Background: The aim of our studies was to evaluate the psychometric properties of a new measure of self-efficacy, referring to coping with secondary trauma experiences - the Secondary Trauma Self-Efficacy (STSE) scale.

Methods: Study 1 enrolled professionals (N = 247) providing trauma therapy for military clients in the U.S. Study 2 was conducted among health care and social workers (N = 306 at Time 1, N = 193 at Time 2) providing services for trauma survivors in Poland.

Findings: The results of both studies indicated unidimensionality of the scale, its good reliability, good validity, and invariance across two language versions. As expected, STSE correlated highly and moderately with secondary trauma stress. The associations between STSE and perceived social support, secondary traumatic growth, negative beliefs about the world and self were either moderate or low.

Discussion: STSE may constitute a key protective resource promoting well-being among people working with trauma victims.

OBJECTIVE
The aim of our study was to evaluate the psychometric properties of the Secondary Trauma Self-Efficacy (STSE) scale.

Methods:

Participants: Study 1: mental healthcare providers working with returning soldiers in the United States, N = 247 (gender: 33.2%; age: M = 35.41; SD = 8.59).
Study 2: health care and social workers providing services for civilian survivors of traumatic events in Poland, Time 1: N = 306 participants (gender: 71 males, 23.2%; age: M = 35.41; SD = 8.59).
Time 2: N = 193 (gender: 37 males, 19.2%; age: M = 35.05; SD = 8.10).

Table 1: Pearson's Correlations among the Study Variables

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Secondary trauma self-efficacy (STSE)</td>
<td>.23***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Perceived social support</td>
<td>.32***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Secondary trauma stress</td>
<td>.54***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Secondary trauma growth</td>
<td>.14***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Negative cognitions: World</td>
<td>.32***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Negative cognitions: Self</td>
<td>.51***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Direct trauma exposure</td>
<td>.05</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8. STSE (direct exposure partialled out)</td>
<td>.38***</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01, ***p < .001. Statistical significance was set at p < .05. Time 2 includes a partialled-out variable to control for any direct traumatic events after the trauma exposure.

RESULTS

The results of exploratory and confirmatory factor analysis showed unidimensionality of the STSE scale in both studies.

Confirmatory factor analyses: Study 1: one-factor accounting for 55.03% of the variance (sigmasquare = 3.86); Study 2: one factor accounting for 61.54% of the variance (sigmasquare = 5.26) factor loadings for the seven items: between .49 and .85.

Confirmatory factor analyses: Study 1: RMSEA =.071 (90% lower and upper confidence limits: .037 and .106), CFI =.978, TLI =.965 (modled one-factor uncorrelated model - items 4 and 5 covared). Study 2: RMSEA =.050 (90% lower and upper confidence limits: .000, .081), CFI =.991, TLI =.961 (modled one-factor uncorrelated model - items 4 and 5 covared).

The results indicated good internal consistency of the STSE scale and its good stability over time (Study 1: a = .87, Study 2: a = .89 at Time 1, a = .88 at Time 2; the association between the STSE scores at Time 1 and Time 2 in Study 2: r (191) = .65, p < .001).

Secondary trauma self-efficacy correlated highly or moderately with secondary traumatic stress (see Table 2).

The associations between secondary trauma self-efficacy and perceived social support, secondary traumatic growth, negative beliefs about the world and self were either moderate or low (see Table 2).

The STSE factor structure and pattern of correlations with the validity measures were invariant across two studies, which indicated that the STSE scale may be a culturally unbiased instrument (see Figure 1 and Table 2).

CONCLUSION

The results confirmed good psychometric properties of the Secondary Trauma Self-Efficacy (STSE) scale and verify its theoretically assumed unidimensional structure (Bandura, 1997). They also provide evidence that the STSE scale is a robust measure and suggest that secondary trauma self-efficacy may have similar properties and operate similarly across different cultural contexts. Secondary trauma self-efficacy may constitute a key protective resource promoting well-being among people working with trauma survivors – we propose a new measure to assess it.

Figure 1: Final two-group confirmatory factor analysis model of the Secondary Trauma Self-Efficacy scale.

Note: Standardized regression weights (i.e., factor loadings), covariances, and correlation between error variances are presented. In the final model factor loadings and covariances that are not significant were set to zero. Model fit: study 1, numbers before the each other in Study 1; numbers before the each other in Study 2. For more information see Table 2.