

# Development and Validation of the Secondary Traumatic Stress Scale

**Brian E. Bride**

*University of Tennessee*

**Margaret M. Robinson**

**Bonnie Yegidis**

*University of Georgia*

**Charles R. Figley**

*Florida State University*

*Objective: To describe the development and validation of the Secondary Traumatic Stress Scale (STSS), a 17-item instrument designed to measure intrusion, avoidance, and arousal symptoms associated with indirect exposure to traumatic events via one's professional relationships with traumatized clients. Method: A sample of 287 licensed social workers completed a mailed survey containing the STSS and other relevant survey items. Results: Evidence was found for reliability, convergent and discriminant validity, and factorial validity. Conclusions: The STSS fills a need for reliable and valid instruments specifically designed to measure the negative effects of social work practice with traumatized populations. The instrument may be used to undertake empirical investigation into the prevention and amelioration of secondary traumatic stress among social work practitioners.*

**Keywords:** *secondary traumatic stress; vicarious traumatization; scale development*

The psychological effects of direct exposure to extreme and traumatic stressors such as criminal victimization, natural disaster, and war and terrorism are well documented. Dozens of books and hundreds of scientific articles have been published in the major professional journals documenting the nature and dynamics of traumatic stress (Wilson & Raphael, 1993). However, nearly all of those reports focus solely on those who were directly traumatized, excluding those who were traumatized indirectly or secondarily (Figley, 1999). As the field of traumatic stress studies has grown, it has become increasingly apparent that the effects of traumatic events extend beyond those directly affected. The term secondary traumatic stress has been used to refer to the observation that those who come into continued close contact

with trauma survivors, including social workers, may experience considerable emotional disruption and may become indirect victims of the trauma themselves (Figley, 1995). Consequently, secondary traumatic stress is becoming viewed as an occupational hazard of providing direct services to traumatized populations (Figley, 1999; Munroe et al., 1995; Pearlman, 1999).

Secondary traumatic stress has been defined as “the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person” (Figley, 1999, p.10). The negative effects of secondary exposure to a traumatic event are nearly identical to those of primary exposure, with the difference being that exposure to a traumatizing event experienced by one person becomes a traumatizing event for a second person (Figley, 1999). Chrestman (1999) noted that secondary traumatization of clinicians has been hypothesized to include symptoms parallel to those observed in persons directly exposed to trauma, such as intrusive imagery related to the client’s traumatic disclosures (Courtois, 1988; Danieli, 1988; Herman, 1992; McCann & Pearlman, 1990), avoidant responses (Courtois, 1988; Haley, 1974), physiological arousal (Dutton & Rubinstein, 1995; Figley, 1995; McCann & Pearlman, 1990), distressing emotions (Courtois, 1988; Herman, 1992), and functional impairment (Dutton & Rubinstein, 1995; Figley, 1995; McCann & Pearlman, 1990). Thus, secondary traumatic stress is defined as a syndrome of symptoms nearly identical to those of post-traumatic stress disorder (PTSD), including symptoms of intrusion, avoidance, and arousal (Figley, 1999).

Although the body of literature related to secondary traumatic stress among direct service providers is growing (Stamm, 1999), the majority of this literature is conceptual in nature or reports only anecdotal evidence of the phenomenon (Kassam-Adams, 1999). As noted by Kassam-Adams (1999), a primary limitation of the few empirical studies concerning secondary traumatic stress is the extent to which existing measures are sensitive enough to detect differences among professionals with secondary exposure. For the most part, instruments used in research on secondary traumatization were designed to investigate symptomatology among trauma survivors who were directly, rather than secondarily, exposed. Such measures have not been validated or normed on samples of persons who were indirectly exposed to trauma. The Secondary Traumatic Stress Scale (STSS) was developed in response to the paucity of instruments designed to specifically measure secondary trauma symptoms in social workers and other helping professionals.

### DEVELOPMENT OF THE STSS

For the purpose of instrument design, secondary traumatic stress was operationalized as intrusion, avoidance, and arousal symptoms resulting from indirect exposure to traumatic events by means of a professional helping relationship with a person or persons who have directly experienced traumatic events. To maintain congruence with the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (American Psychiatric Association, 1994), conceptualization of the characteristic symptoms of posttraumatic stress and associated features, such as distressing emotions and functional impairment, were excluded from the item pool. It was further reasoned that, taken together, functional impairment and emotional distress might actually correspond to burnout, a related but conceptually distinct construct (Figley, 1999; Pearlman & Saakvitne, 1995; Stamm, 1999). Thus, an initial pool of items based on the *DSM-IV* Criteria B (intrusion), C (avoidance), and D (arousal) for PTSD was developed using the domain-sampling model described by Nunnally and Bernstein (1994). Five experts in the area of secondary traumatic stress reviewed the initial pool of 36 Likert-type items, concurring that the scale had adequate content validity. However, because many more items should be included than are planned for in the final form of the instrument (DeVellis, 1991), additional items were composed to increase the item pool, resulting in a 65-item version of the STSS.

This 65-item version was pilot tested with a convenience sample of 37 direct service providers for the purpose of reducing the item pool. The following steps were employed in analyzing the items: (a) Reliability analyses using SPSS were conducted for each subscale to provide quantitative data regarding item performance; (b) within each subscale, all items corresponding to an individual *DSM-IV* symptom were evaluated quantitatively by examination of the corrected item-total correlation and the resulting coefficient alpha if the item were deleted; (c) concurrently with Step 2, items were qualitatively examined in terms of readability, clarity, relevance, and length; (d) based on the results of Steps 2 and 3, items that performed poorly, either quantitatively or qualitatively, were deleted; and (e) the remaining items were examined for content validity and congruence with the instrument's purpose. Because of the small sample, we were conservative in the reduction of the item pool at this stage, resulting in a 50-item instrument with a coefficient alpha of .97. The obtained coefficient alphas for the Intrusion, Avoidance, and Arousal subscales were .92, .89, and .94, respectively.

In the next stage of instrument development, the 50-item version was completed by 200 alumni of a school of social work located in the southeastern United States for the purpose of identifying items for inclusion in the final

scale version. The previously described procedure for item analysis was again used to reduce the item pool such that only 1 item remained for each of the 17 individual *DSM-IV* symptoms. Using the methodology of structural equation modeling, a model-generating approach to confirmatory factor analysis (Jöreskog, 1993) was employed to test the hypothesized factor structure of the retained items. Results indicated that 2 items loaded on more than one factor; therefore, those items were replaced with items that better represented the hypothesized factor structure of the instrument. The resulting 17-item STSS had a coefficient alpha of .94, and the Intrusion, Avoidance, and Arousal subscales had alphas of .83, .89, and .85, respectively. Although these results were promising, data-driven modifications to instruments may capitalize on chance (Jöreskog, 1993); thus, further investigation into the reliability and validity of the STSS with an independent sample is needed.

The purpose of the present study was to investigate the psychometric properties of the STSS. Three primary research questions guided the study: (a) To what extent are the STSS and its subscales internally consistent? (b) To what extent do the STSS and its subscales correlate with measures of related and unrelated variables? and (c) To what extent do individual items of the STSS represent the factors of intrusion, avoidance, and arousal?

## METHOD

### Sample and Procedure

A list of master's-level social workers licensed in one state located in the southeastern United States was obtained from the state licensing board. From that list, 600 social workers were randomly selected to be included in the sample for the present study. A cover letter, the STSS, additional survey items, and a business reply envelope were mailed to the sample in January 2001. A reminder postcard was sent 1 week following the initial mailing, and a second mailing of the entire study packet was sent out 2 weeks later to those persons whose replies had not been received by the researchers. Of the 600 study packets sent out, 294 (49.6%) completed surveys were returned. However, 7 (1.2%) surveys were excluded from the analysis due to missing data, resulting in an effective response rate of 48.4% ( $N = 287$ ). Study participants had a mean age of 44.8 ( $SD = 10.5$ ) and averaged 16.1 years ( $SD = 9.6$ ) in social work practice. Respondents were primarily female (81.9%) and Caucasian (77.5%).

### Instrumentation

As used in the present study, the final version of the STSS (see Appendix) is a 17-item, pencil-and-paper, self-report instrument designed to assess the frequency of intrusion, avoidance, and arousal symptoms associated with secondary traumatic stress. Respondents are instructed to read each item and indicate how frequently the item was true for them in the past 7 days using a five-choice, Likert-type response format ranging from 1 (*never*) to 5 (*very often*). The STSS is comprised of three subscales: Intrusion (items 2, 3, 6, 10, 13), Avoidance (items 1, 5, 7, 9, 12, 14, 17), and Arousal (items 4, 8, 11, 15, 16). Scores for the full STSS (all items) and each subscale are obtained by summing the items assigned to each. The STSS differs from the many available PTSD measures in that the wording of instructions and the stems of stressor-specific items (items 2, 3, 6, 10, 12, 13, 14, 17) were designed such that the traumatic stressor was identified as exposure to clients. Consistent with the *DSM-IV* criteria for PTSD, other items are not stressor-specific (items 1, 4, 5, 7, 8, 9, 11, 15, 16) but are characteristic of the negative effects of traumatic stress.

In addition to the STSS, participants were asked to complete a 23-item survey seeking information regarding demographics and professional activities. Using 5-point, self-anchored rating scales, respondents were instructed to rate the extent to which their client population is traumatized (*not at all*, *mildly*, *moderately*, *severely*, *very severely*) and the frequency with which their work addresses traumatic stress (0 = *not at all*, 1 = *rarely*, 2 = *occasionally*, 3 = *often*, 4 = *very often*). A list of potentially traumatic events was included in the survey to aid respondents in determining whether their client population was traumatized. The items were designed to measure current, rather than cumulative, exposure to traumatized clients because prior research (Brady, Guy, Poelstra, & Brokaw, 1999) has found a stronger relationship between trauma symptoms and current caseloads than between trauma symptoms and cumulative exposure. In a similar fashion, respondents were instructed to rate the extent to which they have experienced symptoms of depression (0 = *not at all*, 1 = *mildly*, 2 = *moderately*, 3 = *severely*, 4 = *very severely*) and the extent to which they have experienced symptoms of anxiety (0 = *not at all*, 1 = *mildly*, 2 = *moderately*, 3 = *severely*, 4 = *very severely*). Although many standardized measures of depression and anxiety are available, a number of studies have been conducted that demonstrated the positive psychometric properties of single-item measures of depression (Chochinov, Wilson, Enns, & Lander, 1997; Mahoney et al., 1994; Nugent, 1992) and anxiety (Thyer, Papsdorf, Davis, & Vallecorsa, 1984). As such, single-item

indicators of depression and anxiety were selected to minimize response burden and study cost.

## RESULTS

### Reliability

The first research question concerns the internal consistency of the STSS and its subscales. As a measure of reliability, internal consistency is concerned with the homogeneity of the items comprising a scale ( DeVellis, 1991) and is an indicator of how well the individual items of a scale reflect a common, underlying construct (Spector, 1992). Coefficient alpha (Cronbach, 1951) is the statistic most often used to assess internal consistency (Spector, 1992) and was used in the present study, as computed by SPSS. Nunnally and Bernstein (1994) suggest that an alpha level of at least .80 is sufficient for most purposes given that correlations are attenuated very little by measurement error at that level. Furthermore, DeVellis (1991) stated that alpha values between .80 and .90 should be considered very good. Means, standard deviations, and alpha levels for the STSS and its subscales were as follows: Full STSS ( $M = 29.49$ ,  $SD = 10.76$ ,  $\alpha = .93$ ), Intrusion ( $M = 8.11$ ,  $SD = 3.03$ ,  $\alpha = .80$ ), Avoidance ( $M = 12.49$ ,  $SD = 5.00$ ,  $\alpha = .87$ ), and Arousal ( $M = 8.89$ ,  $SD = 3.57$ ,  $\alpha = .83$ ).

### Convergent and discriminant validity

The second research question concerns convergent and discriminant validity. A measure that correlates poorly with variables unrelated to the construct has discriminant validity, whereas a measure that correlates moderately to strongly with related variables has convergent validity (Campbell & Fiske, 1959). Both theoretical (Figley, 1995, 1999; Pearlman & Saakvitne, 1995) and empirical support (Brady et al., 1999; Chrestman, 1999; Kassam-Adams, 1999; Schauben & Frazier, 1995) exists for the contention that increased exposure to traumatized populations is related to increased symptoms of secondary traumatic stress. Specifically, secondary traumatic stress symptoms were related to the percentage of trauma clients on one's caseload (Brady et al., 1999; Chrestman, 1999; Schauben & Frazier, 1995), time engaged in clinical activities with traumatized clients (Brady et al., 1999; Chrestman, 1999; Lee, 1995), and perceived intensity of working with traumatized clients (Arvey & Uhlemann, 1996). It follows that social workers who work with more severely traumatized clients and whose work more

**TABLE 1: Convergent and Discriminant Validity**

	<i>Intrusion Subscale</i>	<i>Avoidance Subscale</i>	<i>Arousal Subscale</i>	<i>Total STSS</i>
<b>Convergent</b>				
Extent ( $n = 281$ ) <sup>a</sup>	.269*	.211*	.260*	.260*
Frequency ( $n = 283$ ) <sup>a</sup>	.225*	.200*	.228*	.232*
Depression ( $n = 284$ ) <sup>a</sup>	.391*	.516*	.461*	.502*
Anxiety ( $n = 284$ ) <sup>a</sup>	.461*	.507*	.563*	.553*
<b>Discriminant</b>				
Age ( $n = 280$ ) <sup>a</sup>	-.098	-.090	-.073	-.093
Ethnicity ( $n = 285$ ) <sup>b</sup>	-.024	-.061	.027	-.026
Income ( $n = 284$ ) <sup>c</sup>	-.135	-.066	-.060	-.095

a. Pearson product-moment coefficient.

b. Point-biserial coefficient.

c. Spearman's rho.

\* $p < .00179$  (two-tailed).

frequently addresses trauma issues would be at increased risk of secondary traumatic stress. Furthermore, there is a high rate of comorbidity of traumatic stress, depression, and anxiety symptoms (Davidson & Fairbank, 1993). Therefore, persons experiencing secondary traumatic stress would be at increased risk of experiencing depression and anxiety symptoms. Conversely, studies have failed to demonstrate an empirical relationship between secondary traumatic stress symptomatology and age (Good, 1996; Knight, 1997; Munroe, 1990; Pearlman & Mac Ian, 1996), ethnicity (Knight, 1997), or income (Pearlman & Mac Ian, 1995).

Thus, claims of convergent validity would be supported if scores on the STSS and its subscales correlated with respondent ratings of (a) the extent to which their client population is traumatized (extent) ( $M = 3.19$ ,  $SD = .87$ ), (b) the frequency with which their work with clients addresses traumatic stress (frequency) ( $M = 3.49$ ,  $SD = .93$ ), (c) the severity of depression symptoms experienced by the respondent in the past week (depression) ( $M = 1.74$ ,  $SD = .79$ ), and (d) the severity of anxiety symptoms experienced in the past week (anxiety) ( $M = .88$ ,  $SD = .85$ ). Furthermore, claims of discriminant validity would be supported if scores on the STSS were unrelated to the demographic variables of age, ethnicity, and income. Because a total of 28 correlations were planned in examination of convergent and discriminant validity, setting  $\alpha = .05$  for each correlation would result in an inflated Type I error risk. Therefore, the Bonferroni technique was used to set the family-wise error rate at  $\alpha = .05$ , resulting in a per comparison alpha level of .00179 (.05/28). The results displayed in Table 1 reveal that significant correlations were obtained between the STSS and its subscales and each of the convergent

variables, although significant correlations were not found between the STSS and its subscales and each of the discriminant variables. Thus, claims for the convergent and discriminant validity of the STSS and its subscales appear to be supported.

It should be noted, however, that the correlations with the extent and frequency variables, although statistically significant, are of a relatively low magnitude. These results may reflect the fact that not all persons exposed to traumatic stressors develop related symptomatology (Yehuda, 1999). The risk of PTSD following exposure to a traumatic event varies depending on the characteristics of both the individual and the type of trauma experienced but as a rule does not exceed one quarter of those exposed (Breslau, 1998). Furthermore, of those persons indirectly exposed to trauma, only 2.2% met the full criteria for PTSD (Breslau, 1998). Because the extent and frequency variables reflect risk factors for secondary traumatic stress, it is possible that the low but significant correlations with the STSS and subscales reflects a low proportion of symptom development in relation to exposure.

#### **Factorial Validity**

The third research question concerns the factorial validity of the STSS and was addressed through the use of confirmatory factor analysis using structural equation modeling (SEM) techniques. Maximum likelihood (ML) estimation, using LISREL 8.3 software, was employed for this analysis using a covariance matrix. ML estimation was chosen because it is the standard method of estimating free parameters in structural equation models, performs well under a variety of less-than-optimal analytic conditions such as small sample size and excessive kurtosis, and is the most widely researched estimator (Hoyle & Panter, 1995). It was hypothesized that confirmatory factor analysis of the STSS would result in the finding that responses to the STSS could be explained by three factors identified as Intrusion, Avoidance, and Arousal.

SEM employs fit indices to provide estimates of how well the data fit the a priori hypothesized model. Because different indices reflect different aspects of model fit, researchers typically report the values of multiple indices. The fit indices selected for the analysis were as follows: (a) the Goodness of Fit Index (GFI), (b) the Comparative Fit Index (CFI), (c) the Incremental Fit Index (IFI), and (d) the root mean square error of approximation (RMSEA). The GFI measures “how much better the model fits as compared to no model at all” (Jöreskog & Sorbom, 1993, p. 122). The GFI is a measure of the relative amount of observed variance and covariance accounted for by the model and is analogous to  $R^2$  in multiple regression analysis (Hoyle & Panter, 1995;

**TABLE 2: Factor Loadings, *t*-values, Squared Multiple Correlations, Means, and Standard Deviations for STSS Items**

<i>Item</i>	<i>Intrusion</i>	<i>Avoidance</i>	<i>Arousal</i>	<i>t-value</i>	$R^2$	<i>M</i>	<i>SD</i>
Item 2	.69			12.70	.47	1.55	.76
Item 3	.58			10.13	.33	1.30	.61
Item 6	.76			14.45	.57	1.70	.89
Item 10	.72			13.56	.52	2.21	1.06
Item 13	.66			11.98	.43	1.34	.64
Item 1		.63		11.47	.40	1.84	.91
Item 5		.71		13.39	.50	1.90	1.03
Item 7		.76		14.67	.57	1.78	.97
Item 9		.70		13.23	.49	1.91	1.04
Item 12		.71		13.51	.51	1.49	.90
Item 14		.72		13.76	.52	2.01	1.00
Item 17		.64		11.60	.40	1.55	.84
Item 4			.63	11.46	.39	1.87	.97
Item 8			.71	13.48	.50	1.52	.79
Item 11			.79	15.68	.63	1.91	.97
Item 15			.73	14.08	.54	2.02	.98
Item 16			.69	12.93	.47	1.57	.88

Kline, 1998). The CFI compares how much better the model fits compared to a baseline model, typically the independence (null) model in which the observed variables are assumed to be uncorrelated (Jöreskog, 1993; Kline, 1998). The IFI is similar to the CFI in that it compares how much better the model fits compared to a baseline model; however, the IFI takes into account the complexity of the model by rewarding more parsimonious models with higher values (Mueller, 1996). The RMSEA takes into account the error of approximation in the population and is a measure of discrepancy per degree of freedom (Byrne, 1998; Jöreskog, 1993). Adequate model fit is represented by GFI, CFI, and IFI values greater than .90 (Hoyle & Panter, 1995) and RMSEA values below .08 (Byrne, 1998). The following values were obtained for the chosen fit indices: GFI = .90, CFI = .94, IFI = .94, and RMSEA = .069.

In addition to fit indices, structural elements of the model such as factor loadings, *t*-values, and squared multiple correlations should also be examined (Jöreskog, 1993). As can be seen in Table 2, each STSS item loads on its intended factor with factor loadings ranging from .58 to .79, and each factor loading is statistically significant ( $\alpha = .05$ ) with *t*-values ranging from 10.13 to 15.68. Examination of the squared multiple correlations ( $R^2$ ) for each item permits an assessment of the extent to which the measurement model is adequately represented by the observed measures. The  $R^2$  values range from .33

to .63 for individual items, indicating that between 33% and 63% of the variance on individual items can be accounted for by the factor to which they are assigned. Furthermore, factor intercorrelations (Intrusion-Avoidance = .737,  $p < .001$ ; Intrusion-Arousal = .784,  $p < .001$ ; Avoidance-Arousal = .831,  $p < .001$ ) are consistent with both the conceptualization of secondary traumatic stress as comprising three related symptom domains and with other empirical investigations of traumatic stress symptoms (Foa, Riggs, Dancu, & Rothbaum, 1993). Given that the selected fit indices are consistent in their reflection of a good-fitting model, the factor loadings are statistically significant and of sufficient size, and the squared multiple correlations are reasonable, the results support the factor structure of the STSS.

#### DISCUSSION AND APPLICATIONS TO SOCIAL WORK PRACTICE

Before considering the application of these results, certain limitations of the study should be discussed. Readers should exercise caution in generalizing the results beyond the study sample, that of licensed social workers in one southeastern state who by definition hold master's degrees in social work. Among those not included in the sample were bachelor's-level social workers, unlicensed social service professionals and paraprofessionals, social workers licensed in other states, and professionals from other disciplines such as psychology, nursing, and psychiatry who also are engaged in helping relationships with traumatized populations. The possibility remains that inclusion of any of these or other groups may have led to different results. Additional studies should be conducted to examine the psychometric properties of the STSS when used with populations different from the present study. Furthermore, although the 48% response rate approaches the 50% recommended by Rubin and Babbie (1997) as an "adequate" response rate for the purpose of analysis and reporting, the possibility remains that the nonrespondents were qualitatively different from the respondents. For example, it is possible that among those sampled, persons who were experiencing secondary traumatic stress symptoms were more likely to respond because the study had personal meaning for them. Alternatively, it is possible that they were less likely to respond due to fear that the act of completing the instrument would increase their distress.

There are also limitations associated with the interpretation of structural equation models. As noted by Kline (1998), good model fit should not be interpreted as having "proved" the hypothesized model. That is, all structural equation models may have equivalent models; therefore, the present

results do not rule out competing models. For example, the present study investigated the factor structure of the STSS as congruent with the three PTSD symptom clusters identified by the *DSM-IV*. According to Cordova, Studts, Hann, Jacobson, and Andrykowski (2000), there have been no published accounts of the use of confirmatory factor analysis to evaluate the replicability of the *DSM-IV* PTSD symptom clusters. However, several studies have assessed alternative models including a four-factor structure (King, Leskin, King, & Weathers, 1998; Sack, Seeley, & Clarke, 1997) and a two-factor structure (Buckley, Blanchard, & Hickling, 1998). The possibility remains that one of these alternative models might better account for the factor structure of the STSS. Future analyses should be conducted in a manner to allow comparison of alternative models such as those mentioned above.

Although beyond the scope of the present study, it will be important to investigate the ability of the STSS to discriminate between persons experiencing secondary traumatic stress and persons experiencing related constructs such as depression, burnout, and traumatic stress reactions resulting from direct exposure. A discussion of the conceptual distinctions between these constructs can be found elsewhere (see Figley, 1995; Hyer, Stanger, & Boudewyns, 1999; Mazza & Reynolds, 1999; Pearlman & Saakvitne, 1995; Stamm, 1999). For instance, a subset of items on the STSS may also measure symptoms of depression, reflecting the overlap in PTSD symptomatology and depression that is evident in their respective diagnostic criteria. Indeed, depressive symptoms appear to be a part of the complex picture of traumatic stress reactions (Hyer et al., 1999). However, the intrusion and avoidance symptoms that are characteristic of traumatic stress reactions are distinctive from the symptomatology of depression and burnout (Mazza & Reynolds, 1999). Thus, taken as a whole, the items of the STSS appear to measure more than depressive symptoms. Similarly, this same subset of items could be seen to reflect symptoms stemming from primary exposure to trauma, although the stressor-specific items clearly indicate that secondary exposure is what is being measured. Nonetheless, care should be taken in interpreting scores until further research is conducted to determine scoring guidelines that would allow discrimination between a person experiencing secondary traumatic stress and a person experiencing symptoms of depression, burnout, or primary exposure to trauma.

Despite these concerns, the STSS is an important contribution toward the development of empirical knowledge regarding the effects of secondary traumatic stress on social workers and their clients. The STSS is a 17-item instrument that provides a useful tool to assess the frequency of secondary traumatic stress symptoms experienced by clinicians. The present study provides beginning evidence of its reliability, convergent and discriminant validity,

and factorial validity. As such, the STSS fills a need for reliable and valid instruments specifically designed to measure the negative effects of exposure to traumatic events through clinical work with traumatized populations. In addition, the STSS has the desirable characteristics of being easy to administer, score, and interpret.

The effects of secondary traumatic stress are believed to impair the ability of clinicians to effectively help those seeking their services (Figley, 1999). Professionals experiencing secondary traumatization are believed to be at higher risk to make poor professional judgements such as misdiagnosis, poor treatment planning, or abuse of clients than those not experiencing secondary traumatization (Rudolph, Stamm, & Stamm, 1997). Furthermore, secondary traumatic stress is one reason why many social workers and other human service professionals leave the field (Figley, 1999). The STSS will allow empirical investigation of such a hypothesis through longitudinal research. In addition, the STSS has the potential to aid our understanding of the development and course of secondary trauma as well as to aid the identification of associated risk and protective factors. However, it is also believed that certain strategies can help to ameliorate the effects of secondary traumatic stress. Such strategies include increased training in direct services with traumatized clients, increased supervision by experienced trauma specialists, more support for trauma workers, and increased use of self-care strategies (Pearlman & Mac Ian, 1995). The STSS can aid the evaluation of strategies designed to reduce secondary traumatic stress and allow for the monitoring of levels of secondary traumatic stress symptoms in social work practitioners.

**APPENDIX  
SECONDARY TRAUMATIC STRESS SCALE**

The following is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement, then indicate how frequently the statement was true for you in the past *seven (7) days* by circling the corresponding number next to the statement.

	<i>Never</i>	<i>Rarely</i>	<i>Occasionally</i>	<i>Often</i>	<i>Very Often</i>
1. I felt emotionally numb.	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients.	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s).	1	2	3	4	5
4. I had trouble sleeping.	1	2	3	4	5
5. I felt discouraged about the future.	1	2	3	4	5
6. Reminders of my work with clients upset me.	1	2	3	4	5
7. I had little interest in being around others.	1	2	3	4	5
8. I felt jumpy.	1	2	3	4	5
9. I was less active than usual.	1	2	3	4	5
10. I thought about my work with clients when I didn't intend to.	1	2	3	4	5
11. I had trouble concentrating.	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients.	1	2	3	4	5
13. I had disturbing dreams about my work with clients.	1	2	3	4	5
14. I wanted to avoid working with some clients.	1	2	3	4	5
15. I was easily annoyed.	1	2	3	4	5
16. I expected something bad to happen.	1	2	3	4	5
17. I noticed gaps in my memory about client sessions.	1	2	3	4	5

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NOTE: "Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, and so forth.

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