecting the idiosyncratic characteristics of mental health problems that are specific to IPV. The IPV-specific characteristics have been qualitatively analyzed (Buchbinder & Eisikovits, 2003; Enander, 2010; Nunziante Cesàro and Troisi, 2016; Smith et al., 1995b; Walker, 2016), providing a profound insight into the mental health status of women affected by IPV. However, qualitative assessment on a larger scale is complex and resource intensive, hindering both research and clinical assessment of the overall mental health of women who have experienced IPV.

While several instruments exist to aid in screening and estimating the prevalence of IPV, including the NorVold Abuse Questionnaire (NorAQ; Swahnberg and Wijma, 2003), the Composite Abuse Scale (CAS; Hegarty et al., 2005), the Woman Abuse Screening Tool (WAST; Brown et al., 1996) and the Women’s Experience With Battering (WEB) Scale (Smith et al., 1995a); the Intimate Violence and Traumatic Affect (VITA) Scale (Troisi, 2018) is, to our knowledge, the only existing instrument that specifically focuses on measuring IPV-related mental health consequences experienced by women. The content of the items is based on psychodynamic theoretical frameworks and captures the emotional affect embedded in the post-traumatic nature of IPV. It employs a four-factor structure, measuring fear, terror, guilt, and shame.

According to Troisi (2018), fear is understood as an active response to violence, prompting individuals to seek escape from dangerous situations. In contrast, terror is

viewed as a passive and paralyzing emotional affect. Guilt and shame are also positioned along the active–passive continuum, reflecting active emotional expression in experiencing guilt and passivity in experiencing shame (Troisi, 2018). Passive emotional affects may be related to feelings of helplessness experienced by survivors of IPV (Troisi, 2018). Walker (2016) observed that some IPV survivors exhibited symptoms reminiscent of learned helplessness, which she identified as a significant barrier to leaving abusive relationships. Consequently, passivity and helplessness are closely associated with feelings of shame (Buchbinder & Eisikovits, 2003; Troisi, 2018). Shame can be defined as a social emotion that relates to a perceived sense of social inferiority (Enander, 2010). In the context of women who have experienced IPV, shame may result from the stigma they face and the lack of social support they receive (Enander, 2010). Guilt, as conceptualized by Troisi (2018), refers to survivors' perceived inability to take certain actions to resolve the situation they find themselves in.

The VITA Scale serves as a valuable instrument for researchers, clinicians, and professionals working in the field of intimate partner violence, including psychologists, psychiatrists, social workers, and NGO workers. Its application enables a more comprehensive assessment of the mental health status of women who have experienced IPV, facilitating the implementation of targeted (therapeutic or public) interventions to mitigate the negative mental health repercussions. As a result, the objective of this study is to promote the utilization of the VITA Scale by translating it into the Slovenian language and conducting a validation process using a sample representative of the Slovenian population. By doing so, we not only aim to enhance the understanding and support available to women affected by IPV in Slovenia and beyond but also contribute to the pool of psychometrically robust assessment tools available to professionals in former Yugoslav countries.

Materials and Methods

The present study adopts a web-based panel approach and employs a cross-sectional research design. It is a component of a broader research project focused on evaluating the psychological effects of violence experienced by women. The Commission of the University of Primorska for Ethics in Human Subjects Research assessed that the study complied with the principles of ethics in the research (University of Primorska, 2011) and was granted consent to proceed with implementation (No: 4265-24/21).

Participants

In this study, a stratified sample comprising 1,016 women from Slovenia was surveyed. From this group, a subsample of 275 women who reported experiencing any form or intensity of intimate partner violence was selected for further analysis. The assessment of IPV was conducted using the NorVold Abuse Questionnaire (Swahnberg & Wijma, 2003), detailed under the Measures section.

The participants' age ranged from 18 to 81 years ($M = 46.60$, $SD = 14.21$). Other demographic characteristics, including region, level of education, employment status, personal income, marital status, and having children, are presented in Table 1.

Table 1 illustrates that the demographic profiles of the IPV group did not significantly differ from the non-IPV group across most demographic characteristics, with the notable exception of marital status. Specifically, a smaller proportion of women in the IPV subsample reported being married (26.2%) compared to the non-IPV group (42.9%). Conversely, a higher percentage of participants in the IPV group were either divorced, widowed, or categorized under other marital statuses (20.4%)

Table 1. Demographic Characteristics of the Sample and Comparison to the Rest of the Sample.

	Sample characteristics		Comparison with the rest of the samples		
	<i>n</i>	%	χ^2	<i>df</i>	<i>p</i>
Region			0.03	1	.87
Eastern Slovenia	143	52.00			
Western Slovenia	132	48.00			
Education			3.35	2	.20
Basic education	10	3.64			
Secondary education	134	48.73			
Tertiary education	131	47.64			
Employment			6.17	4	.19
Employed	169	61.45			
Unemployed	25	9.09			
Student	16	5.82			
Retired	53	19.27			
Other	12	4.36			
Personal monthly net income ^a			0.34	2	.85
Below 1280 EUR	194	70.54			
Above 1280 EUR	44	15.99			
Not specified	37	13.47			
Marital status			31.82	4	<.001
Single	41	14.91			
In a relationship, not cohabiting	28	10.18			
In a relationship, cohabiting	78	28.36			
Married	72	26.18			
Divorced/widowed/other	56	20.36			
Children			1.24	3	.74
Yes	722	71.06			
No	294	28.94			

Note. χ^2 = chi square test; *df* = degrees of freedom; *p* = asymptotic significance (two-sided).

^aThe average net monthly wage in Slovenia when the data were collected (April 2022) was 1,304.32 EUR (Statistical Office of the Republic of Slovenia, 2022).

in the IPV group vs. 10.8% in the non-IPV group). Due to the adverse relationship experiences present in the IPV group, these differences are expected.

Data Collection, Management, and Analysis

The data for this study were collected through an online panel conducted in April 2022. Data collection was outsourced to Valicon, a private Slovenian company specializing in online research, experienced in gathering data for academic purposes (e.g., Gomboc et al., 2022; Krohne et al., 2022; Lavrič et al., 2021). Valicon maintains a large database of panelists, stratified by gender, age, and region, with the proportions of selected panelists in each stratum representing the general population.

An e-mail invitation, including a link to the survey, was sent to adult female panelists who could join the study by clicking the link and responding to the call. Access to the survey was limited to the panelists who received the link. Once a particular stratum reached its predetermined capacity, the invited panelists were no longer able to respond to the invitation. Participants were required to be 18 years of age or older, but no other specific inclusion or exclusion criteria were established for participation in this study.

Before survey completion, the participants were provided with information regarding the study's objectives, procedures, potential risks, and available sources of support. Participants provided their informed consent to participate in the study before proceeding to complete the survey. The survey consisted of demographic questions and a battery of questionnaires (see Measures). On average, the participants took approximately 40 minutes to complete the survey. As an incentive for participation, the survey respondents were awarded points upon completion of the survey. These points could be accumulated and later exchanged for monetary or other rewards at the end of the year.

The company Valicon exported the data in .xlsx and .sav database formats. The cases completed before the minimal survey completion time were excluded from the databases. Minimal completion time was defined as the sum of time needed to read each question, considering a time of 20 milliseconds per sign.

Data were stored and managed under the General Data Protection Regulation. The data were collected in a semi-anonymous manner, where participants' answers could be linked to their email addresses if necessary. Access to the semi-anonymous data was restricted solely to the employee dedicated to the project. After 200 days following the data collection, the data were archived and rendered anonymous. The anonymous dataset was forwarded to the authors of this study for analysis. The dataset is securely stored both on the first author's work computer and on the university's cloud storage system.

To evaluate the construct validity of the Intimate Violence and Traumatic Affect Scale (Troisi, 2018), a confirmatory factor analysis was conducted using a maximum likelihood estimator. Based on the original scale, a four-factor model was hypothesized. Factor loadings, standardized residuals, chi-square tests, comparative fit index (CFI), relative noncentrality index (RNI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) were

estimated to assess the fitness of the model. Internal consistency of the factors was assessed using Cronbach's alpha (α) and McDonald's omega (ω). Discriminant and convergent validity of the scale and its factors were evaluated by analyzing their correlations with other relevant constructs. The data analysis was performed using the R-based program JASP. The dataset and analysis procedure can be obtained by contacting the corresponding author.

Materials

Intimate Violence and Traumatic Affect Scale (VITA Scale; Troisi, 2018). The scale assesses the intensity of post-traumatic affect resulting from women's IPV experience. It consists of 28 items measuring four constructs: Fear (e.g., the feeling of being in danger and needing to take action; five items), Terror (e.g., the feeling of being at risk by doing any action; seven items), Shame (e.g., feeling humiliated; 10 items), and Guilt (e.g., feeling guilty; seven items). The participants rate their agreement with each item on a 5-point Likert scale, ranging from 1 (*never*) to 5 (*very often*).

Originally developed and validated in the Italian language, the scale underwent a rigorous blind-back translation process into English. The process was performed by the author of the original scale (Troisi, 2018) and a native English speaker. For this study, the first author obtained the scale and received permission for its translation and use via email from the author of the scale. The authors ensured that the translation process adhered to a meticulous procedure depicted in Figure 1.

NorVold Abuse Questionnaire (NorAQ; Swahnberg and Wijma, 2003). The scale incorporated nine items to operationalize the type (psychological, physical, and sexual violence) and intensity (mild, moderate, and severe) of the experienced violence. For this study, we modified the scale, enabling the participants to report experiences of violence during childhood or adulthood, specifying whether the perpetrator was an intimate partner (current or former) or another individual.

The scale underwent a blind-back translation procedure. The procedure resembled the procedure described in Figure 1, excluding the contribution of the Italian-speaking Slovenian. Permission to utilize the scale for this study was granted to the first author via email communication by the scale's authors.

Impact of Events Scale-Revised (IES-R; Weiss & Marmar, 1997; Slovenian Translation: Cvetek & Žvelc). The 22-item scale measures the impact of a stressful event on psychological functioning. Participants answer on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much so*) to indicate the extent of distress felt in the past week, relating to the content of the item. Items are designed to measure three factors, including avoidance (eight items; e.g., staying away from reminders of the event), intrusions (seven items; e.g., reminders bringing back feelings about the event), and hyperarousal (seven items; e.g., being jumpy and easily startled). The Slovenian translation of the scale, along with permission for its use, was obtained by the first author from the author of the Slovenian translation.

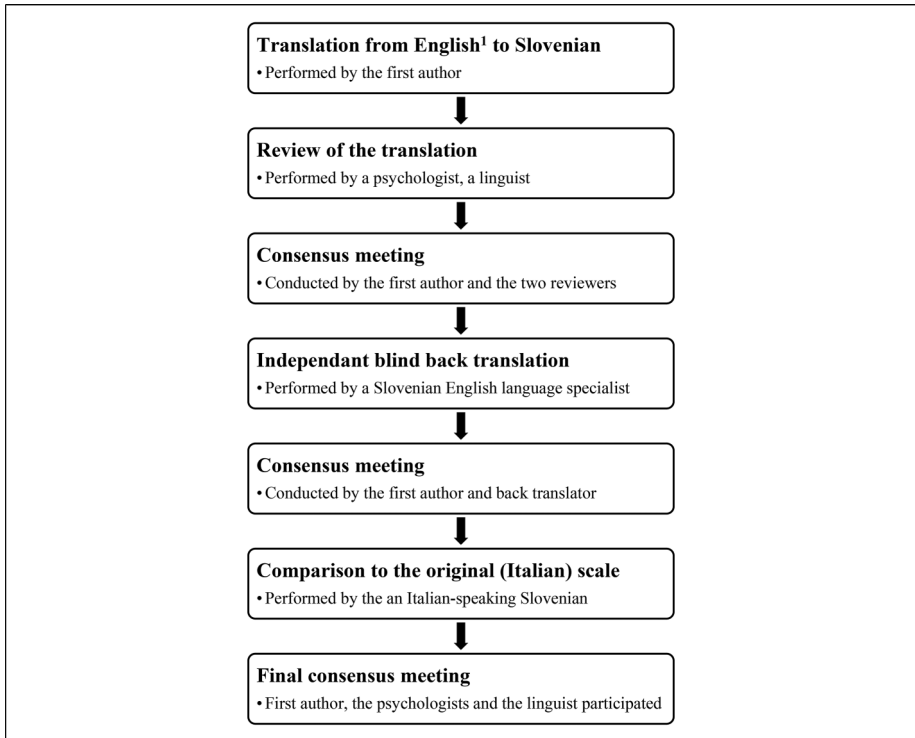


Figure 1. The Flowchart of the Translation Process.

Depression Anxiety Stress Scale (DASS-21; Lovibond and Lovibond, 1995; Slovenian Translation: Čolić). A 21-item scale is used to assess participants' mental health status in the past week across the domains of stress (six items; e.g., finding it hard to wind down), anxiety (six items; e.g., experiencing trembling), and depression (six items; e.g., the feeling of having nothing to look forward to). Participants indicate the extent to which each statement applies to them using a 4-point Likert scale ranging from 0 (*does not apply to me at all*) to 3 (*applies to me very much or most of the time*). The questionnaire is in the public domain and its translations, including Slovenian translation, are freely available online (University of New South Wales, 2022).

Results

Confirmatory Factor Analysis

Construct validity was assessed through a confirmatory factor analysis (CFA) adopting a four-factor model. The loading estimates for all four factors were high (Factor 1 = 0.56–0.92; Factor 2 = 0.70–0.92; Factor 3 = 0.85–0.92; Factor 4 = 0.79–0.91). All

items exceeded the 0.5 threshold, and almost all (except for Item 5 [0.56]) exceeded the 0.7 threshold (Hair et al., 2013). All loading estimates were statistically significant. These results show that the indicators share a high proportion of the variance, indicating a good fit for the model. The latter is supported by the relatively low values of the standardized residuals ($M = 0.26$, $SD = 0.18$), except for item no. 5 (0.68). The good fit of the model suggests adequate convergent validity of the instrument.

The statistically significant result of the chi-square test (see Table 2) indicates that the data align with the suggested four-factor structure. However, considering the large sample size, we evaluated alternative measures to determine the fit of the model better (see Table 2). The fit indices presented in Table 2 align with the suggested thresholds, confirming a good fit for the four-factor model.

The CFA results provide evidence that the Slovenian translation of the VITA scale (S-VITA) is consistent with the original four-factor structure. The factors align with semantically meaningful emotional affects: Fear (Factor 1), Terror (Factor 2), Shame (Factor 3), and Guilt (Factor 4). The factors are appropriately named after the emotional affects they represent. The descriptive statistics for each factor are presented in Table 3.

The results presented in Table 3 indicate that the participants achieved scores across the full range of possible values on both extremes of the scale and its factors. Additionally, all factors, along with the overall scale, exhibit slightly positively skewed distributions and display platykurtic characteristics. The statistically significant results of the Shapiro–Wilk test suggest a deviation from the normal distribution of the data.

Reliability Analysis

To evaluate the reliability of the measure, we assessed the internal consistency of its proposed factors by calculating both Cronbach's α and McDonald's ω coefficients. The inclusion of both coefficients was aimed at mitigating the limitations inherent in Cronbach's α , thereby providing a more comprehensive assessment of internal

Table 2. Fit Indices for Confirmatory Factor Analysis.

Index	Value	Suggested thresholds
$\chi^2(df)$	818.60 (344)***	$p < .05$
Comparative fit index (CFI)	1.00	$> .92$
Relative noncentrality index (RNI)	1.00	$> .92$
Root mean square error of approximation (RMSEA)	0.07	$< .07$
Standardized root mean square residual (SRMR)	0.06	$< .08$

Note. In the first row, degrees of freedom are presented in parentheses. The suggested thresholds are taken from Hair et al. (2013) for samples larger than 250 participants. χ^2 = chi square value; df = degrees of freedom.

*** $p < .001$.

Table 3. Descriptive Statistics.

Factor	M (SE)	SD	Min–Max	Skewness (SE)	Kurtosis (SE)	S-W
1 Fear	12.43 (0.30)	5.02	5–25	0.15 (0.15)	–0.84 (0.29)	0.96***
2 Terror	18.46 (0.48)	7.92	7–35	0.25 (0.15)	–1.01 (0.15)	0.95***
3 Shame	27.21 (0.72)	11.95	10–50	0.28 (0.15)	–1.05 (0.15)	0.95***
4 Guilt	17.51 (0.46)	7.64	7–35	0.36 (0.15)	–0.80 (0.15)	0.95***
S-VITA	72.90 (1.68)	27.79	28–140	0.22 (0.15)	–0.86 (0.15)	0.97***

Note. M = mean; SE = standard error; SD = standard deviation; Min = minimal obtained score; Max = maximal obtained score; S-W = Shapiro–Wilk test of normality.

*** $p < .001$.

Table 4. McDonald's ω and Cronbach's α Values.

Factor	McDonald's ω [95% CI]	Cronbach's α [95% CI]
1 Fear	.88 [.86–.90]	.86 [.83–.88]
2 Terror	.93 [.92–.95]	.92 [.92–.94]
3 Shame	.96 [.95–.97]	.96 [.95–.96]
4 Guilt	.90 [.88–.91]	.90 [.87–.91]
S-VITA	.97 [.96–.97]	.97 [.96–.97]

Note. 95% CI = 95% confidence interval, lower and upper bound.

consistency. While Cronbach's α is widely used and aids the interpretation, McDonald's ω is increasingly recommended (Trizano-Hermosilla & Alvarado, 2016) as it can provide reliable estimates of internal consistency even when the assumptions required for Cronbach's α are not met (Peters, 2014). Detailed results of these calculations are presented in Table 4.

Both McDonald's ω and Cronbach's α values for all factors exhibited high scores, confirming the good reliability of the measured factors (Kalkbrenner, 2021). The minimal discrepancies observed between these two coefficients indicate that the assumptions necessary for Cronbach's α are adequately met. However, notably high Cronbach's α values for factors Terror and Shame, which exceed .90, may suggest potential redundancy among some items within these factors, pointing towards the possibility of overlapping content (Kalkbrenner, 2021).

We further evaluated the impact of item deletion on the McDonald's ω and Cronbach's α values to identify any items whose removal might enhance the reliability of the scale. Specifically, for factor Fear, removing item 5 would increase McDonald's ω and Cronbach's α values to .90 and .89, respectively. This item, characterized by a relatively low item-total correlation of .40, concerns the respondent's reaction to fear by seeking help. The content of the item appears integral to the measured construct, thus its deletion might result in compromised content validity. Nevertheless, the

phrasing of this item may suffer from translation issues in the Slovenian version, appearing too direct and potentially not culturally adapted.

In the Terror factor, the deletion of item 10 would improve the McDonald's ω and Cronbach's α values to .94 and .93, respectively, with an item-total correlation of .57.

For the Shame and Guilt factors, no item deletion would increase the reliability measures. A similar pattern extends to the overall reliability assessments of the total S-VITA scale.

In summary, the confirmatory factor analysis and reliability assessments have confirmed the good psychometric properties of the measure, evidencing satisfactory construct and convergent validity. Despite these overall positive results, minor psychometric concerns have been noted regarding item 5. Although the scale demonstrates adequate reliability and validity, item 5's translation and cultural adaptation may require revision to improve its applicability in future iterations of the S-VITA scale. Therefore, while we do not recommend the removal of this item based on the current analysis, a review and potential revision of the item's phrasing for future applications are advised.

Correlation Analysis

We performed correlational analysis to assess discriminant and convergent validity. The results are presented in Table 5.

The intercorrelations between the four factors of the S-VITA scale—Fear, Terror, Shame, and Guilt—are moderate to strong, with the highest correlations observed between factors Fear and Terror, Terror and Shame, and Shame and Guilt. These strong associations suggest a significant overlap among these constructs, which may reflect nuanced, interconnected emotional responses to trauma.

Conversely, the correlations between factors Fear and Guilt and between factors Terror and Guilt are comparatively lower, indicating a degree of distinctiveness among these factors, which supports the discriminant validity within the construct framework of S-VITA scale.

Additionally, the four factors show moderate correlations with other related constructs, including Depression, Anxiety, Stress, and symptoms of post-traumatic stress such as Avoidance, Intrusions, and Hyperarousal. These findings indicate satisfactory convergent validity for all factors of the scale.

Overall, the correlation analysis provides evidence of sufficient convergent validity for the S-VITA scale, as the factors demonstrate moderate to strong correlations with related constructs. While there are indications of shared variance among certain factors, the discriminant validity of the factors is deemed satisfactory. We provide further explanation in the Discussion.

Discussion

The present study aimed to translate the Intimate Violence and Traumatic Affect Scale (Troisi, 2018) into Slovenian (S-VITA scale) and assess its psychometric properties in a sample of Slovenian women who have experienced intimate partner violence. The

Table 5. The Results of Correlation Analysis.

Variable	Fear	Terror	Shame	Guilt	Total	Depression	Anxiety	Stress	Avoidance	Intrusions	Arousal
Fear	—										
Terror	.79***	—									
Shame	.63***	.79***	—								
Guilt	.55***	.63***	.81***	—							
S-VITA SUM	.79***	.90***	.95***	.86***	—						
Depression	.39***	.53***	.61***	.63***	.62***	—					
Anxiety	.42***	.53***	.59***	.59***	.61***	.87***	—				
Stress	.40***	.51***	.58***	.60***	.60***	.91***	.87***	—			
Avoidance	.46***	.55***	.54***	.50***	.58***	.58***	.58***	.59***	—		
Intrusions	.49***	.55***	.55***	.46***	.58***	.58***	.58***	.59***	.83***	—	
Arousal	.51***	.59***	.56***	.51***	.62***	.65***	.67***	.68***	.85***	.92***	—

Note. Fear, Terror, Shame, and Guilt are factors included in the Slovenian translation of the Intimate Violence and Traumatic Affect Scale (VITA Scale; Troisi, 2018). Depression, Anxiety, and Stress are factors included in the Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond, 1995). Avoidance, Intrusions, and Arousal are factors included in the Impact of Events Scale-Revised (IES-R; Weiss & Marmar, 1997). Spearman ρ was computed to assess the correlations.

*** $p < .001$.

results of the study indicate that the S-VITA scale is psychometrically robust, supporting its use in the Slovenian language.

The results provided evidence that the factor structure of the S-VITA scale aligns with the original four-factor structure. The scale's items measure four latent constructs (factors): Fear, Terror, Shame, and Guilt. The factor loadings were high (Hair et al., 2013) and statistically significant, demonstrating the strength of the relationships between the items and the latent constructs. The fit indices of the model indicated a good fit to the data, further supporting the construct validity of the scale.

The S-VITA scale demonstrated high internal consistency and reliability across all factors, as evidenced by both McDonald's ω and Cronbach's α coefficients. However, the very high values for the Terror and Shame factors suggest a potential redundancy of some items included in these factors. While this overrepresentation may not pose significant issues, further analysis is recommended to identify items that could be eliminated to enhance the scale's parsimony.

Item 5, which assesses factor Fear, displayed slightly lower psychometric properties, though the discrepancy was minimal. Following the recommendations of Swami and Barron (2019), we opted to retain the item to maintain the integrity of the original instrument. The content of this item appears integral to the construct being measured, and its removal could compromise the scale's content validity. However, the phrasing in the Slovenian version may suffer from translation issues, as it appears overly direct and potentially lacks cultural adaptation. This suggests a need for linguistic analysis and possibly a reformulation of the item to better align with cultural nuances while preserving its intended meaning.

The correlation analysis revealed moderate to strong correlations between the S-VITA scale's factors and related constructs—Depression, Anxiety, Stress, and post-traumatic symptomatology (Avoidance, Intrusions, and Hyperarousal). These findings indicate good convergent validity of the scale.

Troisi (2018), the author of the original VITA scale, conducted a correlation analysis between the scale and its factors and post-traumatic symptomatology. While Troisi (2018) employed the original IES (Horowitz et al., 1979), our study utilized the revised Impact of Events Scale (IES-R, Weiss & Marmar, 1997). Both versions of the IES incorporate factors Intrusion and Avoidance.

Notably, in comparing the correlation strengths between the VITA scale and the Slovenian VITA (S-VITA) scale, we found the correlations with the S-VITA scale to be significantly stronger: $M_{r-VITA} = .43$, $M_{\rho S-VITA} = .53$, $t(12) = -2.58$, $p = .01$. This marked discrepancy, particularly evident in the factors Fear and Guilt, could be attributed to the updated version of the IES used in this study, which may more effectively capture the emotional affects measured by the S-VITA scales. Alternatively, the methodological differences in correlation coefficients could explain the variance—Troisi (2018) calculated Pearson's r , while our study employed Spearman's ρ . However, upon recalculating Pearson's r , we observed that the values were consistent with those derived from Spearman's ρ . This suggests that cultural differences in the expression of these emotional affects may contribute to the observed discrepancies, highlighting the necessity for further research to explore these potential cultural variations.

The results indicate limited divergent validity, as evidenced by the moderate to strong intercorrelations among the factors of the S-VITA scale. The strong correlation observed between factors Fear and Terror is anticipated given that both encompass emotional responses to fear. Notably, the distinction between these factors lies in their manifestation; factor Fear involves an active escape response, whereas factor Terror is characterized by paralysis and an inability to escape (Troisi, 2018).

Similarly, the strong correlation between factors Shame and Guilt can be ascribed to their semantic and affective similarities, both involving significant social components. Shame pertains to threats to social representation, whereas guilt relates to the moral and care components within social contexts (Gilbert et al., 1994). Troisi (2018) delineates guilt as having an active component related to personal responsibility for actions, whereas shame involves passivity and potential feelings of helplessness.

The correlation between factors Shame and Terror factors may be explained by their common attribute of passivity. Furthermore, shame is sometimes conceptualized as a fear of negative evaluation by others (Beck et al., 1985), indicating a fear element within the context of shame. The theoretical models thus justify the overlap between factors. Hence, we advocate for preserving the scale's original structure, despite the high intercorrelations. Such patterns are consistent with findings by Clark and Watson (1991), who noted that emotional constructs often display high intercorrelations due to shared underlying dimensions, especially in scales designed to measure affective responses.

In conclusion, the correlation analysis revealed good convergent validity of the S-VITA scale, as indicated by moderate to strong correlations with related constructs. However, the analysis indicated limited divergent validity, possibly due to the semantic similarity and shared components among factors. The findings support the use of the S-VITA scale but highlight the need for further examination of potential cultural particularities in their expression.

Constraints on Generalizability

The study has several constraints on its generalizability. Firstly, the use of an online panel for data collection may introduce sampling bias, limiting the external validity of the findings. The sample consists of panel members, who have experienced IPV and may not be representative of all women who have experienced intimate partner violence (IPV). Additionally, the study lacks information regarding participants' diversity, including their ethnic backgrounds, nationality, and specific gender identity, which further hinders the generalizability of the results to a diverse population. Moreover, the results only apply to women who experienced IPV in a relationship with a man.

Furthermore, the sample predominantly consisted of women with lower-than-average monthly incomes and a high proportion of women with tertiary education. While the educational and economic profiles of the subsample of women who experienced IPV did not significantly differ from the rest of the sample, the overall educational profile of the sample was higher than that of the general population in

Slovenia (Razpotnik, 2020). This suggests that the study may not fully capture the experiences of women from different socioeconomic backgrounds.

The online nature of the survey raises additional considerations concerning generalizability. Although most people in Slovenia (89%) regularly use the Internet (Mlakar, 2022), there may still be women who do not have access to the Internet.

While substantial efforts were made to include a stratified community sample that represents the general population of adult women from all Slovenian regions, it is important to acknowledge that specific populations, such as women using social services or residing in women's shelters, may have different experiences that are not fully captured by this study. Therefore, it is recommended to test the measure on these specific populations to enhance the generalizability of the findings.

In summary, the constraints on generality include potential sampling bias, limited representation of diverse ethnic backgrounds, the overrepresentation of women with higher education and lower income, and the exclusion of women without Internet access. Future studies should address these limitations to provide a more comprehensive understanding of the psychological consequences of IPV among a broader range of women.

Conclusion

In this study, we successfully translated and validated the Intimate Violence and Traumatic Affect Scale (Troisi, 2018) in the Slovenian language. The Slovenian version of the scale, known as the S-VITA, retains the original four-factor structure, capturing the emotional affects of Fear, Terror, Shame, and Guilt. Our findings from the confirmatory factor analysis and correlation analysis support the construct validity of the factors, particularly in terms of convergent validity. We observed moderate-to-strong intercorrelations between factors, which can be attributed to the shared nature of affective experiences measured by the studied constructs.

The internal consistency and reliability analyses confirm the robustness of the S-VITA scale, indicating excellent stability and consistency across its measurements. The high reliability coefficients suggest an opportunity to streamline the scale further to achieve greater parsimony. Moreover, a linguistic revision of item 5 is recommended to ensure clarity and cultural relevance in its phrasing.

Overall, the findings robustly support the application of the S-VITA scale within the Slovenian context. By validating the Slovenian Intimate Violence and Traumatic Affect Scale (S-VITA), this study contributes significantly to the understanding of the psychological ramifications of intimate partner violence among Slovenian women. We endorse the use of the S-VITA scale in research, clinical practice, and targeted interventions for evaluating and mitigating the mental health effects of IPV. Moreover, our findings underscore the potential for adapting the scale to various linguistic and cultural contexts, which could facilitate a more comprehensive global understanding of the psychological impacts of intimate partner violence. Encouraging further validation efforts will ensure the scale's relevance and utility in diverse settings, enhancing our approach to addressing this pervasive issue.

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Author Note

The findings discussed in the submitted article have not been previously presented in any publication or event and are currently not under review elsewhere. The data and analysis procedure are available upon contacting the correspondence author.

Author Contributions

Study conception and design and analysis and interpretation of results: NK and VP; data collection and draft manuscript preparation: NK; supervision: VP and DDL; funding acquisition: DDL. All authors reviewed the results and approved the final version of the manuscript.

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ORCID iD

Nina Krohne  <https://orcid.org/0000-0002-6508-8598>

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Author Biographies

Nina Krohne, PhD, is a research psychologist at the University of Primorska, Slovenia. Her main field of research is mental health and suicidality in women who experienced intimate partner violence. Additionally, her research interests include mental health literacy, attitudes, e-health, intervention implementation, public mental health, and the impact of crises (including

COVID-19) and trauma on mental health. She is involved with the Suicide in Women and Girls Taskforce at the International Association for Suicide Prevention.

Diego De Leo, PhD, is a Full Professor at the University of Primorska, Slovenia, Head of the Slovene Centre for Suicide Research (UP IAM), and Emeritus Professor of Psychiatry at Griffith University, Australia. He is globally renowned for his research contributions to suicide investigation and prevention. His research interests include elderly suicide, general mental health, and loneliness. An influential figure in suicidology, he has held leadership roles in organizations such as the World Health Organization, the International Academy for Suicide Research, and the International Association for Suicide Prevention.

Vita Poštuvan, PhD, is a Full Professor at the University of Primorska, Slovenia, and the Deputy Head of the Slovene Centre for Suicide Research (UP IAM). Her expertise and research interests include investigating and preventing suicidal behavior, crisis interventions, mental health, bereavement, mental health-related human rights, ethics, cognitive-behavior therapy, and mindfulness. One of Slovenia's most cited psychologists, she holds leadership positions at the European Federation of Psychologists' Associations and the International Association for Suicide Prevention.