

The Impact of “Training the Trainers” Course for Helping Tsunami-Survivor Children on Sri Lankan Disaster Volunteer Workers

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The authors evaluated the impact of a “training the trainers” course for helping Sri Lankan tsunami-survivor children on education and mental health disaster volunteers. Sixty-two disaster volunteers were randomly

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assigned to either a school-based (ERASE Stress) "training the trainers" course or to an alternative "befriending" program that served as a control group. Participants in the ERASE Stress course significantly improved their perception of self-efficacy as tsunami survivors' helpers (Disaster-Helper Self-Efficacy Scale), self-mastery (Mastery scale), and optimism about their personal future (item from the Children's Future Orientation Scale). In addition, the perceived ability to use cognitive coping strategies (Cognitive Emotion Regulation Questionnaire) such as refocusing on planning, positive reappraisal, and putting the trauma into perspective was enhanced. The ERASE Stress course may be an effective method for strengthening local community capacity to deal with trauma survivors in developing countries.

Keywords: school-based intervention, tsunami, trauma, training the trainers

On December 26, 2004, an earthquake with a magnitude of 9.0 on the Richter scale hit near the western coast of northern Sumatra in Indonesia, causing a tsunami that devastated coastal areas in Indonesia, Sri Lanka, India, Maldives, Thailand, Malaysia, Myanmar, and the eastern coast of Africa. The death toll stood at 270,000, with a further estimated 5 million people directly or indirectly affected. Specific to Sri Lanka, the tsunami killed an estimated 41,000 people, and 5,240 Sri Lankans were reported missing. In addition, 889,000 people were reportedly displaced (4.5% of the population) and were either living with friends or relatives or housed in one of the 262 refugee camps (World Health Organization, 2005).

Such alarming statistics, accompanied by a long history of war, terrorism, and poverty, have resulted in significant ongoing psychosocial needs of the Sri Lankan people (Silove & Zwi, 2005). Furthermore, the tsunami presented multiple long-term stressors, including loss of family, homes, community, and livelihood, resulting in bereavement, lack of social and family support, and lack of a sense of safety at home (Maddern, 2005).

Given growing evidence regarding the adverse impact of exposure to a major natural disaster on affected populations (Norris et al., 2002) and the aforementioned disintegration of social and cultural networks in the Sri Lankan society, the mental health consequences for many of the survivors, particularly children, were expected to be devastating. A recent study corroborated this concern, suggesting a very high prevalence of posttraumatic stress disorders among Sri Lankan children residing in severely affected coastal communities (Neuner, Schauer, Canati, Ruf, & Elbert, 2006). The evident lack of trained mental health workers in Sri Lanka (Kaplan, 2005), coupled with the tendency of victims, particularly children and adolescents, not to seek psychosocial services (Chemtob, Nakashima, & Hamada, 2002; Gurwitch, Sitterle, Young, & Pfefferbaum, 2002), further limited the local government's capacity to provide much needed psychosocial support.

Several months after the tsunami disaster, Psychology Beyond Borders (PBB) was invited by a local organization, Sumithrayo (2006), to assist in the recovery phase. We were asked to provide a community-based program that would be easily disseminated to teachers and applicable within a school setting and be effective in reducing posttraumatic distress in children. We decided to use a school-based intervention, Enhancing Resiliency Among Students Experiencing Stress (ERASE Stress), developed in Israel to help children cope with ongoing terrorism (Berger, Senderov, Horvitz, Sofer-Gelert, & Shendor, 2003). This program was previously adapted and taught in a "training the trainers" format to Palestinian mental health professionals who succeeded in disseminating the program within Palestinian schools in Gaza Strip and the West Bank (Berger & Manasra, 2005).

ERASE Stress is a "universal" school-based intervention (i.e., an intervention that does not employ a selection process based on symptom severity) that has been found to be efficacious in reducing stress-related symptoms of children exposed to war and terrorism (Berger, Pat-Horencyk, & Gelkopf, 2007). The program incorporates psychoeducational materials, skills training, meditative practices, bioenergetic exercises, art therapy, and narrative techniques for reprocessing traumatic experiences. The content of each session is presented in Table 1.

Because we wanted to ensure application of this program to as many youngsters as possible, we used a "training the trainer" cascade model (Aylon & Shacham, 2000). This meant training disaster volunteers to become trainers of teachers for at least 30 teachers in two schools, teachers who would then administer the program to students. Thus, by training 40 people we targeted approximately 24,000 students. An approach similar to our "training the trainers" course was also applied with mental health professionals who were dealing with either natural disasters (Aylon, 2003; Rosenfeld, Cayne, Aylon, & Lahad, 1995) or war and terrorism (Aylon, 2004; Baum, 2005; Gal, 1995). Although anecdotal, these authors reported data regarding the positive effects of the training in terms of lowering the stress levels of participants, increasing their perceived sense of self-efficacy, and enhancing their overall well-being. In addition, two empirical studies directly examined the impact of trauma treatment training on clinicians in the aftermath of the 9/11 terror attacks. Greenwald, Stamm, Larsen, and Griffel (2003) reported significant gains in "compassion satisfaction" and self-competency of school-based mental health professionals following child trauma treatment training. Similarly, Ansel, Neria, Marshall, and Shu (2005) found that clinicians significantly changed their ratings of self-competency in applying specific cognitive-behavioral therapy components following a 2-day intensive training workshop. Because the "training the trainers" course focused not only on learning the ERASE Stress program but also on processing the trainees' trauma-related experiences, enhancing their coping skills and resiliency

Table 1. Enhancing Resiliency Among Students Experiencing Stress
(ERASE Stress)

| | |
|--|--|
| Session 1—Getting Started | Introducing group leaders, participants and the program. Presenting an overview of the program and setting ground rules. Describing the stress continuum in an interactive format. |
| Session 2—Strengthening Your Personal Resources | Identifying students' personal resource profiles and providing them with new coping skills. Learning a model (the M-O-S-T B-A-S-I-C model) for enhancing their coping repertoire. |
| Session 3—Inhabiting Your Body | Learning the role of the body and its function during stress, becoming aware of somatic reactions pertaining to stress, and developing sensory–motor strategies to control the body during stressful situations. |
| Session 4—Knowing Your Feelings | Enhancing students' emotional awareness, identifying and clarifying feelings, and becoming aware of the connections between sensations and feelings. Learning various modalities to express feelings. |
| Session 5—Controlling Your Emotions With Your Mind | Exploring relationships between sensations, thoughts, and feelings, and learning cognitive coping skills. |
| Session 6—Dealing With Fears | Normalizing fears and learning new ways to deal with them and to create an inner sense of safety. |
| Session 7—Dealing With Anger and Rage | Confronting anger and rage and expressing them in a controlled manner. Learning and practicing assertiveness. |
| Session 8—Coping With Grief and Loss | Exploring grief and loss experiences and providing an opportunity to express these feelings within a safe context. |
| Session 9—Building a Social Shield | Exploring social needs and ways to strengthen our support system. Learning to ask for help and to become more emphatic. |
| Session 10—Boosting Your Self-Esteem | Exploring self-image and the way it affects our coping styles. Learning to accept deficits and acknowledge strengths. |
| Session 11—Turning Crisis Into an Opportunity | Becoming aware of negative thought patterns and learning how to reframe them positively. |
| Session 12—Seeking a Better Future | Exploring future dreams and fantasies and learning how to build a plan toward achieving them. Reviewing the program and providing an opportunity for closure. |

strategies, we anticipated significant changes in participants' general sense of self-mastery, optimism, and self-efficacy in helping tsunami-affected children. We also expected the participants to enhance their use of coping strategies.

In this article, we focus on assessing the impact of intensive ERASE Stress “training the trainers” course on educational and mental health disaster volunteers who were exposed to tsunami disaster relief work in 2004. We report on the impact of the ERASE Stress on the students elsewhere.

METHOD

Setting

The ERASE Stress workshop was hosted by a local nongovernmental grassroots organization called Sumithrayo. Sumithrayo (2006) is a Sri Lankan nonprofit, nongovernmental organization dedicated to giving emotional support to those who need it most. This organization trains hundreds of volunteers (some of whom are professionals) to help persons in need, as well as their families, in most major Sri Lankan towns (Ellawala, 2004). Sumithrayo has been especially active and has hosted a number of projects aimed at helping tsunami victims.

Participants

Sixty-two education and mental health volunteer workers who were involved in working with the disaster survivors registered for a training geared to enhance their ability to deal with the tsunami relief effort. They were told that they would participate either in the ERASE training program or in the Befriending program and that the distribution would be random. Participants had been working on-site giving immediate physical help (ranging from recovering and burying bodies to building camps and providing makeshift kitchens) as well as providing emotional support and counseling to survivors and their families.

From the list of 62 participants, 37 were randomly chosen 2 weeks before the training (using the Excel computer application random number generator) to participate in the ERASE Stress training program.

The control group was made up of 25 volunteers who participated in a 32-hr Befriending seminar (Ellawala, 2004) conducted over 2 weekends 1 month after the ERASE Stress training. This Befriending seminar was administered by the same local organization that had sponsored the ERASE Stress program and was led by local psychologists and social workers. We chose the number of participants in the experimental group in order to have the largest possible group we could train and still have a sizable control group.

Of those registered for the ERASE Stress training program, 35 completed the entire 4-day, 30-hr workshop that was given over 2 weekends. Two participants dropped out for personal reasons. All participants who registered for the Befriending seminar completed it.

Training

The training included a 4-day, 30-hr intensive course based on the ERASE Stress program, a school-based intervention geared at enhancing students' coping skills and resiliency strategies for dealing with traumatic stress. The content of each session is presented in Table 1.

The "training the trainers" course provides participants with an opportunity to experience the 12 sessions of the program as if they were the children themselves, as well as to explore ways to effectively deliver the program to children, given the particular context of their educational setting.

The ERASE Stress "training the trainers" course is based on four major components:

1. Processing the volunteer workers' personal and tsunami relief experiences.
2. Enhancing trainers' coping skills and strengthening the group cohesiveness of the trainers.
3. Providing trainers with trauma-related psychoeducational knowledge and techniques to enhance children's coping skills and resiliency strategies.
4. Teaching trainers how to disseminate the knowledge and to apply the learned techniques within the school system and providing them with the opportunity to practice their training skills.

The "training the trainers" course relied on several educational modalities, including

1. Experiential exercises that demonstrated the same procedures that were to be implemented in the classroom with the students.
2. Lectures that presented the rationale of the entire program to the participants and the explanations for each topic to be presented to the students.
3. Skills training practices that required the teachers to apply the skills themselves they would later deliver to students.
4. Simulations of teaching by the participants.

Control Intervention: Befriending

The Befriending seminar is a standard seminar given to many of the Sumithrayo volunteers. In this application, it was a 32-hr seminar administered by mental health professionals. It aimed at giving tools for emotional

support to volunteers working at Sumithrayo. The seminar included lectures and interactive discussions on providing emotional support and emphatic listening, conflict resolution, processing traumatic experiences, parenting, drug abuse, and suicide prevention. Furthermore, the seminar used experiential exercises aimed at enhancing group cohesiveness and empowering the participants. Throughout the seminar, the precepts of cooperation, communication, affirmation, and acceptance were explained and exercised (Ellawala, 2004, pp. 33–36).

The control seminar was a psychoeducational procedure that relied on lectures and discussions rather than the intervention procedure that primarily employed experiential exercises around traumatic experiences, skills training practices, and simulations. Furthermore, the control seminar did not focus on the personal tsunami relief experience of the participants, nor did it provide specific trauma-related knowledge and techniques for enhancing children's resiliency. Finally, the control group also addressed issues such as drug abuse and suicide prevention not specifically addressed in the ERASE Stress intervention. However, the two interventions did provide for a setting designed to empower participants, provide emotional support, and foster group cohesiveness.

Cultural Adaptation

The importance of adapting psychosocial programs to the needs, priorities, and cultural character of local communities has been emphasized (Palmer, 2002; Silove & Zwi, 2005; Summerfield, 1999; Weiss, Saraceno, Saxena, & van Ommeren, 2003). International training guidelines by the International Society for Traumatic Stress Studies recently highlighted the need to be culturally sensitive (Weine et al., 2002). We therefore made every effort to adapt the original Israeli ERASE Stress program to the local Sri Lankan culture and context. We collaborated with several Sri Lankan professionals to assess the suitability of the program for the local culture. We focused on exploring how different emotions are processed and expressed in the Sri Lankan culture, how views are expressed, how experiences and rituals regarding mourning and death are manifested, and how gender issues are dealt with in the society. On the basis of consultations with Sri Lankan professionals, we translated the ERASE Stress manual to Sinhalese and adapted it to the Sri Lankan culture.

For example, in dealing with emotions, we emphasized body processes because we were informed that this is a more accessible mode of emotional expression (Ashraf, 2005) than verbal discourse. Thus, in exploring a variety of emotions during simulations of stressful events (in Sessions 4, 6, 7, and 8),

we found out that alluding to participants' sensations enabled them to become more easily aware of their feelings and to talk about them. This differs from the procedure we have so far used with Westerners where we first talk about the feelings that emerge during the simulations and then allude to their somatic impact on the participants. In coping with the participants' posttraumatic symptoms, we avoided using Western diagnostic labels, which tends to pathologize culturally normative responses (Summerfield, 1999), and made every effort to respect the local systems of coping. For instance, tsunami-related nightmares by survivors, which could have been conceived as a reexperiencing symptom within a Western culture, was given the cultural meaning of revisiting loved ones and honoring their memory within Sri Lankan culture. In so doing, we relied on spiritual and religious conceptualizations in dealing with loss and grief (Ashraf, 2005). In line with this philosophical and spiritual point of view, we also decided to deemphasize diagnostic considerations and pathological reactions and focused more on reframing negative thought patterns and enhancing social and religious rituals such as group prayer and meditation.

Finally, we were very sensitive to gender differences in the Sri Lankan culture, particularly when dealing with issues of authority, assertiveness, and physical expression of emotion. Although we taught women to respect their own views, opinions, and feelings, we explored culturally acceptable ways to express them in a manner that did not directly challenge the masculine authority.

Measures

A questionnaire was compiled and administered before and after the ERASE Stress and Befriending courses. It included 5 demographic items, 1 item on economic status, 2 questions relative to objective exposure, 6 items relative to subjective exposure, 1 item relative to personal optimism, 1 item relating to one's personal sense of self-efficacy facing a possible future tsunami, 5 items relating to one's professional sense of self-efficacy in helping tsunami victims, 8 questions measuring sense of mastery, and 36 items assessing cognitive coping strategies. Gender, age, profession, religion, and marital status were recorded.

Economic status was assessed by asking the participants to rate their household income relative to the average urban Sri Lankan monthly income (23000 LKR, roughly equivalent to \$230) ranging from 1 (*much higher than average*) to 5 (*much lower than average*).

Objective exposure was assessed by asking participants (a) whether or not they had been personally exposed to the tsunami and were injured, and (b) whether or not they had a close relative (friend or family member) who

had been exposed, and if so whether they had been injured or killed during the tsunami.

Subjective sense of exposure was assessed by the Trauma Exposure Questionnaire (Pat-Horencyk et al., 2006), which includes six yes/no questions assessing the degree of subjective exposure by asking whether the participant (a) should have been in the region of the disaster but for some reason was not, (b) was very close to the region when the disaster occurred, (c) was in the region when it occurred, (d) suffered financial loss because of the disaster, (e) intensively followed the situation after the disaster through the media, and (f) was currently in personal contact with victims. Test-retest reliability on the current sample, comparing the first and the second administration of the questionnaire, was high ($r = .97$; $n = 60$). A total subjective closeness measure was also calculated by summing the scores of the previously mentioned questions.

Personal optimism was queried via one item modified from the Children's Future Orientation Scale (Saigh, 1997). This item assessed optimism about one's personal future. This measure was used because we have found that it is significantly associated with self-efficacy in coping with trauma-related stress (Bleich, Gelkopf, & Solomon, 2003, 2006). One 2-week test-retest correlation of this item for a student sample of 30 was $r = .90$ (Bleich et al., 2003).

Personal sense of self-efficacy in the face of a tsunami disaster was assessed using a single item asking participants to indicate if they believed they would know what to do if caught in a tsunami. This item was taken from previous studies assessing the impact of terrorism and adapted to the tsunami disaster. The 2-week test-retest correlation for this item in the terrorism context was $r = .90$ (Bleich et al., 2003). All three previous questions were rated on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much*).

Professional self-efficacy was assessed by the Disaster-Helper Self-Efficacy Scale (Gelkopf, Rifkind, & Berger, 2008). This scale was designed to specifically assess different aspects of sense of self-efficacy in helping tsunami victims and includes five items: confidence, personal difficulty, ability, satisfaction, and sense of capacity as a helper. Each question was rated on a 5-point Likert scale from 0 (*not at all*) to 4 (*very much*). Cronbach's alpha assessing their sense of self-efficacy to help for this scale is .84. Two-week test-retest correlations on this questionnaire in a sample of 70 medical student terrorism victims showed scores ranging from $r = .70$ to $r = .93$ (Gelkopf et al., xxxx).

The Mastery Scale (Pearlin, Lieberman, Menaghan, & Mullan, 1981) assesses a sense of control over one's life in contrast to being fatalistically ruled. Mastery was found to be related to a variety of task engagement variables such as persistence, effort, goal setting, strategy usage, and choice (Berry & West, 1993). It is an eight-item scale with high reliability and validity data

(Robinson, Shaver, & Wrightsman, 1991, pp. 304–306). Answers are rated on a 4-point scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*).

The Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski, Kraaij, & Spinhoven, 2002) is a 36-item questionnaire tapping nine cognitive coping strategies (self-blame, acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal, putting into perspective, catastrophizing, blaming others). The instructions for the questionnaire read as follows: “You have experienced working with tsunami victims. More people have had similar experiences, and everyone deals with them in his or her own way. By means of the following questions, you are asked what you think about your experience in working with tsunami victims.” Subjects indicate on a 5-point scale ranging from 1 (*almost never*) to 5 (*almost always*) the extent to which they make use of a certain coping strategy. These are some of the questions: “I dwell upon the feelings the situation has evoked in me” (rumination); “I think I can learn something from the situation” (positive reappraisal); and “I keep thinking about how terrible it is what I have experienced” (catastrophizing). This questionnaire was particularly suited for our purpose of assessing the ability to regulate cognitively tsunami-related emotionally arousing information because it identifies risk factors and protective factors associated with the development and continuation of emotional and behavioral problems after traumatic experiences (Garnefski et al., 2002). The CERQ has demonstrated that cognitive coping strategies themselves, that is, without the behavioral component, are very capable of predicting a considerable part of the variance in scores of depression, anxiety, and suicidality. Rumination, catastrophizing, and self-blame have been found to be related to reporting symptoms of psychopathology; positive reappraisal, positive refocusing, and putting into perspective have been found to be protective against the emotional impact of trauma (e.g., Garnefski, Kraaij, & Spinhoven, 2001; Garnefski et al., 2002).

The CERQ has been used in many studies assessing negative life events (Garnefski et al., 2001), and we chose it for its sound psychometric properties. Fourteen-month test–retest correlations on a group of 287 adults showed for the different items a range from $r = .48$ to $r = .65$, suggesting that these are stable coping styles and not personality traits. Cronbach’s alpha for the various subscales range from $\alpha = .68$ to $\alpha = .80$.

A professional translator first translated the questionnaire from English into Sinhalese, followed by a back translation. Any divergences were then discussed with the author of the manual (RB).

Data Analysis

Rates are reported as raw numbers, and standard deviations accompany the means. The ERASE Stress and Befriending groups’ pretest

scores (baseline) on demographic, exposure, and clinical variables were compared using two-tailed independent t tests for continuous variables and chi-square tests for categorical variables. We assessed normality with the Kolmogorov–Smirnov Z test and also assessed homoscedasticity with the Levene test for equality of variance on each pretest and posttest variable.

To assess treatment effect, we used an analysis of covariance (ANCOVA) design with the pretest as covariate, the posttest as a dependent variable, and group as a fixed factor. We also present the effect sizes.

For the baseline comparison of demographic and exposure items between the experimental and control group, we adopted the $p = .01$ significance level. A family-wise Bonferroni correction was used for the comparison of before and after measures. We adopted $p < .01$ (.05/4 measures) for the self-efficacy, optimism, and mastery items, and a $p < .006$ (.05/9 factors) significance level for the coping modes.

RESULTS

Sample Characteristics

Most of the participants were female ($n = 46$, 76.7%) and married ($n = 40$, 66.7%). A majority were volunteers, and most were teachers ($n = 43$, 71.7%) with an average or higher than average income. Twenty-six (43.3%) were Buddhist; 22 (36.7%) were Christian. Seventeen (28.3%) had been personally present during the tsunami, and 15 (25.0%) had a close relative who was either hurt or died in the tsunami. Except for a nonsignificant tendency for a higher income level in the experimental group, results suggest no difference between the experimental and control groups on the demographic and exposure variables. This suggests that the groups were of similar backgrounds (see Table 2). Differences between the experimental and control groups showed more personal optimism in the control group, $t(68) = 3.4$, $p < .001$; the experimental group showed more rumination, $t(68) = 5.2$, $p < .001$, and catastrophizing, $t(68) = 4.3$, $p < .001$.

Intervention Effects

Table 3 shows the mean scores on each of the outcome variables at each assessment time (preintervention vs. postintervention) and the results of the ANCOVA analysis. The analysis revealed a significant improvement (while

Table 2. Comparison of Gender, Age, Marital Status, Income, Profession, Religion, and Objective and Subjective Exposure to the Tsunami Disaster in the ERASE Stress Intervention and the Befriending Control Groups

| Variable | ERASE Stress (<i>n</i> = 35) | Befriending (<i>n</i> = 25) |
|---|----------------------------------|---------------------------------|
| Gender, <i>n</i> (%) | | |
| Female | 26 (74.3) | 20 (80) |
| Male | 9 (25.7) | 5 (20) |
| Mean (<i>SD</i>) age (years) | 50.4 (11.8) | 46.2 (13.9) |
| Marital status, <i>n</i> (%) | | |
| Married | 22 (62.8) | 18 (72) |
| Single | 13 (37.2) | 7 (28) |
| Mean (<i>SD</i>) income (range 1–5)* | 2.8 (0.4) | 2.5 (0.6) |
| Profession, <i>n</i> (%) | | |
| Mental health professional | 11 (31.4) | 6 (24) |
| Volunteer/teacher | 24 (68.6) | 19 (76) |
| Religion, <i>n</i> (%) | | |
| Hindu | 4 (11.1) | 6 (24) |
| Buddhist | 16 (45.7) | 10 (40) |
| Christian | 14 (40) | 8 (32) |
| Muslim | 1 (2.9) | 1 (4) |
| Objective exposure, <i>n</i> (%) | | |
| Personally exposed | 10 (28.6) | 7 (28) |
| Close relative exposed and hurt or dead | 7 (20) | 8 (32) |
| Close relative exposed and not hurt | 12 (34.3) | 6 (24) |
| Subjective exposure, <i>n</i> (%) | | |
| Should have been in the region | 9 (25.7) | 5 (20) |
| Was very close to the region | 14 (40) | 7 (28) |
| In the region when occurred | 10 (28.6) | 7 (28) |
| Financial loss | 2 (5.7) | 1 (4.0) |
| Intensively followed through the media | 29 (82.9) | 22 (88) |
| In personal contact with victims | 21 (60) | 9 (36) |
| Total mean (<i>SD</i>) subjective closeness | 2.4 (1.2) | 2.0 (0.9) |

*Significantly different, $t(58) = 2.30, p < .05$.

taking into account a family-wise Bonferroni correction) on personal optimism ($p = .001$), professional self-efficacy ($p = .001$), and sense of mastery ($p = .006$).

Relative to cognitive coping strategies, we observed a significant improvement in refocusing on planning ($p = .001$) and positive reappraisal ($p = .001$). A tendency toward significant reduction in rumination ($p = .01$) and increases in positive refocusing ($p = .04$) and putting in perspective ($p = .02$) was also obtained.

On the basis of Cohen's (1988) classification, small effect sizes were found for increases in personal optimism, sense of mastery, positive refocusing, putting in perspective, positive reappraisal, refocusing on planning, and reduction in rumination. A large effect size was obtained for increase in professional self-efficacy.

Table 3. Comparison of ERASE Stress Training Group ($n = 35$) and Befriending Seminar ($n = 25$) on Optimism, Personal and Professional Self-Efficacy and Mastery, and Cognitive Coping Strategies

| Variable | First assessment <i>M (SD)</i> | Second assessment <i>M (SD)</i> | ANCOVA <i>F(58)</i> | Effect size |
|----------------------------------|-----------------------------------|------------------------------------|------------------------|-------------|
| Optimism, self-efficacy, mastery | | | | |
| Personal optimism | | | | |
| ERASE Stress | 3.1 (0.9) | 3.9 (0.7) | 12.7*** | .18 |
| Befriending | 3.8 (0.8) | 3.8 (0.7) | | |
| Self-efficacy (personal) | | | | |
| ERASE Stress | 3.3 (0.9) | 3.5 (1.0) | 3.4 | .30 |
| Befriending | 3.5 (0.8) | 3.2 (0.9) | | |
| Self-efficacy (professional) | | | | |
| ERASE Stress | 13.1 (2.5) | 15.1 (2.2) | 24.5*** | .60 |
| Befriending | 13.4 (2.6) | 13.2 (2.5) | | |
| Sense of mastery | | | | |
| ERASE Stress | 25.3 (3.3) | 27.7 (3.2) | 8.2** | .13 |
| Befriending | 25.3 (3.5) | 25.7 (3.3) | | |
| Cognitive coping strategies | | | | |
| Self-blame | | | | |
| ERASE Stress | 6.3 (2.0) | 5.3 (1.5) | 1.8 | .03 |
| Befriending | 5.0 (1.9) | 5.1 (1.7) | | |
| Acceptance | | | | |
| ERASE Stress | 12.1 (2.5) | 12.9 (2.9) | 1.8 | .31 |
| Befriending | 12.3 (3.8) | 12.6 (3.2) | | |
| Rumination | | | | |
| ERASE Stress | 11.6 (3.0) | 9.0 (2.5) | 6.3** | .11 |
| Befriending | 9.1 (2.6) | 8.6 (2.6) | | |
| Positive refocusing | | | | |
| ERASE Stress | 11.4 (2.7) | 13.1 (3.3) | 4.4* | .09 |
| Befriending | 9.7 (2.6) | 10.8 (1.9) | | |
| Refocusing on planning | | | | |
| ERASE Stress | 13.9 (3.3) | 16.7 (2.6) | 30.1*** | .36 |
| Befriending | 12.8 (3.7) | 13.1 (3.2) | | |
| Positive reappraisal | | | | |
| ERASE Stress | 14.8 (3.3) | 16.8 (2.9) | 16.0*** | .23 |
| Befriending | 13.4 (3.6) | 13.5 (3.1) | | |
| Putting in perspective | | | | |
| ERASE Stress | 12.0 (3.6) | 13.0 (3.9) | 5.3* | .10 |
| Befriending | 10.3 (3.5) | 10.4 (3.2) | | |
| Catastrophizing | | | | |
| ERASE Stress | 9.0 (2.9) | 7.3 (2.3) | 0.6 | .01 |
| Befriending | 6.1 (1.4) | 6.5 (1.1) | | |
| Blaming others | | | | |
| ERASE Stress | 6.5 (2.3) | 6.0 (1.9) | 0.01 | .01 |
| Befriending | 5.3 (2.7) | 5.4 (2.3) | | |

* $p < .05$. ** $p > .01$. *** $p < .001$.

DISCUSSION

Results showed that participants who completed the ERASE Stress “training the trainers” course significantly improved their perceived level of

professional self-efficacy as a helper of tsunami survivors and their sense of self-mastery; they also developed an optimistic outlook regarding their personal future when compared with a control group.

During the ERASE Stress training, participants acquired practical skills with which to handle students' emotional difficulties, particularly those of the tsunami survivors, and practiced them during the training. Research has shown that active practice changes both skill levels and perception of self-efficacy (Smith, 2000). It is therefore reasonable to assume that this active component of the training may have positively influenced the participants' self-efficacy as disaster workers. These results are also consistent with studies on the impact of trauma treatment training for professional clinicians (Ansel et al., 2005; Greenwald et al., 2003).

In addition, processing trainees' trauma-related experiences coupled with the acquisition of coping skills probably improved the trainees' sense of self-mastery and optimistic outlook about their personal future. Indeed, participants informally reported encountering stressful incidents in between sessions for which they successfully applied the skills and found that they were more capable of handling them. For instance, one participant reported that she was better able to cope with the hospitalization of her elderly mother between the two sessions by using meditative practices, self-talk, and positive imagery. Similarly, another participant related that for the first time she managed to calm herself during a conflict with her husband and was able to maintain an assertive posture during a vocal confrontation with him.

The results of this study also demonstrate that the training enhanced participants' perceived ability to use certain coping strategies such as refocusing on planning and positive reappraisal while simultaneously reducing their tendency to employ ruminative coping. This change may be attributed to the fact that the ERASE Stress program uses cognitive-behavioral treatment components such as reframing, guided imagery with a positive content, distraction techniques, and thought stopping, which may have accounted for the improved coping.

The ERASE Stress course exemplifies the "training the trainers" experiential learning approach (Berger, 2002). This approach focuses simultaneously on strengthening trainer/teacher personal coping skills and practicing dissemination strategies while at the same time teaching children psycho-educational material and new coping strategies. In other words, it is our experience that the best way to implement and disseminate a program is by "trying it first on yourself" and then teaching others how to do it. Such an approach not only enables effective and efficient learning (Berger, Pat-Horencyk, & Gelkopf, 2007; Mainemelis, 2001; Sweta & Sinha, 2005) but, more important, provides participants with a sense of self-accomplishment that serves to increase their motivation to teach and develop training programs for others. Furthermore, by learning generic methods of coping with

stress and trauma, participants acquire skills that are not only applicable to the most recent disaster but also applicable to other stressful situations.

Despite the fact that we had accommodated the program to make it culturally sensitive prior to the training, there were aspects of the program we had to change as the training evolved. First and foremost, the classical cognitive-behavioral treatment confrontational techniques such as “challenging negative thoughts” or “flexing rigid positions” seemed rather inappropriate and relatively ineffective. Further exploration of this issue during the training highlighted the fact that Sri Lankans, who are deeply influenced by Buddhist culture, tend to frame disaster, trauma, and loss as being a natural human experience that should be gracefully accepted (Harris, Hook, & English, 2003; Holtz, 1998). A participant who became rather distressed when describing how she was unable to save her relatives during the tsunami provided a good example. She admitted that she frequently had been haunted by the spirits of these relatives who had been accusing her of abandoning them. Despite her attempts to challenge these “voices” or to ignore them, she was unsuccessful. When one of the religious women in the group suggested that she listen to the spirits, accept their complaints, and make peace with them, she was able to relax and later reported that she was able to sleep well for the first time in months. Thus, the Western, perhaps even Judeo-Christian notion, of “fighting evil thoughts” seemed incompatible with participants’ Buddhist belief of accepting and making peace with one’s destiny. Interestingly, a similar approach has also been introduced by Acceptance and Commitment Therapy (Hayes, 2002), suggesting that human suffering should be accepted rather than challenged or avoided. This approach, not unlike the ERASE Stress program, also uses mindfulness practices as an important part of its intervention.

Another interesting observation was the fact that many of the trainees showed discomfort with receiving compliments and the use of self-affirmations that were part of the program. For example, when we worked on enhancing participants’ self-esteem by having them outline their qualities and using them as self-affirmation statements, they felt rather uncomfortable, suggesting that those activities were not “modest” and, in fact, represented a weakness. In other words, whereas in an individualistic Western society, using self-affirmations can serve as an antidote for negative self-esteem, in the collectivistic Sri Lankan culture these activities are looked on as a sign of weakness, shamelessness, and showing off. Similarly, the inability of Sri Lankan women to express their opinions as freely as men also raised some important cross-gender issues. For this in Session 7 (see Table 1), the assertiveness training seemed to cause some conflicts that needed to be addressed delicately by helping female participants evaluate the context in which these skills should be applied. For example, it became clear that certain modules could not be applied in religious schools.

Finally, the loss of social support networks due to many communities having been dispersed inland and the loss of parents' self-worth as providers and heads of the family led us to put more emphasis on helping children develop social skills, strengthen the social network, and better cope with parental loss of sense of worth. For instance, during Sessions 9 and 10, we focused on developing social skills by learning how to communicate participants' needs without being perceived as selfish (a very important Sri Lankan caveat) as well as how to help others within the community. These skills were practiced by using role-playing situations. In addition, using narrative techniques, we helped participants identify familial sources of inspiration and pride, thus emphasizing the value of elders within their culture.

On the basis of these observations, we suggest that international training programs should spend much more time and effort in learning about the host culture and in adapting their programs accordingly. Trainers should not only become culturally aware and sensitive but also adopt a flexible attitude while teaching in foreign countries. Cultural issues may be addressed within the training sessions, and adequate interventions can be developed in cooperation with the participants.

Study Limitations

This study has a number of limitations. First, the sample size was relatively small. Second, given that the population of this study consisted of a select group of educators and mental health disaster volunteers, the generalizability of the training for professional disaster volunteers is unknown. Third, the measures of optimism and personal self-efficacy were based on single items that might have a limited reliability and validity and might be problematic to interpret. Furthermore, we did not assess which aspects of the program affected the disaster worker. Was it the experiential learning, the specific skills provided by the training (emotional processing, cognitive restructuring, social support enhancement), or a general enhancement in motivation to help and assist trauma victims? Also we did not use any "objective" measure relating to helping skills, such as responses that could be observed during role-playing situations. Finally, it is not known whether this intervention has had any long-term impact on the participants.

Future Directions

The application of "training the trainers" trauma relief and recovery program, particularly in third-world countries where mental health services

are lacking, may be of help to many. Perhaps the most important question is whether the international community is able to strengthen the local educational and mental health providers in the host country. On the one hand, this should be evaluated by monitoring whether information/training dissemination (in our case, a training program for the teachers) prevails long after the international experts leave the country. On the other hand, evaluation should also explore the efficiency of the application of the program in enhancing the resiliency and coping skills of tsunami-affected students.

Given the promising results regarding the positive impact of the training on education and mental health disaster volunteers, future studies should explore what specific components of the program are perceived by the trainees as enhancing their sense of self-efficacy and sense of competence.

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