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Objective

To know the dimensionality and internal consistency of the BDTS in high school students of Santa Marta, Colombia.

Background

The brief version of the Davidson Trauma Scale (BDTS) quantifies symptoms after exposure to traumatic events. However, the dimensionality and internal consistency in the Colombian population is unknown.

Materials and methods

A total of 1,462 tenth and eleventh grade students from official and private schools completed the BDTS. We included students between 13 and 17 years old ($M=16.0$, $SD=0.8$), 60.3% female. In the exploratory factor analysis (EFA) were calculated the KMO coefficients, Bartlett's chi-square, communalities, coefficients, eigenvalue and explained variance. In the confirmatory factor analysis (CFA) were estimated the chi-square, RMSEA, CFI TLI and SRMR. The internal consistency of the BDTS was calculated with the Cronbach alpha and McDonald omega coefficients.

Results and Conclusions

In the EFA, the BDTS showed $KMO=0.714$, Bartlett's chi-square= 783.3 ($df=6$, $p=0.001$), communalities were between 0.191 and 0.488, coefficients in the matrix were between 0.438 and 0.699. The factor showed Eigen value of 1.99 that explained 49.7% of the variance. In the CFA, the coefficients were chi squared= 5.921 , $df=2$, $p=0.052$, $RMSEA=0.037$ (CI90% 0.000-0.072), $CFI=0.995$, $TLI=0.985$ and $SRMR=0.011$.

Table 1. Communalities, loadings, corrected correlation and Cronbach alpha if item was deleted.

Item	Commonality	Loading	Corrected correlation with total score	Cronbach alpha if item was deleted
Startle	0.191	0.438	0.36	0.65
Physiological arousal	0.345	0.588	0.46	0.59
Anger	0.488	0.699	0.52	0.54
Numbness	0.321	0.567	0.45	0.59

Cronbach's alpha coefficient was 0.661 and McDonald's omega, 0.691. More results are presented in the table 1. As conclusions, the BDTS shows clearly one-dimensional structural and acceptable internal consistency. It is necessary to observe the performance of this scale in other Colombian populations.