# EMDR TECHNIQUES AND BEHAVIORAL THERAPY IN GROUP TRAINING DEALING WITH STRESS

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#### **SUMMARY**

**Background:** This paper is to demonstrate the application of techniques of Behavioral therapy and EMDR (Eye Movement Desensitization and Reprocessing) in training on effective stress management in a group setting. To show how the Effective Stress management training aimed to improve individual resources may be useful in order to prevent the accumulation of daily stress and consequently development of the psychological disorders.

Subjects and methods: The subjects were 87 adults, 9 men and 78 women. The stress management training has been held in the period between 2017-2018 with the employees and the external associates of JU Medical School in Bihać and the users of the Centre for Research and education "Nahla" Bihać. The training was delivered in the group setting over two days, and consisted of: psychoeducation about stress mechanisms, self- evaluation of the stress and the burnout levels; recognition of the symptoms, identification of the potential stressors; practice of the techniques, diaphragmatic breathing, progressive muscular relaxation, and 4 elements of stress management, and EMDR technique intended to strengthen internal resources when facing a perceived stressful situation. The evaluation of the course was done using the Lickert scale from 1-5; completely disagree to completely agree.

**Results:** The result showed that 92% of the participants strongly agreed with training being beneficial, with 8% agreed. The participants also answered the question on the application of these techniques in their everyday life.

**Conclusions:** Based on the outcomes of the study, observation and positive reaction of the participants during the training, we can conclude that the integration of Behavioral techniques with the EMDR resource building can be a useful tool for self-help in the situations of increased stress.

Key words: EMDR - behavioral therapy - stress

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#### **INTRODUCTION**

Stress and the effects of stress on mental health are increasingly being talked about, written, and researched in all parts of the world. The reasons for this are the growing awareness of the individual about the significant role of its cumulative effects in the development of mental disorders, as well as physical illnesses. Numerous authors have dealt with the theoretical conceptualization of stress. Among the first and most important is Hans Seley (1956) who explained the term stress as the bodily effect of any stimulus that seriously disturbs the balance of the organism. It is this phenomenon that we call the stress response today. One of the earliest explanations implies that stress is a relationship between a person and the environment in which a person perceives an aspect of the environment as threatening, in the context of potential loss or challenge to their strength, with characteristic changes in psychophysiological balance (Lazarus & Folkman 1984). The same event will cause different intensities of stress in different people. The results of previous research indicate that this depends on personality characteristics, individual interpretation of meaning and assessment of the importance of a particular event, perception of the degree of threat, and one's own ability to influence it. Accordingly, the individual chooses a strategy for coping with perceived stress, on which the

S24

outcomes further depend both for himself and his environment. The set of reactions to the threat Selev (1956) conceptualizes through the so-called. General adaptation syndrome which he describes in three stages. The first phase involves an alarm response that lasts from several hours to several days and in which the body's defenses last longer than normal, and accordingly, there is a mobilization of bodily processes such as increased adrenal activity, cardiovascular and respiratory functions. If stress continues, a resistance phase follows where resistance to stress stimuli is relatively maintained but resistance to other stimuli decreases. However, if exposure to stressful stimuli becomes continuous, there is a decrease in the capacity for adaptation, which over time leads to a phase of depletion of the organism and a decline in the immune system (Honkonena et al. 2006, Melamed et al. 2006). The results of the research increasingly indicate that stress, through its long-term effects on the nervous system, samples significant structural and functional changes in the brain (Ghodrat et al. 2014). Furthermore, one of the significant long-term consequences of workplace stress is burnout syndrome. It is caused by chronic exposure to stressors in the workplace and represents a significant problem in professions that are cognitively and socio-emotionally demanding. This term was first used by Freudenberger (1974) to describe the physical and mental state of exhaustion in

supportive occupations. Accordingly, the results of previous research shows that the risk of developing this syndrome is increased in mental health professionals such as dialectical-behavioral therapists (Jergensen 2017), counselors (Somoray et al. 2017), then especially those who work with traumatized individuals diagnosed with PTSD (Garcia et al. 2016). Burnout at work is an increasingly present phenomenon in teaching professions with significant both individual and social consequences (Hudek Knežević et al. 2011). In addition to numerous causes of stress, the negative impact of disturbed interpersonal relationships at work and a phenomenon called interpersonal strain as one of the key predictors of burnout at work have been increasingly investigated (Borgogni et al. 2012). It is described as a feeling of discomfort and disconnection in interpersonal relationships resulting in prolonged emotional and social pressure (Schaufeli 2006).

For all reasons above, it is clear that it is necessary to focus on strengthening existing and building new resources of the individual in modern society, in order to be able to adequately meet the demands of everyday life and maintain perceived pressure within their own tolerance to stress.

In Bosnia and Herzegovina (BH), after the war (1992-1995), when whole population experienced numerous severe trauma, lot of different mental health problems occurred as the consequences of surviving this historical period. Many individuals who work with traumatized people are in need to upgrade their capacities of own tolerance to working stress. The collective need to expand capacity to cope with stress is continual. Though, with the help of enthusiasts from Trauma Aid UK (earlier HAP UK & Ireland) education in EMDR psychotherapy organized in Bosnia and Herzegovina. So, the first training of EMDR for the BH mental health professionals was organized in 2009, and in 2014 Association of EMDR Therapists in Bosnia and Herzegovina was established (Hasanović et al. 2018, 2021).

This paper aims to present the training of effective coping with stress, the aim of which was to strengthen the resources of the individual in preventing the accumulation of stress in everyday life, and thus the development of mental disturbances and disorders.

#### SUBJECTS AND METHODS

#### Subjects

A total of 87 adults were included, of which nine were men and 78 were women. Out of the total number of participants, 51 (58.6%) are employees and external associates of the Public Institution (PI) of the Medical School Bihać, and 36 of them (41.4%) are users of the services of the Center for Research and Education "Nahla", Bihać. All participants are employed.

#### Instruments and techniques

The Questionnaire for Self-Assessment of Stress Levels (Girdin, Everly & Dusek 1996), the Questionnaire for Determining the Level of Burnout Syndrome at Work (Freudenberger 1974), and the Evaluation Questionnaire for Assessing Training Satisfaction were applied.

The stress self-assessment questionnaire contained 10 statements and participants assessed the presence of certain behaviors on a scale of 1 to 4, where "1" means that stress symptoms are not pronounced, "2" that they are rarely expressed, "3" that they are frequently expressed, and "4" that they are always present and expressed. The total score on this questionnaire is expressed as the sum of all responses so that the range of scores ranges between 10 and 40. The total score of 25 to 40 indicates a high level of stress that can significantly exhaust an individual mentally and physically. Furthermore, the Workplace Burnout Syndrome Level The Questionnaire consists of 15 statements and participants rated the presence of a particular behavior on a scale of 1 to 5, where the total score is also expressed as the sum of all responses so that the score range is between 15 and 70. The results of the questionnaire indicate: up to 25 individuals feel well, from 25 to 35 individuals are in the risk zone, from 36 to 50 increased risk for burnout syndrome, from 51 to 65 indicates involvement with burnout syndrome (there are serious signs of permanent exposure to stress), and above 65 complete combustion.

The evaluation satisfaction assessment questionnaire consisted of 10 statements, where participants rated the level of satisfaction with the training on a scale of 1 to 5, where "1" means completely dissatisfied and "5" means completely satisfied. Completion of all questionnaires was anonymous, and participants had the opportunity to gain insight into their stress situation by evaluating the first two questionnaires themselves.

Furthermore, several relaxation techniques have been applied, namely: abdominal breathing, progressive muscle relaxation (Jacobson 1939), the "Light Beams" technique (Shapiro 2001), and the "Eye Movements Desensitization and Reprocessing" technique. EMDR): four elements for coping with stress (Shapiro 2007).

#### Procedure

Stress coping trainings were conducted in the period from 2017 to 2018. The method of group guided work was applied. The training program was conducted during two full-day seminars and consisted of several parts: psychoeducation on the mechanisms of stress, self-assessment of stress intensity and burnout levels at work, exercises on recognizing their own symptoms, identifying stressors and coping mechanisms, practicing relaxation techniques such as technique light rays, abdominal breathing, and progressive muscle relaxation, and finally practicing the use of four elements for stress management according to the EMDR technique, which involves building the resources of an individual to cope with perceived stress.

### RESULTS

Average age of participants M=39.01 (SD=4.81) years. Out of a total of 87 participants, 80 (91.95%) have a university degree (VSS), 3 (3.45%) a university degree (VŠS), and 4 (4.60%) a high school diploma (SSS).

 Table 1. Results of the Stress Self-Assessment Questionnaire

Stress level	Number of participants	%		
< out of 25	17	19.54 %		
> out of 25	70	80.46 %		
In total	87	100%		

Table 1 shows that as many as 80.46% of participants reported the presence of a high level of stress, while only 19.54% of participants rated their own stress level within desirable limits.

From Table 2 we see that 19.54% of participants in training feel good, but that as many as 55.17% of participants estimate that they are in the risk zone for

the development of burnout syndrome, 17.24% that they are at significantly increased risk, then that they 6.89% feel severe involvement with burnout syndrome, while 1.15% of participants are in the phase of complete burnout.

Table 3 shows that 95.41% of participants reported complete satisfaction with the way they work and preparedness of educators in the conducted group training for coping with stress. Furthermore, 98.85% of participants reported that they were completely satisfied with psychoeducation on the mechanisms of stress, and 94.25% of them with a workshop on recognizing their own stress symptoms. All participants reported that they were completely satisfied with the Light Beam and Abdominal Breathing technique. Regarding the technique of progressive muscle relaxation, 58.62% of participants expressed that they were mostly satisfied with it, while 39.08% of them were completely satisfied with it. Of the total number of participants, 96.55% expressed complete satisfaction with the application of the EMDR technique: four elements for coping with stress, 62.1% of participants assessed that the content of the training is fully useful and applicable in dealing with stress in everyday life, while 37.9% of them estimated that it was mostly applicable. Training expectations were fully met in 93.11% of participants, while 6.89% of them were mostly met.

Table 2. Results of the Questionnaire for determining the level of burnout syndrome

	< 26	26-35 I degree burnout	36-50 II degree burnout	51-65 III degree burnout	> od 65 IV degree burnout
Number	17	48	15	6	1
%	19.54	55.17	17.24	6.89	1.15

Table 3. Results of the Evaluation (	Questionnaire to assess the level of satisfaction with training
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Claims	l not at all	2	3	4	5 completely
			N (%)		1 5
Contentment with the way of work on training				4 (4.59)	83 (95.41)
Contentment with the readiness of educators				4 (4.89)	83 (95.41)
Contentment with psychoeducation				1 (1.15)	86 (98.85)
Contentment with the workshop on recognizing the symptoms of stress				5 (5.75)	82 (94.25)
Contentment with relaxation technique: light rays					87 (100)
Contentment with abdominal breathing technique					87 (100)
Contentment with the technique of progressive muscle relaxation			2 (2.29)	51 (58.62)	34 (39.08)
Contentment with the EMDR technique: 4 elements for coping with stress			1 (1.15)	2 (2.29 %)	84 (96.55)
Assessing the usefulness and applicability of training content in everyday life				33 (37.9)	54 (62.1)
Fulfillment of training-related expectations				6 (6.89)	81 (93.11)

# DISCUSSION

In the field of modern approaches, the importance of strengthening the resources of the individual for more efficient coping with stress in everyday life is increasingly considered. The more he manages to maintain the perceived pressure within his "window of tolerance" on stress, the more functional and efficient he will be, both personally and professionally. Based on the results of the Questionnaire on self-assessment of the level of stress intensity and determination of the level of burnout syndrome filled in by the participants of this group training, it is clear that there is a well-recognized need for psychological interventions in such programs. In the overall sample, women are significantly more represented than men, but in addition to the fact that women are more likely to verbalize the difficulties they face every day, as well as seek help, they are more represented in teaching occupations, which are represented by 68.96% of participants in the sample.

Behavioral (Abdominal Breathing, Progressive Muscle Relaxation) and EMDR (Light Rays, Four Elements for Stress Management) therapy were integrated into the stress management training in order to make a significant change in the classical approaches to this type of training and thus increase the likelihood of their use. The highest degree of satisfaction on the part of the participants was assessed for abdominal breathing techniques, light rays, and four elements for coping with stress. Satisfaction was expressed, but lower compared to previous techniques, also for progressive muscle relaxation. During this part of the training, participants reported on their impressions and predicted difficulties in applying this technique in everyday life, and the objections were mainly due to the duration and enabling conditions for their implementation (especially in the workplace).

Significant interest from participants was observed during the application of the four-element stress management technique, which includes the application of the Disturbance Scale (SUDs) and one type of bilateral stimulation used in EMDR. It is a stimulation through the Butterfly Hug method, which is specific due to the ease of self-administration. It is primarily intended for processing traumatic content, either individually or in a group regardless of age (Artigas et al. 2000, Jarero et al. 2008). It has been shown that, compared to individual techniques of the same content, through four elements such as earth (grounding), air (breathing), water (saliva production) and fire (the path of imagination leading to a safe place) individuals acquire knowledge and skills more efficiently about setting your body to react to stress support by relaxation, as well as to easily remember what has been learned at a given moment (Shapiro 2009). The participants of the conducted training easily accepted and adopted this technique, including its constituent components.

Since the participants assessed that the content of the training was useful and applicable in everyday life, it is recommended to meet again with the same group in order to monitor their application of learned techniques, and at certain points in time to encourage self-evaluation of stress levels and burnout.

# CONCLUSIONS

Based on the obtained results on satisfaction with the training, assessed possibilities of applying techniques adopted during its implementation, acceptance and positive reactions of participants shown during the training process, it is concluded that the integration of behavioral and EMDR techniques can be a useful tool for self-help in situations of individuals with increased stress. By innovating the classic approaches nurtured in education on coping with stress, both individually and in groups, we enable individuals to empower and build resources, create resistance to stressful stimuli, and generally easier and more efficient adoption of functional knowledge that will be able to apply in everyday life.

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#### Contribution of individual authors:

- Vildana Aziraj Smajić: conception and design of the manuscript and interpretation of data, literature searches and analyses, clinical evaluations, manuscript preparation and writing the paper;
- Cornelia de la Fosse: made substantial contributions to conception and design, literature searches and analyses, participated in revising the article and gave final approval of the version to be submitted.

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