Article

Psicothema

Psicothema 2021, Vol. 33, No. 4, 631-638 doi: 10.7334/psicothema2021.160 ISSN 0214 - 9915 CODEN PSOTEG Copyright © 2021 Psicothema www.psicothema.com

# A Proposal for Evaluating Psychosocial Trauma

Loreto Villagran<sup>1</sup>, Amalio Blanco<sup>2</sup>, Julio Olea<sup>2</sup>, and Marian Bilbao<sup>3</sup> <sup>1</sup> Universidad de Concepción, <sup>2</sup> Universidad Autónoma de Madrid, and <sup>3</sup> Universidad Alberto Hurtado

# Abstract

Background: The objective of the study was to design and validate the Psychosocial Trauma Scale (ETAPS) for assessing psychosocial consequences of collective violence. This instrument proposed the following dimensions: Pre-traumatic Situation, Destruction of Fundamental Beliefs, Intergroup Emotions, and Family and Community Destruction. Method: A total of 382 people participated who had been affected by political violence: civil war in El Salvador, forced displacement from Colombia and state violence from Chile. The study had three phases: (1) content validity of the items evaluated by experts; (2) exploratory factor analysis to study the structure of ETAPS, reducing the number of items; (3) convergent (post-traumatic stress symptomatology) and divergent (psychological and social well-being) validity. Results: The EFA showed that ETAPS had a slightly different internal structure from that proposed. The dimensions found were Pre-traumatic Situation and Intergroup Emotions along with two new emerging dimensions: Destruction of Sociality and Personal and Collective Self-Efficacy. Divergent and convergent validity gave expected results except for the pre-traumatic situation. Conclusions: The ETAPS dimensions show that the effects of violence are broader than the symptoms measured by clinical scales. An instrument with adequate psychometric properties was obtained which will be useful for future studies in the area.

*Keywords:* Psychosocial Trauma; political violence; PTSD phenomenology; Prisoners; War/armed conflict as civilian.

# Resumen

El Trauma Psicosocial: una Propuesta Para su Evaluación. Antecedentes: el objetivo del estudio fue el diseño y validación de la Escala de Trauma Psicosocial (ETAPS) para evaluar consecuencias psicosociales de la violencia colectiva. Este instrumento propuso las dimensiones: Situación Pre-traumática, Destrucción de Creencias Fundamentales, Emociones Intergrupales, y Destrucción Familiar y Comunitaria. Método: participaron 382 personas afectadas por violencia política: guerra civil en El Salvador, desplazamiento forzado de Colombia y violencia estatal de Chile. El estudio contempló tres fases: (1) validez de contenido de los ítems evaluado por expertos; (2) análisis factorial exploratorio para estudiar la estructura de ETAPS, reduciendo el número de ítems; (3) validez convergente (sintomatología de estrés postraumático) y divergente (bienestar psicológico y social). Resultados: el AFE mostró que la ETAPS tenía una estructura interna que difería parcialmente de la propuesta. Las dimensiones encontradas fueron: Situación Pre-traumática y Emociones Intergrupales, junto con dos nuevas dimensiones: Destrucción de la socialidad y Autoeficacia personal y colectiva. La validez divergente y convergente muestra resultados esperados salvo respecto a la situación pretraumática. Conclusiones: las dimensiones de ETAPS plantean que los efectos de la violencia son más amplios que los síntomas medidos por escalas clínicas. Se obtuvo un instrumento con adecuadas propiedades psicométricas útil para futuros estudios en el área.

*Palabras clave:* trauma psicosocial; violencia política; fenomenología TEPT; prisioneros; conflicto armado/guerra como civil.

The most common and extreme suffering humankind has experienced throughout history comes from the intentionally planned actions of human beings against their fellow man, in which most of those suffering are innocent victims. Since 1980, when the DSM-III decided to propose posttraumatic stress disorder (PTSD) as a new diagnostic category for mental disorders, there has been the agreement: "the disorder may be especially severe or long-lasting when the stressor is interpersonal and intentional" (American Psychiatric Association, 2013, p. 275). This is the only feature of PTSD that has remained unchanged since the DSM-III.

Received: April 30, 2021 • Accepted: July 21, 2021 Corresponding author: Loreto Villagran Facultad de Ciencias Sociales Universidad de Concepción 403000 Concepción (Chile) e-mail: lorevillagran@udec.cl At that time, Martín-Baró (1990; 2003), taking as a starting point the Civil War in El Salvador (1980-1992), and the ILAS Group from therapeutic practice with victims of torture and political repression in Chile under Pinochet's dictatorship (Instituto Latinoamericano de Salud Mental y Derechos Humanos, ILAS, 1990; Lira, 1994), came to the conclusion that in addition to the personal damage, the man-made stressor rooted in collective violence reflects and arises from some dysfunctions in the social process, introducing fear and interpersonal mistrust as a shared means of controlling political behavior. These are the factors underlying psychosocial trauma as "a normal result of a social system based on a dehumanizing network of social relationships characterized by exploitation and oppression. In other words, psychosocial trauma can be part of a 'normal abnormality" (Martín-Baró, 2003, p. 295).

In the last two decades, the psychosocial after effects of collective violence have been widely confirmed in different cultural settings, in a particular way in social settings marked by a long-lasting violence. Examples of these consequences can be found around the world in the experience of Palestine (Hirsch-Hoefler, et al., 2019), Sri Lanka (Somasundaram, 2005), and Spain (Díaz et al., 2018; Vázquez, 2005). Also, several studies on this phenomenon have been carried out In Latin America in countries such as Colombia (e.g., Blanco & Amarís, 2014: Centro Nacional de Memoria Histórica, 2013; Médicos Sin Fronteras, 2013), Guatemala (e.g., Oficina de Derechos Humanos del Arzobispado de Guatemala (ODHAG), 1998), Chile (ILAS, 1990; Madariaga, 2002), Argentina (Robben, 2008), and Nicaragua (Sveaass, 2000). In some way, all of these studies understand psychosocial trauma as a collective trauma "that is more than the suffering experienced by each individual because it cracks all social ties, destroys the identities of groups, undermines any sense of belonging to the community and generates cultural disorientation as the meanings taken for granted become obsolete" (Robben, 2008, p. 403). The implications go beyond the loss of life or physical harm: "the devastation of the social and cultural fabric, the people's history, their identity and value systems are under threat" (Pedersen, 2002, p. 181). All these consequences are equally visible in ethnic and racial conflicts (Brave Heart et al., 2011; Comas-Díaz et al., 2019; Whitbeck et al., 2004) and in refugee camps (Braun-Lewenshon & Al-Sayed, 2018). These traumatic experiences are linked to a concatenation of painful losses such the brake of social networks, the loss of cultural values such as language, the erosion of traditional family and community, etc.

Taking the theoretical contributions of Martín-Baró (2003), the ILAS group (1990; Lira, 1994), and the aforementioned investigations as a starting point, it has been possible to differentiate four dimensions of psychosocial trauma (Blanco et al., 2006; Blanco et al., 2016): a) the Pre-Traumatic Situation: conditions and events that turn people into victims; b) Destruction of fundamental Beliefs as a result of exposure to or because of traumatic events: loss of selfconfidence and loss of confidence in others and in the society in which you live, self-criticism, etc.; c) the emergence of negative Intergroup Emotions: resentment, hatred, desire for revenge; and d) Family and Community Destruction: links of protection and support.

These dimensions have helped us build a scale to assess psychosocial trauma (Psychosocial Trauma Scale or ETAPS which corresponds to its Spanish acronym). This scale joins the "Historical Loss Scale" (Whitbeck et al., 2004), which measures the frequency of an individual's thoughts about their historical, cultural and family losses and the "Historical Loss Associated Symptoms" (Whitbeck et al., 2004), which measures the frequency of emotions experienced when thinking historical losses. The aim of this study was to validate the psychosocial trauma scale (PTSD), created to evaluate the consequences of collective violence. Validation was carried out in three phases: (1) content validation, (2) internal structure and reliability validation, and (3) convergent and divergent validation.

## Method

# Participants

The sample was comprised of 406 participants, aged between 18 and 85 years (M age = 43.03, SD = 16.01), directly affected by political violence: 76 affected by state violence in Chile (M age = 52.95, SD = 18.13); 254 Colombians affected by forced displacement (M age = 37.64, SD = 14.15); and 76 ex-combatants of the El Salvador civil war injured in combat (M age = 51.38, SD = 10.79). After eliminating the missing data, only 382 participants remained to participate in the analyses. In Chile, the participants belonged to the Program of Reparation and Integral Attention in Health and Human Rights (PRAIS), which cares for victims or relatives of disappeared or executed individuals and for political prisoners. In Colombia, the ETAPS was applied through the "Nuevo Amanecer" Foundation that works with internally displaced persons. In El Salvador, it was administered through the "War Cripple Association of El Salvador" (ALGES).

## Instruments

#### Phase 1. Content Validity

Judges were contact and given an item evaluation booklet containing instructions, definitions of the psychosocial trauma dimensions (see Table 1) and the 142 scale items. Item congruence (IC) was evaluated with one of the four dimensions, according to Rovinelli & Hambleton (1977). The response format was: -1, does not correspond to the dimension; 0, indecisive; 1, corresponds. In addition, item relevance (IP) to the psychosocial trauma construct was evaluated. The response format ranged from 1 (the item has little relevance or is not relevant); to 10 (very relevant item). In addition, there was a section of qualitative comments.

#### Phase 2. Validity of the Internal Structure of the ETAPS

*Psychosocial Trauma Scale (ETAPS).* After the first phase of the study, the ETAPS comprised 81 Likert items, with 7 ordered categories (1 = totally disagree, to 7 = totally agree). The first dimension measures the Pre-traumatic Situation (which asks

Table 1     The four dimensions of psychosocial trauma (Blanco, Blanco & Díaz, 2016; Villagrán, 2016)						
Dimension Definition						
Pre-traumatic Situation	Situations, conditions or previous experiences that are part of one's autobiographical memory and that are perceived or interpreted as directly responsible for the traumatic experience and/or continue to maintain it over time.					
Destruction of Fundamental Beliefs	Subjective perception that traumatic events have very deeply affected, and continue to affect in your case, values and beliefs on which personal and social life is based.					
Intergroup emotions	Emotional reactions of the victims with respect to themselves, both personally and collectively, and especially with regard to those who understand (perceive) that they are responsible for the event or events that have given rise to their traumatic experience (the perpetrators).					
Family and community destruction	Perception that, as a result of the presence and maintenance of violence, fear and terror have spread, family life and social networks have deteriorated, interpersonal trust has diminished and participation in community activities has been paralyzed, leaving everything it recorded in the collective memory.					

participants to remember the time when the events occurred). The remaining 60 items address the evaluation of the consequences at the current moment, with statements that represent the dimensions of Destruction of Fundamental Beliefs (27 Items), Intergroup Emotions (14 Items), and Family and Community Destruction (19 items). Cronbach's alpha values for the subscales ranged from .81 to .93 (see Table 2). Confirmatory factor analysis showed an acceptable Model Fit ( $\chi^2_{(1797)} = 3384.947$ , p < 0.001; CFI = 0.823; TLI = 0.814; NNFI = 0.814; PNFI = 0.654; SRMR = 0.071; RMSEA = 0.050 (90% CI [0.047, 0.052]).

# Phase 3. Convergent and Divergent Validity of the ETAPS

Global Assessment of Post-traumatic Stress (EGEP, Crespo & Gómez, 2012). This scale evaluates the symptomatology of PTSD in adults exposed to traumatic experiences according to DSM-IV R criteria. The 22 items of four dimensions were applied: Reexperimentation, Avoidance and Affective Dullness, Hyperactivation, and Subjective Clinical Symptoms. The response format used the original 0 = "No", and 1 = "Yes" (existence of symptoms). In addition, discomfort degree was assessed five-point Likert-type scale (0 = none, 4 = extreme). In the current sample, the internal structure of the scale presented two dimensions, which were coherent with proposed criterion of DSM 5 "Negative alterations in cognitions and mood". So, these dimensions were named: Cognitive Alterations, with 11 items ( $\alpha = 0.87$ ); explaining 40.19% of the sum of squared saturations.

*Psychological Well-being* (PW, Ryff, 1989, Spanish version of Díaz et al., 2006). Three dimensions relevant to the study were selected: Self-acceptance; Domain of the Environment; and Purpose in Life. It is a seven-point Likert-type scale (1 = Strongly agree, 7 = Strongly disagree). In the current sample, the internal structure studied with EFA generated only two dimensions. After analyzing the contents of the items, they were named: Psychological Well-being, 11 items ( $\alpha = 0.85$ ) and Psychological Distress, 5 items ( $\alpha = 0.63$ ), explaining 42.37% of the sum of squared saturations.

Social Well-being (SW, Keyes, 1998, Spanish version of Blanco & Díaz, 2005). Two relevant dimensions for the study were selected: Social Integration (5 items) and Social Actualization (5 items). It is a seven-point Likert-type scale (1 = Strongly agree, 7 = Strongly disagree). In the current sample, the internal structure showed loadings on two items different than the original ones, so we re-named the dimensions: Social Well-being, 5 items ( $\alpha = 0.90$ ), and Social Distrust, 5 items ( $\alpha = 0.66$ ), explaining 41.91% of the sum of squared saturations.

#### Procedure

In the initial phase of content validation, a review of the scientific literature was conducted, and 142 items were created following the dimensions of the psychosocial trauma proposed by Blanco et al. (2016), and defined by Villagrán (2016). These items were sent via email to the judges (experts in clinical psychology, social psychology and political violence with experience in fieldwork on political violence), along with the dimension definitions. The answers were analyzed through the concordance indicator of each item with the proposed dimensions (Rovinelli & Hambleton, 1977), and relevance with the TPS construct. After these analyses, a 81 items version of the ETAPS was obtained to be applied to those

affected by violence. All the participants were informed about the objective of the study, signed the corresponding informed consent form, and were given all the time needed to answer the questions. All the ethical standards proposed by the Declaration of Helsinki (Asociacion Mundial Medica, 1964), updated in 2013 (WMA, 2013), were followed, and the study was approved by the Ethics Committee of the Pontificia Universidad Católica de Chile.

#### Data Analysis

Data obtained in phase 1, were processed in excel by using the formula to calculate the item-objective agreement index (IC) and the relevance (IP) through the average of the scores assigned for each item. The internal structure and consistency of the ETAPS and the other scales used (EGEP, SW, PW) were evaluated. Divergent and convergent validity analyses were performed on the basis of the dimensions found for each scale. All the analyses was carried out with SPSS 23 statistical package and the SPSS syntax for parallel analysis proposed by O'Connor (2000). The EFA was chosen because it is the recommended technique when there are no previous systematic results or a solid theoretical model (Izquierdo et al., 2014). The Kaiser-Meyer-Olkin sample adequacy test (KMO) and Bartlett's sphericity test (1951) were used. The number of retained factors was determined by Horn's (1965) parallel analysis. The extraction method was a factorization of the main axis (PE) with direct Oblimin rotation. Internal consistency of the dimensions was calculated by using Cronbach's  $\alpha$  coefficients. Pearson correlations were performed with the factorial scores to examine the divergent validity of the ETAPS dimensions with the EGEP dimensions, PW and SW.

# Results

#### Phase 1. Evidence of content validity

The degree of the judges' agreement with respect to the initial 142 items was evaluated by using the item-objective agreement index proposed by Rovinelli & Humbleton (1977) applying the formula in Figure 1.

$$I_{jk} = \frac{N}{2N-2} \left( \overline{X}_{jk} - \overline{X}_{j} \right)$$

**Figure 1.** Item-objective agreement index  $\overline{X}_{k}$  = Valuation of the indicator j in the dimension u objective k N = Number of dimensions contemplated in the instrument

If the experts agreed that an item corresponded to the expected dimension k, it was expected that the IC would be close to 1 for that dimension. Following the authors' indications, for each item it was necessary to obtained an IC score and an IP score (relevance) for each dimension. Cut-off points were IC  $\geq 0.60$  in a dimension and IP  $\geq 7.0$ . By using this procedure, 81 items were obtained for the ETAPS.

#### Phase 2. Evidence of the internal structure of the ETAPS

Horn's parallel analysis (1965) was used, generating 100 random datasets with the same number of observations (N = 382) and variables (81). The results suggested that 6 factors should be retained. It was proposed as a criterion that each factor should have

at least 4 items with loadings equal to or greater than 0.40. When studying the factorial solutions, it was found that factors 5 and 6 did not reach this criterion, therefore, a solution of 4 satisfactory factors was reached.

Table 2 shows the pattern matrix for the four-factor final solution, the distribution of the items and their factorial weights for each dimension. The final scale was composed of 61 items, and for each dimension the items with the highest factorial weight (greater than 0.40) were considered. This solution explained 33.23% of the sum of squared saturations together with the item-dimension correlation, with an adequate sample for the analysis (KMO 0,882; Bartlett's sphericity test  $\chi^2_{(3081)} = 12767.504$ , p< 0.001). According to the established criterion, no item had relevant weights in more than one factor. The factors that replicate the proposed theoretical structure were the first factor, Pre-traumatic Situation, comprising 19 items with factor loadings between 0.45 and 0.70, and the fourth factor, Intergroup Emotions, comprising 9 items with loadings between 0.41 and 0.61. The second and fourth factors grouped the items in an unexpected way. In the second factor the items showed an increase in negative consequences or reactions as a result of violence on a personal level (e.g., feeling of emptiness: I used to be happy, and now I feel miserable), interpersonal relationships (e.g., distrust in others: I have lost confidence in people), and family (e.g., Living with my family has become increasingly difficult). This dimension was called the Destruction of Sociality and comprised 18 items with loadings between 0.41 and 0.68. In the third factor, 15 items were grouped with factor loadings between 0.40 and 0.69. This factor comprised items in the opposite vein that allude to positive reactions or consequences of the experience at the individual level (e.g., I have more confidence in myself) and community (e.g., I discovered that my community is stronger than I thought), which is why it was called the Personal and Collective Self-efficacy dimension. The fourth factor was Intergroup Emotions, comprising 9 items with loadings between 0.40 and 0.58. The items of this factor were designed for the negative "intergroup emotions" regarding the outgroup (e.g., item 38, It irritates me to see that the people who have done so much damage have not been punished"), which is consistent with the original approach referring to this dimension. The original denomination of the dimension was maintained. Interfactor correlations were all below 0.36, with the highest being 0.35 between the Pre-traumatic Situation and Personal and Collective Self-Efficacy dimensions.

These analyses were confirmed using CFA to study model fit. The results show some acceptable indexes, such as  $\chi^2(1797) = 3384.947$ , p< 0.001, and RMSEA = 0.050 (90% CI [0.047, 0.052]), and some with less goodness of fit, such as CFI = 0.823; TLI = 0.814; NNFI = 0.814; PNFI = 0.654; SRMR = 0.071, which could be explained by a lack of parsimony.

#### Phase 3. Convergent and Divergent Validity of the ETAPS

The dimensions of ETAPS coherently and significantly correlated with the dimensions of EGEP, WP, and WS. Table 3 presents the correlation coefficients. The convergent showed the results expected and the divergent validity showed some results unexpected. There were positive significant relationships between Pre-traumatic Situation and Psychological Well-being (r = 0.29) and Social Integration (r = 0.26), as well as Integroup Emotions with Psychological Distress (r = 0.31) and Psychological Well-being (r = 0.20).

1	Pattern matrix, fa	Pre- traumatic Situation	Destruction of Sociability	Personal and Collective Self-efficacy	Intergroup Emotions
1:	Item 17	.708	.068	.036	.023
2:	Item 9	.705	.021	.070	.043
3:	Item 21	.694	.189	.073	077
4:	Item 4	.676	.146	.085	134
5:	Item 11	.672	.038	056	.024
6:	Item 19	.665	.160	.068	072
7:	Item 12	.644	.071	027	.002
8:	Item 3	.632	077	143	.203
9:	Item 10	.621	.033	046	087
10:	Item 5	.597	057	.056	.119
11:	Item 2	.586	.201	.125	139
12:	Item 18	.564	.107	.155	.087
13:	Item 1	.537	092	.039	.084
14:	Item 14	.530	045	.199	.236
15:	Item 16	.504	107	.023	.327
16:	Item 7	.497	125	.071	.194
17:	Item 13	.475	.108	.207	.084
18:	Item 15	.462	113	.053	.361
19:	Item 20	.456	.093	.081	.086
20:	Item 66	.032	.686	124	050
21:	Item 60	.057	.659	022	015
22:	Item 53	012	.597	071	021
23:	Item 45	010	.594	020	.066
24:	Item 54	.138	.584	004	.079
25:	Item 58	022	.578	004	.108
26:	Item 25	.223	.547	.050	.052
27:	Item 43	.160	.535	.075	.133
28:	Item 61	.018	.513	.021	.059
29:	Item 55	.004	.492	.090	.134
30:	Item 40	016	.486	220	002
31:	Item 56	021	.484	108	075
32:	Item 39	.093	.461	.141	.091
33:	Item 44	.101	.442	.109	.042
34:	Item 22	093	.435	.013	010
35:	Item 28	.178	.420	.133	.008
36:	Item 78	127	.417	.172	.133
37:	Item 74	070	.416	.079	.241
38:	Item 48	.060	094	.694	063
39:	Item 79	.118	137	.599	004
40:	Item 23	.083	.055	.598	184
41:	Item 41	.105	044	.598	065
42:	Item 36	.077	.027	.597	.005
43:	Item 77	.085	011	.590	.051
44:	Item 34	020	.134	.555	105
45:	Item 62	.195	001	.516	182
46:	Item 29	.017	007	.499	047
40. 47:	Item 32	.017	070	.485	.051
47. 48:	Item 75	.039	070	.485	.051
40. 49:	Item 69	100	131	.478	.109
49. 50:	Item 67	057	131	.474	.006
50. 51:	Item 50	.112	070	.455	.115
51. 52:	Item 71	.112	051	.407	016
52: 53:	Item 80	036	.235	159	010 .614
55: 54:	Item 73	030	.170	117	.575
54: 55:	Item 75 Item 37	.048			.575
			060 178	.009	
56: 57.	Item 63	047	.178	044	.545
57: 58.	Item 31	.055	005	.020	.466
58: 50:	Item 81	.190	.047	007	.462
59: 60:	Item 68 Item 30	.211	160	.088	.438
60:	Item 30	.123	.172	089	.423
61:	Item 38	.215	019	.244	.419
	Eigenvalue	15.559	6.780	3.821	2.635

Table 3   Correlations between dimensions of the ETAPS and dimensions of validation scales, complete sample (N = $382$ )						
	Dimensions ETAPS					
Dimensions	Pre- traumatic Situation	Destruction of Sociability	Personal and Collective Self-efficacy	Intergroup Emotions		
EGEP						
Cognitive Alterations	.204**	.059	.133*	025		
Mood Alterations	.151**	.072	.177**	029		
SW						
Social Integration	.257**	045	.519**	.206**		
Social Distrust	.080	.347**	.034	.169 **		
PW						
Psychological Well-being	.285**	043	.536**	.202**		
Psychological Distress	.074	.579**	.051	.319**		

# Discussion

In the present study, steps were taken to create and validate the ETAPS, which assesses the consequences of political violence. Based on Martín-Baró (1990; 2003) proposals and the results of previous research in contexts of violence, four dimensions of the TPS were stated: Pre-traumatic Situation, Destruction of Fundamental Beliefs, Intergroup Emotions, and Family and Community Destruction. In phase 1, from the construction of items and judges' validation, 81 preliminary items were obtained to measure these dimensions. This version of the ETAPS was applied to adult victims of violence.

The second phase gave evidence of internal structure and reliability, reducing the ETAPS to a 61-item version. Table 4 shows the dimensions and their items, in the original version (Spanish) and in the translated version (English). It was structured in four dimensions, quite well delimited, composed by a number of items between 19 and 9 items, and with relevant factorial weights greater than 0.40. The consistency was good for all dimensions, with Cronbach's alpha values above 0.80 and an acceptable model fit in the CFA. The final ETAPS got structured by four dimensions (Pre-traumatic Situation; Destruction of Sociability; Personal and Collective Self-efficacy; Intergroup Emotions), two of which were not from the theoretically proposed.

The "new" dimension of Destruction of Sociality is in line with the original dimension called Destruction of Fundamental Beliefs (individual consequences). In addition, it incorporates consequences to family and community networks belonging to the proposed dimensions of Family and Community Destruction. The emergence of Personal and Collective Self-Efficacy shows that, although most studies have been concerned with the symptoms and problems associated with collective violence, in the last two decades the evidence indicates that associated pathologies are fewer than expected (Bonanno, 2004), and the community belonging and neighborhood cohesion could act as protective factors. This dimension is part of a vision of trauma that states that its psychosocial impact is composed of the negative and positive effects of events (Leiva-Bianchi et al., 2018) and in these contexts self-efficacy could emerge as a coping strategy (Smith et al., 2017). Although Martín-Baró focused his work on the negative consequences—due to trauma's relevance as a mental health problem and the responsibility of those governments that were often victimizers—, he also points out that these experiences could contribute to the growth and improvement of individuals (Martín-Baró, 1990) through actions and responses of solidarity and cooperation within affected communities (Martín-Baró, 2003).

These relationships among Psychosocial Well-being and Pretraumatic Situation with Social Integration, and those among Intergroup Emotions and Social Integration, Social Distrust and Psychological Well-being, may be an expression of emotional ambivalence in trauma contexts (Ben-Zur & Zimmerman, 2005; Jerg-Bretzke et al., 2013) and is linked to studies that found evidence of well-being in displaced persons in the Colombian context (Blanco & Amarís, 2014).

A limitation to this study is the possible effect of the method on the Destruction of Sociality, and the Personal and Collective Self-Efficacy dimensions, where items with the same valence were grouped. However, interfactorial correlation between both factors is low (r = 0.10). Therefore, the results referring to these dimensions should be interpreted with caution until additional analyses are carried out, as recommended by Tomás et al. (2012). They suggest exploring the presence of this effect through an analysis of the convergent-discriminant validity of the multiratemultimethod matrices from the AFC by using correlated traits and correlated methods (CFA-CTCM). Another alternative would be to apply the model of correlated traits and correlated unicity suggested by Marsh et al. (1988) and Marsh (1989).

Validity studies are the first step to a new scale, keeping in mind that the validation process is a continuous process to make sense of score interpretation and the advisable use of a new instrument, such as ETAPS. Accordingly, it is necessary to confirm the factorial structure found by carrying out cross-validation studies to verify the stability of the found dimensions. Given the results of the CFA related to the indexes measuring parsimony, it would be beneficial to have an even smaller version, considering the most relevant items for each dimension according to their psychometric properties or theoretical relevance. As for the relationship of TPS with other constructs, results showed that this construct could be contrasted with variables such as individual resilience (Bonanno, 2004; Bonanno & Mancini, 2008) and, above all, with community resilience (Sharifi, 2016) and individual post-traumatic growth (Calhoun & Tedeschi, 1999) or collective growth (Wlodarczyk et al., 2017). Thus, this construct could elucidate whether the personal and collective self-efficacy dimension corresponds to the concept proposed by Bandura (1997).

Further studies on psychosocial trauma could explore other scenarios where this phenomenon can be important, such as the environmental damage caused by oil extraction in Ecuador (Sanandrés & Otarola, 2015), the psychosocial effects on indigenous communities caused by the installation of dams in Mexico (Jiménez, 2014), and the impact of massive rail accidents in Uruguay (Loarche, 2015). Therefore, it would be worth to study other sample types that have undergone traumatic experiences. In these cases, the proposed instrument should be revised and adjusted because it is specific to the context of violence.

In summary, the relevance of the study of TPS is confirmed. Moreover, in the future, our scale could be used as a contributing

Table 4
Psychosocial Trauma Dimensions and Items*
Pre-traumatic Situation
Quisieron callarnos por la fuerza. [Quisieron callarnos por la fuerza]
Me sentía maltratado y humillado por los gobernantes de la época. [I felt mistreated and humiliated by the rulers of the time] Hubo personas que me persiguieron hasta los últimos rincones por no pensar como ellos. [There were people who persecuted me to the utmost for not thinking like them]
Decir lo que pensaba estuvo a punto de costarme la vida. [Saying what I thought was about to cost me my life]
Había gente que buscaba mi destrucción sólo por pensar de determinada manera. [There were people seeking my destruction just for thinking in a certain way]
Intentaron imponerme por la fuerza una manera de pensar que no compartía. [They tried to force me to impose a way of thinking that I did not share]
En aquellos años, tanto a mí como a personas cercanas se nos trataba como criminales. [In those years, both myself and those close to me were treated like criminals]
Algunos intentaron que sobre mí y sobre personas como yo recayera la culpa de todos los males que ocurrían en el país. [Some tried to blame me and people like me for the evils that oc in the country]
En aquellos momentos era peligroso hablar en voz alta. [At that time, it was dangerous to speak out loud]
Resultaba muy peligroso defender determinadas ideas aunque las creyéramos justas. [It was very dangerous to defend certain ideas even if we believed them to be fair]
Hubo un tiempo en que me sentí tratado como si fuera un animal. [There was a time when I felt like I was treated like an animal]
En aquellos momentos pensaba que gozaba de menos oportunidades en la vida que otras personas. [At that time, I felt I enjoyed fewer opportunities in life than other people]
Hubo momentos en los que llegué a sentir que mi vida y la de los míos corría un serio peligro. [There were times when I came to feel that my life and those of my friends were in s danger]
En aquel entonces era muy peligroso pertenecer a determinado grupos, aunque fuera en defensa de los más necesitados. [At that time, it was very dangerous to belong to certain groups, e t was in defense of those in need]
Temía que me ocurriera lo que le ocurrió a otras muchas personas. [I was afraid of what happened to many other people]
Era imposible vivir tranquilo debido a la violencia existente en el país. [It was impossible to live in peace due to the violence in the country]
Teníamos miedo de reunirnos públicamente o de salir a la calle a protestar pacíficamente. [We were afraid to meet publicly or go outside to protest peacefully]
Me aterraba que pudiera pasarles algo malo a mis seres queridos. [I was terrified that something bad could happen to my loved ones]
Sentía que mi vida y la vida de las personas de mi entorno no valían nada. [I felt that my life and the lives of people around me were worthless]
Destruction of Sociability
Tal y como han sucedido las cosas en mi vida, nada bueno puede pasarme en el futuro. [Just as things have happened in my life, nothing good can happen to me in the future]
Solía ser una persona feliz, pero ahora me siento desdichado. [I used to be a happy person, but now I feel miserable]
Mi vida ha quedado destrozada. [My life has been shattered]
Me siento vacío por dentro, como si no tuviera sentimientos. [I feel empty inside, as if I had no feelings]
He perdido la capacidad de sentir o emocionarme por algo. [I have lost the ability to feel or get excited about something]
Siento que la vida ha sido muy injusta conmigo. [I feel that life has been very unfair to me]
Las relaciones con mi familia son cada día más distantes. [Relationships with my family are increasingly distant]
La vida es en buena medida una lotería, y esta vez me tocó la peor parte. [Life is mostly a lottery, and this time I got the worst part]
He perdido la confianza en la gente. [I have lost confidence in people]
La convivencia en mi familia se ha hecho cada día más difícil. [Living together in my family has become increasingly difficult]
Tengo razones para estar avergonzado de mí mismo y de los míos. [I have reason to be ashamed of myself and my close people]
No tengo a nadie con quien pueda contar. [I don't have anyone I can count on]
Evito situaciones y lugares públicos donde me pueda encontrar con gente a quien no conozco. [I avoid situations and public places where I can meet people I don't know]
La mayoría de las personas han resuelto las cosas mejor que yo. [Most people have solved things better than I have]
No entiendo qué sentido tiene la vida. [I don't understand the meaning of life]
La mala fortuna se ceba con quien menos se lo merece. [Bad fortune is primed for those who least deserve it]
En estas circunstancias, es mejor llevar una vida alejado de otras personas. [In these circumstances, it is better to lead a life removed from other people]
En los últimos tiempos no he tenido muchas relaciones cercanas y de confianza. [Recently, I have not had many close and trustworthy relationships]
No tengo muchas personas que quieran escucharme cuando necesito hablar. [Not many people want to listen to me when I need to talk]
Personal and Collective Self-efficacy
He cambiado a mejor. [I have changed for the better.]
Me siento parte importante de mi comunidad. [I feel I am an important part of my community]
Los acontecimientos vividos en el pasado me demuestran que soy más fuerte de lo que pensaba. [The events lived in the past show me that I am stronger than I thought]
Tengo clara la dirección y el objetivo de mi vida. [I have clarified the direction and purpose of my life.]
Tengo más confianza en mí mismo. [I have more confidence in myself]
Me ofrezco de voluntario para realizar actividades en mi barrio/comunidad. [I volunteer to perform activities in my neighborhood/community]
En mi comunidad/barrio ha aumentado la participación de la gente en actividades comunitarias. [In my community/neighborhood, the participation of people in community activiti increased.]
Participo de manera asidua en las actividades de mi comunidad. [I participate regularly in the activities of my community]
La gente es normalmente amable y está dispuesta a ayudar. [People are usually friendly and willing to help]
Si tomo las decisiones adecuadas, puedo evitar que me sucedan cosas malas. [If I make the right decisions, I can prevent bad things from happening to me]
Me siento más afortunado que la mayoría de la gente. [I feel more fortunate than most people]
Me siento orgulloso de quién soy y de la vida que llevo. [I feel proud of who I am and the life I lead]
He descubierto que mi comunidad es más fuerte de lo que pensaba. [I have discovered that my community is stronger than I thought]
A pesar de lo que pasó, no pierdo la esperanza en el futuro. [Despite what happened, I have hope in the future]

Hemos formado grupos organizados para apoyarnos y apoyar a quien lo necesite. [We have formed organized groups to support us and those who need it]

# Table 4 (continuated) Psychosocial Trauma Dimensions and Items\* **Intergroup Emotions** A veces tengo ganas de explotar contra quienes han sido los causantes de mi sufrimiento. [Sometimes I feel like blowing up at those who have caused of my suffering] Los culpables de lo que me sucedió merecen un castigo ejemplar. [Those guilty of what happened to me deserve exemplary punishment] Desearía que los causantes de mi desgracia sufrieran como nosotros sufrimos. [I wish that those who caused my misfortune would suffer just as we do] Me parece justo odiar a las personas que nos han hecho tanto daño. [It seems fair to hate people who have hurt us so much] No puede haber perdón para los verdugos. [There can be no forgiveness for the executioners] Me parece bien que a las personas se les considere responsables de los daños que su grupo ha ocasionado. [It seems fair to me that people be held responsible for the damage that their group has caused] Me irrita ver que la gente que tanto daño ha hecho no hava sido castigada. [It irritates me to see that the people who have done so much damage have not been punished] Es doloroso ver cómo los verdugos andan libres como si nada hubieran hecho. [It is painful to see how the executioners walk free, as if nothing had happened] Solo puedo sentir rechazo y desprecio contra quienes me han hecho tanto daño. [I can only feel rejection and contempt for those who have hurt me so much] Desearía que los causantes de mi desgracia sufrieran como nosotros sufrimos. [I wish that those who caused of my misfortune would suffer just as we do] Me parece justo odiar a las personas que nos han hecho tanto daño. [It seems fair to hate people who have hurt us so much] No puede haber perdón para los verdugos. [There can be no forgiveness for the executioners] Me parece bien que a las personas se les considere responsables de los daños que su grupo ha ocasionado. [It seems fair to me that people be held responsible for the damage their group has caused] Me irrita ver que la gente que tanto daño ha hecho no haya sido castigada. [It irritates me to see that the people who have done so much damage have not been punished] Es doloroso ver cómo los verdugos andan libres como si nada hubieran hecho. [It is painful to see how the executioners walk free, as if nothing had happened] Solo puedo sentir rechazo y desprecio contra quienes me han hecho tanto daño. [I can only feel rejection and contempt for those who have hurt me so much] Italic indicates inverse items. \* For pre-traumatic situation items (first part), participants are asked to place themselves in the moment in which the events occurred and then indicate their degree of agreement with the

\* For pre-traumatic situation items (hrst part), participants are asked to place themselves in the moment in which the events occurred and then indicate their degree of agreement with the statements. The second part (remaining dimensions), in which participants are asked to situate themselves in the present moment to indicate their degree of agreement with the statements presented

tool to the development of appropriate psychosocial strategies to intervene in these contexts in which individual intervention would be insufficient given the aspects related to the active participation of affected people and communities (Medina, 2015).

# Acknowledgements

This article is devoted to the memory of Julio Olea, a good researcher and better person. Without their wise advice, the construction and validation of this scale would not have been possible.

## References

- American Psychiatric Association (APA) (2013). Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> ed.). Author. https://doi.org/10.1176/ appi.books.9780890425596
- American Psychiatric Association (1980). *Diagnostic and Statistical Manual of Psychiatric Disorders* (3rd ed.). Author.
- Asociación Mundial Médica (1964). World Medical Association Declaration of Helsinki. http://www.who.int/bulletin/archives/79(4)373.pdf
- Asociación Médica Mundial (2013). Ethical principles for medical research involving human subjects. https://www.wma.net/es/policiespost/declaracion-de-helsinki-de-la-amm-principios-eticos-para-lasinvestigaciones-medicas-en-seres-humanos/
- Bandura, A. (1997). Self-efficacy: The exercise of control. Freeman.
- Ben-Zur, H., & Zimmerman, M. (2005). Aging holocaust survivors' wellbeing and adjustment: Associations with ambivalence over emotional expression. *Psychology and Aging*, 20(4), 710-713.
- Blanco, A., & Amarís, M. (2014). La ruta psicosocial del desplazamiento: una perspectiva de género [The psychosocial pathway of displacement: A gender perspective]. Universitas Psychologica, 13, 661-679. https:// doi.org/10.11144/Javeriana. UPSY13-2.rpdu
- Blanco, A., & Díaz, D. (2005). El bienestar social: su concepto y medición [Social well being: its concept and measurement]. *Psicothema*, 17(4), 582-589.
- Blanco, A., Blanco, R., & Díaz, D. (2016). Social (dis)order and psychosocial trauma: Look erlier, look inside, and look beyond the persons. *American Psychologist*. 70(3), 187-198. http://dx.doi.org/10.1037/a0040100

- Blanco, A., Díaz, D., & del Soto, A. (2006). Recovering the context in posttraumatic stress disorder: The psychosocial trauma in victims of political violence and terrorism. *Estudios de Psicología*, 27(3), 333-350. http://dx.doi.org/10.1174/021093906778965053
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20-28. http://dx.doi. org/10.1037/0003-066X.59.1.20
- Bonanno, G. A., & Mancini, A.D. (2008). The human capacity to thrive in the face of potential trauma. *Pediatrics*, 121(2), 369-375. http://dx.doi. org/10.1542/peds.2007-1648
- Braun-Lewenshon, O., & Al-Sayed, K. (2018). Syrian Adolescent Refugees: How Do They Cope During Their Stay in Refugee Camps? Frontiers in Psychology, 9, 1258. https://doi.org/10.3389/fpsyg.2018.01258
- Brave Heart, M.Y.H., Chase, J., Elkins, J., & Altschul, D.B. (2011). Historical Trauma Among Indigenous Peoples of the Americas: Concepts, Research, and Clinical Considerations. *Journal of Psychiatric Drugs*, 43, 282-290. https://doi. org/10.1080/02791072.2011.62891
- Centro Nacional de Memoria Histórica (CNMH) (2013). *¡BASTA YA! Colombia: memorias de guerra y dignidad* [¡STOP IT! Colombia: Memories of War and dignity]. Centro Nacional de Memoria Histórica.
- Calhoun, L. G., & Tedeschi, R.G. (1999). Facilitating posttraumatic growth: A clinician's guide. Routledge.

- Comas-Díaz, L., Hall, G. N., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the special issue. *American Psychologist*, 74(1), 1-5. http://dx.doi.org/10.1037/amp0000442
- Crespo, M., & Gómez, M. (2012). La evaluación del estrés postraumático: presentación de la escala de evaluación global de estrés postraumático (EGEP) [The assessment of post-traumatic stress: Presentation of the global post-traumatic stress assessment scale]. *Clínica y Salud*, 23(1), 25-41. http://dx.doi.org/10.5093/cl2012a4
- Díaz, D., Rodríguez-Carvajal, R., Blanco, A. Moreno-Jiménez, B., Gallardo, I., Valle, C., & Van Dierendonck, D. (2006). Adaptación española de las escalas de bienestar psicológico de Ryff [Spanish adaptation of Ryff's psychological well-being scales]. *Psicothema*, 18(3), 572-577.
- Díaz, D., Stavraki, M., Blanco, A., & Bajo, M. (2018). 11-M Victims 3 Years After Madrid Terrorist Attacks: Looking for Health Beyond Trauma. *Journal of Happiness Studies*, 19, 663-675. https://doi.org/10.1007/ s10902-016-9842x
- Hirsch-Hoefler, S., Vashdi, D. R., Lowe, R. D., Muldoon, O., Hobfoll, S. E., & Canetti, D. (2019). Status symmetry effect: The association of exposure and PTS in Israel-Palestine and Northern Ireland. *Terrorism* and Political Violence, 1-18. http://dx.doi.org/10.1080/09546553.2019 .1590342
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, 30(2), 179-185. http://dx.doi.org/10.1007/ BF02289447
- Instituto Latinoamericano de Salud Mental y Derechos Humanos (ILAS) (1990). *Derechos Humanos: todo es según el color con que se mira* [Human Rights: Everything is in the eye of the beholder]. Instituto Latinoamericano de Salud Mental y Derechos Humanos, ILAS.
- Izquierdo, I., Olea, J., & Abad, F. J. (2014). Exploratory factor analysis in validation studies: Uses and recommendations. *Psicothema*, 26(3), 395-400. https://doi.org/10.7334/psicothema2013.349
- Jerg-Bretzke, L., Walter, S., Limbrecht-Ecklundt, K., & Traue, H. C. (2013). Emotional ambivalence and post-traumatic stress disorder (PTSD) in soldiers during military operations. *Psycho-social medicine*, 10, Doc03. https://doi.org/10.3205/psm000093
- Jiménez, B. (2014). Efectos psicosociales anticipados del proyecto de presa El Zapotillo sobre los habitantes de Temacapulín [Anticipated psychosocial effects of the El Zapotillo dam project on the inhabitants of Temacapulín]. In Flores, J. (Ed.), *Repensar la psicología y lo comunitario en América Latina* (pp. 137-170). Universidad de Tijuana CUT.
- Keyes, C. L. M. (1998). Social well-being. Social Psychology Quarterly, 61(2), 121-140. http://dx.doi.org/10.2307/2787065
- Leiva-Bianchi, M., Ahumada, F., Araneda, A., & Botella, J. (2018). What is the psychosocial impact of disasters? A meta-analysis. *Issues in mental health nursing*, 39(4), 320-327. https://doi.org/10.1080/01612840.201 7.1393033
- Lira, E. (1994). *Psicología y violencia política en América Latina* [Psychology and political violence in Latin America]. Instituto Latinoamericano de Salud Mental y Derechos Humanos, ILAS.
- Loarche, G. (2015). Impacto vital en experiencias extremas: estudio sobre el trauma psicosocial de los habitantes de la ciudad de Young en relación al siniestro ferroviario del año 2006 [Unpublished master's thesis]. Universidad de la República.
- Madariaga, C. (2002). Trauma psicosocial, trastorno de estrés postraumático y tortura [Psychosocial trauma, post-traumatic stress disorder and torture]. Ediciones CINTRAS.
- Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-offit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, 103(3), 391-410. http://dx.doi. org/10.1037/0033-2909.103.3.391
- Marsh, H.W. (1989). Confirmatory factor analysis of multitraitmultimethod data: Many problems and a few solutions. *Applied Psychological Measurement*, 13, 335-361. https://doi. org/10.1177/014662168901300402
- Martín-Baró, I. (1990). *Psicología social de la Guerra: trauma y terapia* [Social psychology of war: trauma and therapy]. UCA.

- Martín-Baró, I. (2003). *Poder, ideología y violencia* [Power, ideology and violence]. Ediciones Trotta.
- Médicos Sin Fronteras (2013). Las heridas menos visibles: salud mental, violenciayconflictoarmadoenelsurdeColombia [Theleastvisiblewounds: mental health, violence and armed conflicto in Southern Colombia]. https://reliefweb.int/sites/reliefweb.int/files/resources/Informe Colombia\_Junio2013.pdf
- Medina, J. L. (2015). *Trauma psíquico* [Psychic trauma]. Ediciones Paraninfo. http://dx.doi.org/10.1023/A:1020181124118
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments & Computers*, 32(3), 396-402. https://doi.org/10.3758/BF03200807
- Oficina de Derechos Humanos del Arzobispado de Guatemala (ODHAG) (1998). *NUNCA MÁS. Impactos de la violencia* [NEVER AGAIN. Impacts of violence]. http://www.remhi.org.gt/portal/
- Pedersen, D. (2002). Political violence, ethnic conflict, and contemporary wars: Broad implications for health and social well-being. *Social Science & Medicine*, 55(2), 175-190. https://doi.org/10.1016/S0277-9536(01)00261-1
- Robben, A. C. (2008). *Pegar donde más duele. Violencia política y trauma social en Argentina* [Hitting where it hurts the most. Political violence and social trauma in Argentina]. Anthropos.
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081. http://dx.doi.org/10.1037/0022-3514.57.6.1069
- Sanandrés, E., & Otálora, J. (2015). Una aplicación de topic modeling para el estudio del trauma: el caso de Chevron-Texaco en Ecuador [An application of topic modeling for the study of trauma: The case of Chevron-Texaco in Ecuador]. *Investigación y Desarrollo*, 23(2), 228-255. http://dx.doi.org/10.14482/indes.23.2.6810
- Sharifi, A. (2016). A critical review of selected tools for assessing community resilience. *Ecological Indicators*, 69, 629-647. http:// dx.doi.org/10.1016/j.ecolind.2016.05.023
- Smith, A. J., Felix, E. D., Benight, C. C., & Jones, R. T. (2017). Protective factors, coping appraisals, and social barriers predict mental health following community violence: A prospective test of social cognitive theory. *Journal of Traumatic Stress*, 30(3), 245-253. http://dx.doi. org/10.1002/jts.22197
- Somasundaram, D. (2004) Short- and Long-Term Effects on the Victims of Terror in Sri Lanka, *Journal of Aggression, Maltreatment & Trauma*, 9(1-2), 215-228. http://dx.doi.org/10.1300/J146v09n01\_26
- Tomás, J. M., Sancho-Requena, P., Oliver, A., Galiana, L. & Meléndez, J. C. (2012). Efectos de método asociados a ítems invertidos vs. ítems en negative [Method effects associated with negatively worded items vs. negative items]. *Revista Mexicana de Psicología*, 29(2), 105-115.
- Vázquez, C. (2005). Reacciones de estrés en la población general tras los ataques terroristas del 11S, 2001 (EE.UU) y del 11M, 2004 (Madrid, España): mitos y realidades [Stress reactions in the general population after the terrorist attacks of September 11, 2001 (USA) and March 11, 2004 (Madrid, Spain): Myths and realities]. *Anuario de Psicología Clínica y de la Salud*, 1, 9-25.
- Villagrán, L. (2016). Trauma psicosocial: naturaleza, dimensiones y medición [Unpublished doctoral dissertation]. Universidad Autónoma de Madrid.
- Whitbeck, L.B., Adams, G.W., Hoyt, D.R., & Chen, X. (2004). Conceptualizing and Measuring Historical Trauma Among American Indian People. *American Journal of Community Psychology*, 33, 119-130. http://dx.doi.org/10.1023/B:AJCP.0000027000.77357.31
- Wlodarczyk, A., Basabe, N., Páez, D., Villagrán, L., & Reyes, C. (2017). Individual and collective posttraumatic growth in victims of natural disasters: A multidimensional perspective. *Journal of Loss and Trauma*, 22(5), 371-384. http://dx.doi.org/10.1080/15325024.2017.1297657