

The role of mindfulness and emotion regulation in prediction of post-traumatic stress Disorder in firefighters

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Abstract

Objective: The purpose of this study was to predict post-traumatic stress disorder based on mindfulness and cognitive-emotional regulation in firefighters.

Method: Participants included 100 firefighters in Mashhad (Iran) who were voluntarily selected through targeted sampling. Data were collected by Traumatic stress questionnaire, Cognitive –Emotional Regulation questionnaire (CERQ-P), and Five Factor Mindfulness Questionnaire (FFMQ's). For data analysis, descriptive indices, Pearson correlation test, and stepwise regression analysis were performed using the SPSS-19 software.

Results: The results showed a positive and significant correlation between posttraumatic stress disorder and ineffective cognitive-emotional regulation and a negative and significant relationship with mindfulness ($p < 0.01$). The results of multiple regression analysis showed that ineffective cognitive-emotional adjustment was 38.8% of the total score of variance and in the presence of mindfulness variable, 48.8% of the total score of the variance of post-traumatic stress disorder was explained.

Conclusion: The results of this study indicated the importance of mindfulness and cognitive-emotional regulation as psychological and emotional skills in reducing posttraumatic stress in firefighters; therefore, providing training based on mindfulness raising and cognitive-emotional regulation in firefighters led to reduction of symptoms of post-traumatic stress disorder.

Keywords: Keywords: Firefighters, post-traumatic stress Disorder, PTSD, mindfulness, emotion regulation.

Introduction

Firefighting is one of the key jobs in crisis management. Post-traumatic stress disorder has a high prevalence among firefighters because they are always faced with various accidents and injuries. Post-traumatic stress disorder eventually leads to changes in emotional and cognitive processes such as memory, attention, planning and problem solving. Avoiding thoughts about harmful events and low mindfulness can play an important role in the symptoms of post-traumatic stress disorder in people who are injured. Mindfulness may seem to act as a protective factor. Researches show the role of ineffective emotional regulation and mindfulness in the emergence and continuation of post-traumatic stress disorder and the also the lack of research in the field of relationship between cognitive-emotional regulation and mindfulness and post-traumatic stress disorder among Iranian

firefighters. The main purpose of this research is to investigate the role of two strategies for cognitive-emotional regulation and mindfulness in dealing with stress and its effects and consequences in firefighters' lives. By revealing the factors involved in predicting and preventing post-traumatic stress disorder, in addition to enriching the research background, the next step is to develop the interventions which focus on aforementioned variables.

Method

In this research, mindfulness and emotion regulation are considered as predictive variables and PTSD symptoms as the criterion variable. Participants included 100 firefighters from the city of Mashhad which were selected through voluntarily targeted sampling. In order to collect data, the traumatic stress questionnaire and Cognitive –Emotional Regulation questionnaire (CERQ-P) and Five Factor Mindfulness questionnaire (FFMQ) were used. The descriptive indicators, Pearson correlation and regression analysis were used to analyze the collected data.

Findings

The results indicate a positive and significant correlation between post-traumatic stress disorder and ineffective cognitive-emotional regulation and a negative and significant relationship between post-traumatic stress disorder and mindfulness ($P < 0/01$). The results of a stepwise multiple regression analysis indicated the dysfunctional cognitive-emotional regulation accounts for 38.8% of the overall distribution of variance in post-traumatic stress disorder and in presence of the mindfulness variable, 48.8% of the total score of the post-traumatic stress disorder variance was explained.

knowledge and the mind set of excitement as the psychological and emotional skills in reducing stress in firefighters. So the provision of training to promote mindfulness and mind-based cognitive and emotional adjustment in the firefighters may lead to reduce the symptoms of post-traumatic stress disorder. Mindfulness training is effective in helping patients to cope with difficult emotions. Mindfulness increases the level of acceptance, creating a sense of emotion away from judgment and less guilty, but recognizing that there is no need for emotions to be controlled or suppressed, but they can be tolerated and experienced. Mindful individuals can respond to hard-working conditions without doing unproductive and non-adaptive behaviors.

Future orientations

Due to the limited amount of post-traumatic stress disorder in this study, it is suggested that the role of emotional regulation and mindfulness in post-traumatic stress disorder should be considered in other vulnerable businesses. Also, due to the prominence of emotional regulation components' role in predicting post-traumatic stress disorder, it is suggested that more attention should be paid to teaching emotion regulation strategies to people exposed to harmful events as well as injured people. According to the present research, the implementation of the targeted behaviors in line with setting up the negative emotions and resorting to adaptive strategies emotion regulation predicts both the reduction of post-traumatic stress disorder symptoms; therefore, it can be concluded that empowering people who are at risk for post-traumatic stress disorder can be anticipated in terms of emotional regulation skills. On the other hand, according to the findings, the emphasis on the use of training techniques based on emotional regulation strategies in post-traumatic stress disorder patients to improve their empowerment as soon as possible is also suggested.

References

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	R2	B	SEB	β	t	P
step one						
Inefficient cognitive-emotional regulation	0.388	1.197	0.15	0.623	7.9	0.001
The second step						
Inefficient cognitive-emotional regulation and Mindfulness	0.485	0.482	0.11	-0.334	-4.28	0.001

Variable	1	2	3	4
Post-traumatic stress disorder	1			
Mindfulness	-0.0514**	1		
Effective cognitive-emotional regulation	-0.016	0.217*	1	
Inefficient cognitive-emotional regulation	0.623**	-0.357**	0.149	1

Discussion

Post-traumatic stress disorder is one of the most common anxiety disorders in firefighters, which is associated with several factors in preventing its occurrence or its severity and durability. The results of the present research indicate the importance of

