

Development of the Vicarious Resilience Scale (VRS): A Measure of Positive Effects of Working With Trauma Survivors

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Objective: Attending to the potential impacts, both positive and negative, of clinical work with trauma survivors on professionals themselves is a crucial aspect of clinical training and supervision. Vicarious resilience refers to unique, positive effects that transform therapists in response to witnessing trauma survivors' resilience and recovery process. This study describes the development and exploratory factor analysis of the first instrument to assess vicarious resilience. **Method:** The Vicarious Resilience Scale (VRS) was developed and administered via electronic survey to 190 helping professionals from around the globe working with survivors of severe traumas, such as torture. **Results:** Exploratory factor analysis yielded 7 factors: Changes in life goals and perspective, client-inspired hope, increased recognition of clients' spirituality as a therapeutic resource, increased capacity for resourcefulness, increased self-awareness and self-care practices, increased consciousness about power and privilege relative to clients' social location, and increased capacity for remaining present while listening to trauma narratives. The Cronbach's alpha reliability of the VRS was .92 and, as hypothesized, the VRS was moderately and positively correlated with posttraumatic growth and compassion satisfaction, indicating convergent validity. The VRS was not significantly correlated with compassion fatigue (CF) or burnout, indicating discriminant validity and that vicarious resilience is a unique construct that is not merely "the opposite" of CF or burnout. **Conclusion:** The VRS possesses sound psychometric properties and can be utilized in supervision and training contexts and for self-assessment by professionals working with trauma survivors to aid the recognition and cultivation of vicarious resilience.

Keywords: compassion fatigue, psychometric assessment, self care, vicarious resilience, vicarious trauma

A major focus of the literature of the field of trauma treatment (Pearlman & Caringi, 2009) has been the stressful effects of trauma work on service providers. Vicarious trauma, empathic stress, secondary traumatic stress, burnout, and compassion fatigue are concepts that identify the toxic processes experienced by trauma therapists and explain how these therapists may develop negative outcomes as a result of their work with trauma survivors. Paying attention to the potential negative impact of trauma work in training and supervision is crucial, as professionals must become aware of their own vulnerabilities, attend to self-care issues, and establish personal and organizational support networks to sustain them through this challenging, and rewarding, work. However, vicarious posttraumatic growth (Arnold, Calhoun, Tedeschi, &

Cann, 2005; Hyatt-Burkhart, 2014) and vicarious resilience (Engstrom, Hernandez & Gangsei, 2008; Hernandez, Engstrom, & Gangsei, 2007; Hernandez-Wolfe, Killian, Engstrom & Gangsei, 2014) draw attention to the *positive* effects traumatic events can have on helping professionals. Specifically, vicarious resilience (VR) offers a balance to the negative effects of trauma work on therapists. This paper describes the development of a self-rated assessment to quantify VR. The dimensions and item content of the Vicarious Resilience Scale (VRS) were drawn from four qualitative studies (Edelkott, Engstrom, Hernandez-Wolfe & Gangsei, 2016; Engstrom, Hernandez, & Gangsei, 2008; Hernandez, Engstrom, & Gangsei, 2007; Hernandez-Wolfe, Killian, Engstrom & Gangsei, 2014) conducted nationally and internationally. Themes from these qualitative studies included (a) reflecting on human beings' capacity to heal, (b) being inspired by clients' recovery from severe traumas, (c) reaffirming the value of therapy, (d) reassessing the dimensions of one's own problems, and (e) valuing spiritual dimensions of healing and recovery.

Literature Review

The concept of VR supports an appreciation of the reciprocal nature of therapy, allowing helping professionals to balance the painful, difficult aspects of trauma work with those that bring hope

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and promote growth. VR is defined as the positive impact on and personal growth of therapists resulting from exposure to clients' resilience (Hernandez, Engstrom, & Gangsei, 2007). National and international qualitative research studies have documented the presence of VR with mental health professionals and teachers working with survivors of severe trauma and family members dealing with the consequences of politically motivated violence, including torture, kidnapping, disappearance, displacement, and youth victims of interpersonal violence (Acevedo & Hernandez-Wolfe, 2014; Edelkott et al., 2016; Engstrom et al., 2008; Hernandez et al., 2007; Hernandez-Wolfe et al.; Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2015; Silveira & Boyer, 2015). VR offers a counterbalance to the focus in research and clinical training on vicarious traumatization, compassion fatigue, and burnout when considering the health and well-being of professionals working in the area of trauma treatment and recovery.

Other efforts to measure the positive and negative impact of working with trauma involve Stamm (2002, 2003) and Stamm and Figley's (2009) model and measure of compassion fatigue (CF) and compassion satisfaction (CS). The Professional Quality of Life Protocol (ProQOL) measures CF and CS associated with the work of helpers working with trauma (Stamm, 2003). Professional quality of life is defined as the quality one feels in relation to one's work as a helper (e.g., health care professionals, social service workers, teachers, clergy, and police officers). Compassion Satisfaction is about the pleasure a helper can experience from helping others and feeling that they are making a positive difference in the world. Compassion satisfaction measures positive affect related to (a) one's perceptions of success as a helper, (b) relationships with colleagues, and (c) sustaining beliefs about one's self and career choices. In contrast, vicarious resilience measures the positive impact of clients' recovery process on therapists' own resilience and growth in seven specific dimensions discussed in the next section.

Dimensions of Vicarious Resilience

Previous qualitative studies (e.g., Hernandez-Wolfe et al., 2014) indicated seven possible dimensions of VR: Changes in life goals and perspectives, client-inspired hope, increased self-awareness and self-care practices, increased capacity for resourcefulness, increased recognition of clients' spirituality as a therapeutic resource, consciousness about power and privilege relative to clients' social location, and increased capacity for remaining present while listening to trauma narratives. Additional studies have offered insights into the need to assess and address the positive impacts of trauma work on therapists. Silveira and Boyer (2015) investigated how bearing witness to clients' resilience during treatment impacts the personal and professional lives of counselors working with young victims of interpersonal trauma. Participants reported positive changes in their personal relationships relative to optimism and hope, putting their own lives in perspective, and being inspired by "the strength of children and youth" (pp. 520–521). Documenting VR among professionals working with refugees and asylum seekers in Australia, Puvimanasinghe, et al. (2015) highlighted the factors of work satisfaction and cultural flexibility (reflexivity of one's own cultural standing and that of one's clients), which mirrored the VR dimensions of motivation to be present with clients and consciousness around power and priv-

ilege. Using three chronological case scenarios with therapists to explore VR relative to attachment trauma, Tassie (2015) concluded that a reflective stance is key in attending to and sustaining VR. Another qualitative study found that therapists operating from a resilience- and strength-based clinical model seemed to experience VR across more dimensions than those using more traditional treatment models (Edelkott et al., 2016). Further, scholars in the trauma and resilience fields (Figley & Kiser, 2013; Pearlman & Caringi, 2009; Puvimanasinghe et al., 2015; Walsh, 2007) have noted the clinical, training, and supervisory relevance of VR, confirming that although working with trauma survivors may carry long term risks such as vicarious trauma and compassion fatigue, it may also bring the positive outcomes of improved skills to reframe and cope with negative events, and inspiration.

Changes in life goals and perspectives. Posttraumatic growth (PTG) refers to a phenomenon of stress producing a *positive* transformation within the self. A person who undergoes a traumatic event or injury may experience a significant level of disruption to their assumptive world and personal narrative, resulting in changes in the way a person experiences everyday life (Tedeschi & Calhoun, 2004). Trauma survivors report positive changes in their life philosophy, reevaluating what really matters in life, experiencing greater compassion for others, and valuing their relationships with friends and family more (Lambert & Lawson, 2013; Samios, Abel, & Rodzik, 2013). Based on PTG, Arnold, Calhoun, Tedeschi, and Cann (2005) posited the concept of vicarious posttraumatic growth (VPTG), which also highlighted the positive effect of trauma work on therapists. In a qualitative study, Hyatt-Burkhart (2014) documented VPTG in a sample of therapists working with traumatized children. Central to VPTG are "changes in self-perception," "interpersonal relationships," and "philosophy of life," which are similar to dimensions of VR. However, VPTG has fewer conceptual dimensions than VR, especially in the areas of how clients' resilience alters therapists' approaches to trauma work.

Client-inspired hope. Clients influence therapists in positive ways and that therapists can experience personal growth as a result of their work (O'Loughlin, 2006). Proposing the concept of reasonable hope, Weingarten (2010) posited that therapists' hope may emerge when they are open to be influenced by the hope expressed by others via the therapeutic conversation and process. Research has focused on how *clients* develop hope as a coping mechanism. In a qualitative study on therapists' experiences of compassion satisfaction and vicarious traumatization, Hunter (2012) identified four themes: the empathic resonance of the therapist, the role investment by the client, the sense of mutual affirmation between them, and the satisfactions and risks of working with trauma. Hernandez et al. (2007) found that mutual affirmation and openness to be influenced by clients point to a positive, reciprocal influence via the therapeutic process and are therefore relevant to VR. Hunter (2012) explained that therapists actively affirmed their clients and felt affirmed in the therapeutic encounter: "The client's level of role investment and the therapist's identification with the client appeared to add to the satisfaction and personal affirmation that the therapist experienced" (p. 222).

Increased self-awareness and self-care practices. Research on vicarious trauma (VT), compassion fatigue, and burnout (Barnett, Baker, Elman, & Schoener, 2007; Smith & Moss, 2009; Stevanovic & Rupert, 2004) has affirmed the vital role of self-care

in therapists' wellbeing. Common behavioral patterns that signify impairment include social isolation, neglecting meal breaks, and putting clients' needs first. Impairment can lead to poor clinical judgment, increased risk of ethical breaches, boundary violations, and inappropriate emotional involvement with clients. Samios, Abel, and Rodzik (2013) suggested that a therapist's ability to recognize the benefits and risks of trauma work may involve emotional self-awareness to navigate when and how to respond in the therapy process. Killian (2008) found that higher emotional self-awareness contributed to lower symptoms of stress and burn-out in clinicians working with trauma survivors. Specific self-care strategies for professionals working with trauma survivors, such as mindfulness and meditation, have been promoted (Mathieu, 2012; Regher & Bober, 2005), as well as body centered therapies (Rubinfeld & Griggers, 2015; van der Kolk, 2014), neurofeedback (Gruzelier, Egner, & Vernon, 2006), and theater (Kisiel et al., 2006).

Increased capacity for resourcefulness. Helping professionals and educators described experiencing a greater sense of personal and professional resourcefulness and self-efficacy after they had begun their work with trauma survivors (Hernandez-Wolfe et al., 2014). A central component of VR is the helping professionals' enhanced sense of their own resilience following the witnessing of their clients' capacity to recover from terrible events and experiences. Rossi, Mortimer, and Rossi (2011) posited that resourcefulness in therapy is a two-way dynamic in which both therapist and client contribute to the development of resilience. Further, in a qualitative Brazilian psychotherapy study, Vandenberghe and Silvestre (2014) identified that therapist positive emotion can improve therapist input in treatment by increasing resourcefulness and cuing efforts for professional development. VRS items tap therapists' increased capacity for resourcefulness and self-efficacy in their work with trauma survivors.

Increased consciousness about power relative to social location. Constantine (2002) defined multicultural competence (MCC) as counselors' demonstration of appropriate levels of self-awareness, knowledge, and skills in working with people from diverse cultural backgrounds, including awareness of cultural values and their sociopolitical significance in terms of privilege, discrimination, and oppression. Constantine (2002) found that racial and ethnic-minority counselor trainees were rated as more multiculturally competent than their European American peers and that prior multicultural training predicted observer-rated MCC, but self-reported MCC did not. Brown (2007) asserted that "[a] psychotherapist's ability to understand how a trauma survivor's multiple identities and social contexts lend meaning to the experience of trauma and the process of recovery comprises the central factor of culturally competent trauma therapy" (p. 3). Equally crucial is the therapist's awareness of his or her own multiple identities and the interaction of these identities with those of their clients in therapy. Further, neuroscience research (Henrich, Heine, & Norenzayan, 2010) has shown that most studies published in top journals about human psychology are based on samples from Western, educated, industrialized, rich, and democratic societies; the domains reviewed included visual perception, fairness, cooperation, spatial reasoning, categorization and inferential induction, moral reasoning, reasoning styles, self-concepts and related motivations. The authors stated that in addressing questions of human nature, researchers should interpret findings of data drawn from these

types of samples with greater caution and an awareness of their cultural encapsulation. We included VRS items tapping therapists' increased consciousness regarding clients' social locations and their overcoming equity challenges involving race, class, sexual orientation, and gender.

Increased recognition of clients' spirituality as a therapeutic resource. Hernandez et al. (2007) and Edelkott et al. (2016) found that therapists reported that attunement to their clients' sense of spiritual support and the role it plays in clients' recovery buoyed their own vicarious resilience. This finding is supported by research on the relationship between religion and spirituality, and physical and emotional wellbeing. We acknowledge that religion and spirituality are different constructs, with religion often being associated with specific theological traditions, ethical teachings and institutions, and spirituality referring to perspectives and practices that emphasize human potential and/or one's relationship with ecology or the cosmos (Hill et al., 2000). For the purpose of this study, our intention is to note that studies have found that both constructs have ties to affect and emotion, are relevant to the study of personality and coping, and can be resources for clients, and therapists.

Often times, people seek answers via their faith and/or through spirituality during challenging times (O'Grady, Kari, & Jeremy, 2012). Evaluating the association of religiosity and spirituality to depressive symptoms in pregnant women, Mann, McKeown, Bacon, Vesselinov, and Bush (2007) found a relationship between greater religiosity/spirituality and fewer depressive symptoms in pregnant women, but the association diminished as social support increased; relative to the relationship between religious participation and postpartum depression, they found that organized religious participation appeared to reduce the prevalence of postpartum depressive symptoms compared with controls not involved in organized religious groups.

Evaluating the efficacy of tai chi as a therapy for a variety of health issues through a meta-analysis of 37 randomized controlled trial studies and 5 quasi-experimental studies, Wang et al. (2014) found that tai chi interventions had beneficial effects on a range of psychological well-being measures, including depression, anxiety, general stress management, and exercise self-efficacy. In a mixed methods study examining the influence of personal mindfulness meditation practice on 40 psychotherapists and their work, Keane (2014) identified several themes, including enhanced attention and self-awareness, improved ability to be present and to attune to clients, and increased awareness of self-care needs. Affirmative religious coping styles were associated with improved positive effects (Hebert, Zdaniuk, Schulz, & Scheier, 2009). Therapists interviewed in the qualitative studies exploring VR consistently indicated the importance of attuning to the spiritual dimension of trauma recovery. Personal mindfulness practices can enhance crucial therapist abilities such as attention and empathy that have a positive influence in the therapeutic relationship. The VRS possesses items tapping therapists' willingness to acknowledge client spirituality as a resource in the therapeutic process.

Increased capacity for remaining present while listening to trauma narratives. According to Colosimo and Pos (2015), the issue of presence in therapy is related to being in contact with reality perceptually or phenomenologically in three domains: embodied experience, the environment external to the body, and the interpersonal field allowing optimal perception of one's self, en-

vironment, and others. Full engagement in each of these domains is needed to promote therapeutic change through three core presence modes as “being here,” “being now,” “being open,” and “being with-and-for the client.” They indicate that factors that interfere with therapists’ presence in session may be: hyper-intellectualization, fear, fatigue, reactivity (interpersonal or intrapersonal), and distractibility. These may appear more easily in working with traumatized clients with complex forms of traumatic stress. However, the authors’ research on VR has shown that when therapists focus on client resilience and growth, their capacity to remain present can also be enhanced. VRS items tap their increased capacity of being present during clients’ trauma narratives.

Hypotheses

There are three hypotheses: (a) as VR is parallel to that of posttraumatic growth, the VRS will correlate significantly and positively with the Posttraumatic Growth Inventory; (b) the VRS will correlate significantly and positively with compassion satisfaction, another construct focusing on positive affect, and effects, resulting from professionals’ efforts to help others; and (c) the VRS will not correlate significantly with compassion fatigue or burnout, as the construct of VR is not merely “the opposite” of the constructs of compassion fatigue or burnout.

Method

Scale Development

The VRS was developed to create a valid measure of VR, and scale content was drawn from three qualitative studies conducted nationally and internationally (Edelkott et al., 2016; Engstrom et al., 2008; Hernandez et al., 2007; Hernandez-Wolfe et al., 2014) exploring VR in trauma therapists working with victims of sociopolitical trauma. These studies focused exclusively on trauma resulting from displacement, civil conflicts, politically motivated kidnappings, and physical and psychological injuries connected to sociopolitical persecution and torture. The participants were ethnically diverse trauma therapists from the U.S and Columbia, and came from the spectrum of mental health professions in the U.S. (counseling, social work, psychology, family therapy), whereas Colombian participants included only psychologists. Six experts in the areas of traumatic stress and resilience, four based in the United States and two in Colombia, were selected based on their publication record and years in the field. The experts suggested revisions of items of the VRS and directed attention to content domains not as thoroughly covered in the first version.

The original VRS comprised 48 items with a 6-point range of responses as follows: Did not experience this (0), Experienced this to a *very small* degree (1), Experienced this to a *small* degree (2), Experienced this to a *moderate* degree (3), Experienced this to a *great* degree (4), Experienced this to a *very great* degree (5). The total score ranges from 0 to 130, with higher scores reflecting greater VR. The directions for the VRS state:

Please reflect on your experience working with persons who have survived severe traumas. Since you began this work, you may have undergone changes in how you view your clients, your approach to this work, and/or your own experience or worldview. Please read each of the following statements about your attitudes, experiences, and how

your view of your life *since you began this work*, and indicate the degree to which you disagree or agree.

Sample

Participants were recruited primarily through two sources: via the listserv from the National Consortium of Torture Treatment programs (NCTTP), and through member organizations of the International Rehabilitation Council for Torture Victims (IRCT). The NCTTP is a U.S.-based network of programs devoted to the prevention of torture, advance the knowledge, technical capacities, and resources for torture survivors living in the United States. The IRCT, based in Denmark, is the umbrella organization for more than 140 independent torture rehabilitation organizations in more than 70 countries. A few participants were invited through smaller professional networks in other countries. Major criteria for participation were fluency in English and at least two years of experience providing direct counseling services to victims of sociopolitically based trauma in clinical and community settings specifically developed for victims of civil unrest. Counseling services vary greatly around the world relative to qualifications, settings, and context in which the service is provided. However, all participants were clinicians and trained community workers who were providing culturally appropriate psychotherapeutic services to groups, families, and individuals who experienced traumatic events, including kidnapping, torture, sexual assaults, and displacement in the context of armed conflict. Participants’ primary role was psychotherapist, but additional roles included medical services, health care assistance, health care–related education, and case management. The project received approval from the Institutional Review Board at Lewis and Clark College and all subjects provided informed consent. Of 280 persons who clicked on the link to the research questionnaire on Survey Monkey, 190 answered the majority of the survey questions, and this group constituted the final sample for the study.

The study sample ($N = 190$) is 72% female and 28% male and had a mean age of 44.43 ($SD = 12.5$). The annual income was \$62,000 ($SD = \$23,000$). Regarding highest degree received, 55% reported having a master’s degree, 22.3% reported having a PhD, 5.5% reported having an MD, 15.2% had a bachelor’s degree, and 2% reported having an associate’s degree. Participants reported having worked as a clinician for a mean of 14.66 years ($SD = 9.4$), with a range of 2 to 45 years working as a helping professional. Participants reported working with persons who have been tortured and/or suffered trauma resulting from sociopolitical conflicts for a mean of 9.68 years ($SD = 7$). The average caseload (client contact hours per week) of the sample was 19.26. Data were collected between 2013 and 2015.

Procedure

The VRS, a demographic questionnaire, the 10-item Posttraumatic Growth Inventory Short Form (PTGI-SF; Cann et al., 2010), and the Professional Quality of Life scale (Pro-QOL III; Stamm, 2003) tapping compassion fatigue, compassion satisfaction and burnout (e.g., “I avoid certain activities or situations because they remind me of frightening experiences of the people I help” and “I get satisfaction from being able to help people”, and “I feel emotionally drained from my work”) were administered to partic-

ipants via Survey Monkey. Additional measures included the Oslo Social Support Scale (OSSS; Dalgard, Bjork, & Tambs, 1995), trauma history questionnaire (Killian, 2008), and items measuring participants' perceptions of their work environment, including a 6-item measure of work morale (e.g., "My agency or organization shows that it values the work that I do"). Cronbach's alpha for the instruments in this study were acceptable for all measures, and were as follows: the VRS (.94), PTGI (.90), trauma history (.70), compassion fatigue (.85), compassion satisfaction (.89), burnout (.92), OSSS (.70), and work morale (.89). All analyses were conducted with SPSS 20.

Results

Factor Analysis and Internal Consistency

Attempting to provide guidelines on sample sizes for exploratory factor analysis (EFA), de Winter, Dodou, and Wieringa (2009) and Ferguson and Cox (1993) suggested an absolute minimum N of 50 and 100, respectively. The robustness of a dataset can also be assessed via consideration of other factors, including the strength of item communalities (Costello & Osborne, 2005) and factor loadings (above .50; de Winter, Dodou, & Wieringa, 2009). Because the subject to item ratio in the current study was 4:1, the seven factors were well defined (de Winter, Dodou, & Wieringa, 2009), communalities were moderate to high (.60 to .80; Costello & Osborne, 2005), and most item loadings on their expected factors were .70 and above, the data set was deemed sufficiently strong for exploratory factor analysis. An EFA was chosen over a confirmatory factor analysis since this was an initial exploration of a quantitative data set collected on the first instrument designed to measure vicarious resilience.

An EFA of the VRS was performed using the maximum likelihood method of extraction with varimax rotation. Maximum likelihood was an acceptable extraction method because the data met the assumption of being relatively normally distributed (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy checks the case to variable ratio for analysis conducted, and the accepted index is over 0.60. The KMO measure for our data set was .884, which is considered very good. In addition, Bartlett's Test of Sphericity produced a very significant Chi-Square of 658.005, $p < .001$, confirming that there were correlations in the data set appropriate for factor

analysis. Visual examination of the scree plot indicated a seven-factor solution explaining 64.6% of the total variance, with the item content of the seven factors corresponding to the seven dimensions described by participants in the qualitative study aforementioned (Hernandez-Wolfe et al., 2014). Table 1 displays the initial eigenvalues, the rotation sums of squared loadings, and total variance explained by the seven component factors.

The VRS was then reduced from 48 to 27 items by two processes. First, items were removed if their factor loading failed to reach .50, or if an item loaded on more than one factor and the difference in loading was less than 0.10. In instances in which an item loaded on more than one factor, and the difference was .10 or greater, the item was assigned to the factor with the higher loading. Second, reliability analyses indicated which items could be deleted to increase the Cronbach's alpha for each subscale, and items were removed until the alpha coefficient for each subscale achieved its highest value. The loadings of the final 27 items on the seven factors from the initial EFA are displayed in Table 2.

The 27-item VRS possessed an internal consistency reliability of .92, a mean of 113 ($SD = 19.56$), a median of 114, and a mode of 110; the three measures of central tendency were very close together, suggesting a normal-like distribution of VRS scores. A t test indicated that there was no significant mean difference on the VRS between female ($M = 113.9$) and male participants ($M = 110.8$), $t = .951$, $p = .343$. The Increased Resourcefulness subscale comprised six items and possessed an internal consistency reliability (Cronbach's alpha) of .86. The Changes in Life Goals and Perspectives subscale comprised six items and possessed a Cronbach's alpha of .88. The Increased Self-Awareness and Self-Care Practices subscale was composed of 4 items and demonstrated an alpha of .83. The Client-Inspired Hope subscale comprised three items, and possessed an alpha of .80. The Increased Recognition of Spirituality as a Client Resource subscale comprised 3 items ($\alpha = .79$). The Increased Consciousness around Social Location and Power subscale comprised 2 items and had an alpha of .84. The subscale Increased Capacity to Remain Present During Trauma Narratives comprised 3 items ($\alpha = .65$). The correlations among the 27-item VRS scale and the seven subscales are displayed in Table 3.

The average intercorrelation was .455, supporting the idea that the construct of VR is composed of seven moderately intercorrelated factors.

Table 1
Total Variance Explained

Component	Initial eigenvalues			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	11.74	33.54	33.54	4.31	12.33	12.33
2	2.78	7.94	41.48	4.20	11.99	24.32
3	2.24	6.40	47.88	3.99	11.39	35.71
4	1.90	5.43	53.31	2.99	8.53	44.24
5	1.49	4.24	57.55	2.57	7.35	51.59
6	1.34	3.82	61.37	2.5	7.16	58.75
7	1.14	3.26	64.63	2.06	5.88	64.63

Table 2
Factor Loadings of Vicarious Resilience Scale Items

Item	Factor						
	1	2	3	4	5	6	7
1. Better able to reassess dimensions of problems	.768						
2. Better able to keep perspective	.766						
3. See life as more manageable	.724						
4. Better able to cope with uncertainties	.691						
5. More resourceful	.578						
6. Learned how to deal with difficult situations	.542						
7. More connected to people in life		.755					
8. Life goals and priorities have evolved		.748					
9. More compassion for people		.731					
10. More time and energy into relationships		.719					
11. Ideas about what is important changed		.656					
12. More mindful and reflective		.603					
13. In tune with body			.755				
14. More time for meditative, mindful or spiritual practices			.752				
15. Better able to assess level of stress			.722				
16. Better at self-care			.722				
17. Inspired by peoples' capacity to persevere				.826			
18. Hopeful about people's capacity to heal and recover from traumas				.787			
19. More hopeful and engaged when focusing on strengths				.626			
20. Clients' spiritual practices source of inspiration					.782		
21. Recognize spirituality as component of clients' survival					.695		
22. Highlight clients' spiritual/religious beliefs to promote resilience					.616		
23. Ethnicity, gender, class, sexual orientation and religion						.823	
24. Race, class, gender, sexual orientation and privilege, access, resources						.800	
25. When experience distressing thoughts am able to just notice them							.749
26. Better able to remain present when hearing trauma narratives							.621
27. Notices client trauma narratives without getting lost in them							.578

Criterion-Related Validity

A Pearson's r correlation procedure was run to find evidence of convergent validity for the 27-item version of the VRS (see Table 4). As hypothesized, the VRS correlated with posttraumatic growth, $r = .54$, $p < .001$, compassion satisfaction, $r = .52$, $p < .001$, and work morale, $r = .22$, $p = .004$, and did not correlate significantly with compassion fatigue, $r = -.035$, $p = .64$ or burnout, $r = -.072$, $p = .34$. In an exploration of other possible associations between VR and personal and social variables of interest, the VRS also did not correlate significantly with trauma history, $r = .04$, $p = .60$, age, $r = .07$, $p = .35$, years working as a clinician, $r = .04$, $p = .58$, or social support, $r = .09$, $p = .41$. To determine how much of the variance of the VRS was accounted

for by variables with which it was significantly correlated, a stepwise regression analysis was run with VRS as the dependent variable and posttraumatic growth, compassion satisfaction, and work morale as the independent variables. PTG and compassion satisfaction (the procedure excluded work morale from the model) accounted for 42.8% (adjusted R^2) of the VRS, $F = 66.44$, $p < .001$.

Discussion

Discussing the literature on trauma and trauma treatment, Radey and Figley (2007) asserted that, "Too often we focus on disorders, psychopathology, dysfunction, and problems. We must balance these negative elements with a focus on altruism, compassion,

Table 3
Correlations Among the 27-Item VRS and Its Seven Subscales

Variable	VRS 27 item scale	Increased resourcefulness	Changes in life goals	Increased self-awareness	Client inspired hope	Increased recognition of spirituality	Increased consciousness of power	Increased capacity to remain present
VRS 27 item scale	1							
Increased resourcefulness	.685**	1						
Changes in life goals	.802**	.479**	1					
Increased self-awareness	.696**	.357**	.435**	1				
Client inspired hope	.596**	.887**	.378**	.300**	1			
Increased recognition of spirituality	.635**	.580**	.396**	.346**	.573**	1		
Increased consciousness of power	.540**	.387**	.320**	.223**	.241*	.324**	1	
Increased capacity to remain present	.579**	.394**	.369**	.331**	.304**	.278**	.299**	1

* $p < .01$ level (two-tailed). ** $p < .001$ level (two-tailed).

Table 4
Correlations Between the VRS and Key Study Variables

Variable	VRS (27 item)	Compassion fatigue	Burnout	Trauma history	Posttraumatic growth	Compassion satisfaction	Work morale
VRS (27 item)	1						
Compassion fatigue	-.047	1					
Burnout	-.068	.701***	1				
Trauma history	.035	.234**	.140	1			
Posttraumatic growth	.551***	-.012	-.075	.135	1		
Compassion satisfaction	.524***	-.224**	-.32***	-.055	.298***	1	
Work morale	.219**	-.027	-.119	-.007	.185*	.215**	1

* $p < .05$ level (two-tailed). ** $p < .01$ level (two-tailed). *** $p < .001$ level (two-tailed).

resilience, success, and thriving” (p. 208). We developed the VRS to measure specific ways in which trauma therapists may be positively impacted by their clients’ resilience and recovery. The 27-item scale was found to have good validity and internal consistency, and exploratory factor analysis provided support for seven factors: changes in life goals and perspectives, client-inspired hope, increased recognition of clients’ spirituality as a therapeutic resource, increased self-awareness and self-care practices, consciousness about power and privilege relative to clients’ social location, increased capacity for resourcefulness, and increased capacity for remaining present while listening to trauma narratives. The seven subscales also demonstrated adequate to very good reliability.

As expected, the VRS correlated moderately and positively with the Posttraumatic Growth Inventory and with compassion satisfaction. These results suggest that the VRS is tapping dimensions related to the positive affect and perceived rewards associated with helping professionals’ work with trauma survivors and changes they experience as a result of this challenging work. Regarding discriminant validity, nonsignificant correlations were found between the VRS and CF, and the VRS and burnout. Because 57% of the variance of the VRS is not explained by compassion satisfaction, posttraumatic growth, and work morale, and because the VRS is not significantly correlated with compassion fatigue and burnout, the instrument appears to be measuring a distinct construct. It is interesting that although the VRS correlated positively with the PTGI, it did not correlate with trauma history, suggesting that personal traumatic events and their effects may not contribute to development of VR in professionals.

Like VPTG, VR taps into an acknowledgment of humanity’s resilience, spiritual broadening, valuing the difference that a therapist can make as a therapists working with trauma survivors and a sense of competence. Witnessing resilience and growth in trauma survivors may positively impact those who work with them by triggering emotions such as hope, joy, and happiness (Manning-Jones, de Terte, & Stephens, 2015). Vicarious resilience uniquely identified additional factors such as increased self-awareness and self-care practices, consciousness about power and privilege relative to clients’ social location, increased capacity for resourcefulness, and increased capacity for remaining present while listening to trauma narratives.

As Hernandez et al. (2014) found, trauma therapists can be potentially transformed by their clients’ trauma and resilience in ways that are positive, even if not pain-free. Vicarious trauma and vicarious resilience may coexist as different times in a therapist’s

life. In their review on VPTG, Manning-Jones et al. (2015) explain that associations have been found between VPTG and secondary traumatic stress. They speculate that an initial experience of shock and shattering of assumptions may provide the foundation to the development of VPTG. Furthermore, they explain that it is possible that VPTG may increase linearly with increases in secondary posttraumatic stress but that VPTG may reach a plateau in spite of changes in secondary posttraumatic stress. The nature of the relationship is still unclear, and further research is needed to better understand the complex and varied ways in which trauma therapists respond to trauma exposure.

Clinical Implications

Reflecting on strengths and positive attributes associated with the total score, and scores on the seven subscales, professionals can assess and look to enhance their capacities to engage in self-care, raise consciousness around issues of relative power and privilege, increase connection with others, and to be present during trauma narratives. A prioritizing of VR and consideration of therapists’ well being may lead to proactive decisions around work-life balance, and adoption of techniques such as mindful meditation, and body awareness. This may, in turn, foster more positive emotions (e.g., gratitude), increased self-compassion, and increased consciousness around privileges professionals may hold by virtue of their social locations. Including VR in the training of trauma therapists has the potential to expand therapists’ recognition of clients’ responses to trauma beyond the therapy room. Self-awareness and self-care are related to compassionate responses to both self and others, and are a factor in the VRS. Thus, in training and supervision, clinicians can learn to habitually expand their therapeutic lens to include positive emotions and beliefs relative to the reciprocal and potentially positive impact of their work with clients. The use of the VRS may enhance professionals’ (a) sense of mutual affirmation within the therapeutic bond, (b) satisfaction, and (c) personal affirmation.

In selecting a useful and robust instrument for the purposes of self-assessment and training, helping professionals and trainers can consider whether an instrument is composed of subscales guided by psychological theory (e.g., grounded theoretical studies regarding resilience in helping professionals), and whether the measure possesses reliability and construct validity. The VRS meets these criteria.

Limitations

Regarding limitations to the present study, shared method variance in the form of using self-report to measure the study's variables may have contributed to the moderate associations observed between the scales of the VRS, the PTGI, and the compassion satisfaction subscale. In addition, it is acknowledged that retrospective documentation of personal or professional changes since beginning work with trauma survivors can be quite subjective, and therefore, is subject to distortion and memory bias.

Future Research

Going forward, additional items can be developed to augment coverage of the factors Increased Consciousness, and Increased Capacity for Remaining Present during Trauma Narratives, and to enhance the reliability of these two subscales. A confirmatory factor analysis in a future study could validate the structure of the VRS and determine if the instrument's structure persists across subgroups of helping professionals working with survivors of other traumas, such as domestic violence and child sexual abuse. The authors intend to test the performance of the VRS by applying item response theory (IRT)-based analyses to further elucidate the measurement properties of the individual items comprising the VRS. Future studies could also suggest possible cut-off scores on the total scale and the subscales for means of comparison and therapist self-assessment. Research could also seek to discover factors that contribute to the development of VR in helping professionals, how VR may impact psychological wellness and well-being in professionals, and whether VR has an impact on professionals' work and organizational commitment.

Future research can study pre- to postchange in helping professionals working with survivors of severe traumas to clearly ascertain the impact of this work on the health, well-being, and resilience of service providers. Finally, the VRS has the potential to be utilized worldwide in settings involving helping relationships in contexts of displacement, war, resettlement, and community rebuilding. In the future, the VRS may make important contributions in the following areas: (a) explaining outcome measures of clinician health and well-being in the research domain, and (b) facilitating the assessment, supervision, and sustaining of helping professionals who work with the severely traumatized in the domain of clinical training.

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