

Summary

Evaluation of Vicarious Trauma, Secondary Traumatic Stress and Burnout in Aid Workers

Gökce Gürdil Birinci
Anka Danışmanlık

Gülşen Erden
Ankara University

The effects of traumatic events may include the traumatic stress symptoms that have been grouped in DSM-V (APA, 2013) as intrusion symptoms, avoidance, negative alterations in cognitions together with mood and alterations in arousal and reactivity as well as more permanent changes in individual's cognitive schemas regarding the world and the self (Janoff-Bulman & Berg, 1998). Not only those who are directly exposed to traumatic experiences, but also those who witnessed or learned about these experiences via different channels, may be similarly affected (APA, 2013). Thus those who work in jobs that require intense relationship with victims of trauma, may be at risk of being affected indirectly by the traumatic experiences (Bryant & Harvey, 1996; Carlier, Lamberts, & Gersons, 1997; Chamberlain & Miller, 2009; Jackson & Maslach, 1982; Levin & Greisberg, 2003; Pearlman & Saakvitne, 1995a).

Different concepts have been proposed to explain the adverse effect experienced by aid workers. At the fore of these concepts are vicarious trauma, secondary traumatic stress and burnout. These concepts are thought to differ with regard to some significant points. For example, it has been stated that secondary traumatic stress is peculiar to the occupations that include trauma interventions, while burnout may be observed in every job where the interpersonal relationships and work place conditions are stressful (Deighton, Gurriss, & Traue, 2007; Figley, 1995). Additionally, it has been stated that burnout represents the chronic dissatisfaction with workplace conditions, while secondary traumatic stress is not related to the workplace conditions but the traumatic experiences (Schauben & Frazier, 1995).

Comparing vicarious trauma and secondary traumatic stress, it can be said that these two concepts show similarities regarding the explanation of the difficulties experienced, particularly by those who work with victims of trauma. However, while the concept of secondary traumatic stress is based on the symptoms of traumatic

stress (Figley, 1995), the concept of vicarious trauma focuses on the changes in a person's belief system after traumatic events (Pearlman & Saakvitne, 1995a; 1995b). Unlike secondary trauma which can emerge after a single experience with victims of trauma, vicarious trauma develops cumulatively over time. While the symptoms observed in secondary trauma are acute symptoms that emerge instantly and can be healed in a short time, the changes in a person's cognitive schemas caused by vicarious trauma occur cumulatively and tend to be permanent (Figley, 1995; Pearlman & Mac Ian, 1995; Pearlman & Saakvitne, 1995a; 1995b).

The concepts of vicarious trauma and burnout differ in regard to their scope of interest. While burnout can be observed in every job in which the interpersonal relationships and work place conditions are stressful (Leiter & Maslach, 1988; Maslach & Jackson, 1981), vicarious trauma includes the cognitive changes experienced especially by those who work with trauma victims (Pearlman & Saakvitne, 1995a; 1995b). Burnout, representing the chronic dissatisfaction with workplace conditions, can be prevented by appropriate manipulation of these conditions or a change of job (Pearlman & Saakvitne, 1995a; Schauben & Frazier, 1995; Trippany, Wilcoxon, & Satcher, 2003). Conversely it has been stated that vicarious trauma is not associated with workplace conditions (Schauben & Frazier, 1995).

In the relevant literature, an agreement on how to distinguish the concepts of vicarious trauma, secondary traumatic stress and burnout empirically has not yet been reached. In some research it has been stated that the concepts of vicarious trauma and secondary traumatic stress actually represent the same phenomenon (Deighton et al., 2007; Jenkins & Baird, 2002). Moreover, it has been argued that the concepts of vicarious trauma and secondary traumatic stress can be described under the single concept of burnout (Betts Adams et al., 2001; Deighton et al., 2007; Devilly et al., 2009). The present study has

aimed to test whether these three concepts can be distinguished empirically.

It is noticeable that in the relevant literature the relationship between variables such as age, gender, duration of professional experience, case load and personal trauma history and the development of vicarious trauma, secondary traumatic stress and burnout has not yet been clarified. Another aim of the present study is to evaluate the relationships between these variables.

Method

Participants

One hundred and fifty psychologists, lawyers, social services staff and ambulance staff with an average age of 32.91 ($SD = 8.52$) took part in the study.

Materials

Personal Information Form. Information such as participant's length of professional experience, case load and personal trauma history together with demographic information was collected via a personal information form.

Trauma and Attachment Belief Scale (TABS). The TABS, developed by Pearlman (2003) is a six-point Likert-type scale consisting of 84 items. It includes ten subscales named as *self-safety*, *other-safety*, *self-trust*, *other-trust*, *self-esteem*, *other-esteem*, *self-intimacy*, *other-intimacy*, *self-control*, and *other-control*. Adaptation of the scale to the Turkish culture has been carried out by Gürdil (2014) and the Cronbach Alpha internal consistency coefficient of the scale has been found to be .93.

Post-Traumatic Stress Symptom Scale (PTSSS). The PTSSS, developed by Şahin, Batıgün and Yılmaz (2001) is a four-point Likert-type scale consisting of 36 items. It includes the three subscales of *cognitive avoidance*, *intrusive thoughts* and *physiological arousal*. The PTSSS has the internal consistency coefficients for the whole scale and the subscales between .89 and .91 (Şahin, Batıgün, & Yılmaz, 2009).

Maslach Burnout Inventory (MBI). The MBI, developed by Maslach and Jackson (1981), is a five-point Likert-type scale consisting of 22 items. The MBI, which has been adapted to the Turkish culture by Ergin (1992), includes three subscales of *emotional exhaustion*, *desensitization* and *reduced personal accomplishment*. The internal consistency coefficients of the inventory are calculated to be .83 for emotional exhaustion, .65 for desensitization and .72 for reduced personal accomplishment.

Procedure

The questionnaires were sent to and collected from the participants via e-mail. In order to determine the probable which may occur over time regarding vicari-

ous trauma, secondary traumatic stress and burnout, data was recollected approximately four months after the first application.

Results and Discussion

While the participants' vicarious trauma and secondary traumatic stress levels were determined to be low, burnout level was found to be high. Considering these results, it may be suggested that the concepts of vicarious trauma and secondary traumatic stress represent different experiences from burnout.

Participants' TABS and PTSSS total scores were found to be positively correlated at a significant level ($r = .58, p < .01$). Similarly, TABS and MBI total scores were found to be positively related ($r = .64, p < .01$). Furthermore, PTSSS and MBI total scores were found to be positively and significantly related ($r = .50, p < .01$). Given that the correlation coefficients between TABS, PTSSS and MBI total scores were not strikingly high, it may be suggested that the concepts of vicarious trauma, secondary traumatic stress and burnout represent distinct experiences that have some similarities.

Among TABS, PTSSS, MBI total and subscale scores, only the MBI-desensitization scores were determined to be significantly related to age ($r = -.21, p < .05$). Among TABS total and subscale scores only the self-trust ($r = -.16, p < .05$) and self-intimacy ($r = -.16, p < .05$) scores were found to be significantly related to duration of professional life. None of the PTSSS total and subscale scores were found to be significantly related to the duration of professional life. Regarding the MBI scores, only the desensitization scores were determined to be significantly related to length of professional life ($r = -.20, p < .05$). Participants' length of working experience with trauma workers was found to be related only to TABS-self-intimacy scores ($r = -.21, p < .01$) among TABS, PTSSS, MBI total and subscale scores. Considering all these results together, it can be suggested that with regard to the indirect trauma effects on aid workers, age and experience cannot be viewed as noticeably protective factors.

Participants' severity of personal trauma was determined to be significantly related to TABS-self-safety ($r = .21, p < .05$) and TABS-other-esteem ($r = .16, p < .05$) scores in a positive way. Moreover, the TABS total scores of participants with trauma history ($Md = 214$) were found to be higher than the scores of those without trauma history ($Md = 202.5$) ($U = 1714, z = 2.32, p = .020$). Regarding the TABS subscales, the self-safety scores of participants with trauma history ($Md = 32$) were determined to be higher than the scores of those without trauma history ($Md = 28.5$) ($U = 1616.50, z = 2.73, p = .006$). Similarly, participants with trauma his-

tory scored higher on other-safety ($Md = 19$) than those without trauma history ($Md = 17$) ($U = 1577$, $z = 2.90$, $p = .004$). Additionally, participants with trauma history scored higher on other-trust ($Md = 22$) than those without trauma history ($Md = 17.5$) ($U = 1604$, $z = 2.78$, $p = .005$). The other-esteem scores of participants with trauma history ($Md = 23$) were found to be higher than the scores of those without trauma history ($Md = 21$) ($U = 1740$, $z = 2.21$, $p = .027$). These results indicate that aid workers with trauma history may be more at risk with regard to the development of vicarious trauma.

Participants' total and subscale scores of PTSSS all showed a significant positive relationship with personal trauma severity. Furthermore, the PTSSS total scores of participants with trauma history ($Md = 18$) were found to be higher than the scores of those without trauma history ($Md = 5.5$) ($U = 1170$, $z = 4.60$, $p < .001$). Regarding the subscales, the intrusive thoughts scores of participants with trauma history ($Md = 7$) were determined to be higher than the scores of those without trauma history ($Md = 2$) ($U = 1201.5$, $z = 4.49$, $p < .001$). Similarly, participants with trauma history scored higher on physiological arousal ($Md = 6$) than those without trauma history ($Md = 1$) ($U = 1316.5$, $z = 4.01$, $p < .001$). Moreover, participants with trauma history scored higher on cognitive avoidance ($Md = 4$) than those without trauma history ($Md = 1$) ($U = 1436.5$, $z = 3.52$, $p < .001$). These results indicate that the personal trauma history of aid workers may increase the risk of secondary traumatic stress.

Participants' total and subscale scores of MBI all showed a significant positive relationship with personal trauma severity. However, none of these scores differed significantly between the groups with and without trauma history. Thus it may be suggested that personal trauma history may not be an important risk factor for burnout. The fact that personal trauma history, which caused significant differences on vicarious trauma and secondary traumatic stress measures, did not lead to any significant difference on burnout measures supports the argument which holds vicarious trauma and secondary traumatic stress as distinct concepts from burnout.

In order to determine whether the TABS, PTSSS, MBI total and subscale scores differ with gender, Mann-Whitney U test was conducted. The TABS-self-intimacy scores of men ($Md = 23$) were found to be higher than the scores of women ($Md = 22$) ($U = 1924$, $z = 2.12$, $p = .034$). Moreover, men scored higher on MBI-reduced personal accomplishment ($Md = 19$) than women ($Md = 18$) ($U = 1889$, $z = 2.26$, $p = .024$). The TABS, PTSSS, MBI total scores and other subscale scores did not vary significantly with gender. Considering these results, it may be suggested that male and female aid workers who work with victims of trauma may be affected at similar

levels by the traumatic experiences which they witness.

In order to determine whether the TABS, PTSSS, MBI total scores differ between professional groups, Kruskal-Wallis test was carried out. The TABS total scores varied significantly between the professional groups ($\chi^2(3, n = 150) = 23.14$, $p < .001$). While the results of multiple pairwise comparisons did not show any significant difference among the scores of lawyers ($Md = 221$), social services staff ($Md = 214$) and ambulance staff ($Md = 234.5$), the scores of psychologists ($Md = 189$) were found to be significantly lower than the scores of other professional groups. Participants' PTSSS total scores did also differ with professional group ($\chi^2(3, n = 150) = 25.26$, $p < .001$). Multiple pairwise comparisons showed the scores of psychologists ($Md = 7$) to be significantly lower than the scores of social services staff ($Md = 18$) and ambulance staff ($Md = 30$), but they did not differ significantly from the scores of lawyers ($Md = 16$). Additionally, no significant difference was seen among the scores of lawyers, social services staff and ambulance staff. Participants' MBI total scores did also differ according to professional group ($\chi^2(3, n = 150) = 14.77$, $p = .002$). The results of multiple pairwise comparisons showed the scores of psychologists ($Md = 44.5$) to be significantly lower than the scores of lawyers ($Md = 57$), but they did not significantly differ from the scores of social services staff ($Md = 52$) and ambulance staff ($Md = 52$). Additionally, no significant difference was determined among the scores of lawyers, social services staff and ambulance staff. Considering these results altogether, it may be stated that psychologists may be at less risk than other aid workers regarding vicarious trauma, secondary traumatic stress and burnout.

The differences among the TABS, PTSSS, MBI total and subscale scores of those who have low, moderate and high levels of case load were evaluated via Kruskal-Wallis test. None of these scores was found to be significantly differing according to the level of case load. Considering these results, it may be suggested that frequent encounters with victims of trauma may not be a prominent risk factor by itself with regard to the occurrence of indirect trauma effects on aid workers. Many other variables which have not been discussed in the present research such as inadequacy of on-the-job training and supervision, stressful workplace conditions, not being able to utilize functional coping mechanisms or inadequacy of social support may be contributing to indirect trauma experiences of aid workers.

The average TABS, PTSSS, MBI total and subscale scores obtained in pre and post-tests were compared with one-sample t-test. As a result, only TABS-self-trust and TABS-self-esteem mean scores were determined to significantly differ between pre and post-tests. These results indicate that the experiences of vicarious trauma, sec-

ondary traumatic stress and burnout cannot be clearly distinguished as being acute or chronic. However, these results may stem from the insufficient time span between the two applications. Studies conducted with longer time

intervals between the two applications or with more than two applications may reveal results indicating that secondary traumatic stress levels change, while vicarious trauma and burnout levels remain constant.