



Personality effective factors in reducing PTSD in earthquake in order to develop a structural model in Kermanshah city

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Abstract

Aim: The present study was conducted with the aim of determining the role of personality factors in predicting the symptoms of post-traumatic stress disorder in people exposed to trauma. **Methods:** The current research method was the type of correlation designs and structural equation modeling method. The statistical population in this research included all the earthquake victims of the recent Kermanshah earthquake, whose number is about 21,000 people. According to Morgan's table, 377 people were selected as simple random sampling. The data were obtained using the Mississippi PTSD citizenship scale (Kian et al., 1988) and the five-factor personality questionnaire (Costa & McCree, 1985). In order to describe the research variables, standard deviation, average, skewness and kurtosis indices were used. Frequency and percentage indicators were also reported for demographic characteristics. It should be mentioned that SPSS software was used for descriptive analysis. In the inferential part, in order to test the hypotheses of the research, modeling of structural equations with Amos software was used. **Results:** The results showed that the components of adaptability, conscientiousness and openness had a negative effect on PTSD, the relationship between adaptability and PTSD was directly equal ($t=-3.97$ and $\beta=-0.18$), the relationship of conscientiousness It is directly equal to PTSD ($t=-3.84$ and $\beta=-0.17$) and the relationship of openness with PTSD is directly equal to ($t=-4.49$ and $\beta=-0.20$). Also, the results show that the neuroticism component had a positive effect on PTSD, the relationship between neuroticism and PTSD is directly equal ($t = 9.23$, $\beta = 0.41$). **Conclusion:** It can be concluded that the results of the statistical test showed that the fit indices of the research model are in a favorable condition. Also, the components of adaptability, conscientiousness and openness have had a negative effect on PTSD, and the component of neuroticism has had a positive effect on PTSD.

Keywords: *personality, post-traumatic stress disorder, earthquake.*

Introduction

One of the factors influencing the development of post-traumatic stress disorder is a person's personality traits (Matson, James and Engdahl, 2018). Most of the current research on personality has focused on the five-dimensional model of personality, which classifies people's personality traits into five dimensions: extraversion, adaptability, conscientiousness, neuroticism, and openness and openness to experience. Extraversion refers to a person's ease in relationships. Extroverted people enjoy being with others and being in large groups and tend to be bold, active and talkative (Hafs et al., 2020). They like simulation and excitement and are usually shy; Adaptability refers to respect for others. Compatible people are compassionate towards others, honest and eager to help others and believe that others are useful to other people, on the other hand, incompatible people are hesitant, deceitful, competitive and self-centered; Conscientiousness and conscientiousness indicate a person's reliability. Conscientious people are focused, determined, and tend to be dependable, hardworking, achievement-oriented, and healthy. In contrast, people who score low in conscientiousness tend to be more hedonistic, distracted, and subservient to their desires (Belidron et al., 2019). They prefer a less organized environment; Neuroticism is the desire to experience emotions such as fear, sadness, confusion, anger, and anxiety. Along with these feelings, neurotic people tend to be prone to irrational ideas and have less ability to control their negative emotions and adapt poorly to stress. People who score low in neuroticism are emotionally stable, calm, gentle, and self-controlled; Openness and acceptance of experience implies a person's interest and fascination with new phenomena and experiences. Such people are creative, curious and sensitive. People on the other side of the spectrum are more comfortable in familiar situations (Tiller et al., 2006).

There is a lack of indigenous studies on psychological problems after accidents in the country, and the most common and important disorder discussed in these cases is post-traumatic stress disorder. Therefore, what we are looking for in this research is to determine the effect of personality factors in reducing post-traumatic stress disorder in the earthquake in Kermanshah that happened in the last few years. Therefore, the current research question is: Do personality factors play a role in predicting post-traumatic stress disorder symptoms in people exposed to trauma?

Method

The current research method was the type of correlation designs and structural equation modeling method. The statistical population in this research included all the earthquake victims of the recent Kermanshah earthquake, whose number is about 21,000 people. According to Morgan's table, 377 people were selected as simple random sampling. The data were obtained using the Mississippi PTSD citizenship scale (Kian et al., 1988) and the five-factor personality questionnaire (Costa & McCree, 1985). In order to describe the research variables, standard deviation, average, skewness and kurtosis indices were used. Frequency and percentage indicators were also reported for demographic characteristics. It should be mentioned that SPSS software was used for descriptive analysis. In the inferential part, in order to test the hypotheses of the research, modeling of structural equations with Amos software was used.

Results

The demographic findings of the study showed that 214 people (56.7%) of the sample of this study were women, and 163 people (43.2%) were men. Also, most people in the sample group were 31 to 40 years (36.3%).

Among the dimensions of personality traits, the highest average is related to neuroticism.

In general, in working with the AMOS program, each of the indicators obtained alone are not the reason for the suitability or lack of suitability of the model, and these indicators should be interpreted together. The values obtained for these indicators show that the model is in good condition regarding explanation and fitting. The components of adaptability, conscientiousness and openness harm post-traumatic stress disorder, the relationship between adaptability and post-traumatic stress disorder is directly equal ($t=-3.97$ and $\beta=-0.18$), the relationship between conscientiousness and post-traumatic stress disorder from trauma is directly equal ($t=-3.84$ and $\beta=-0.17$) and the relationship of openness with post-traumatic stress disorder is directly equal ($t=-4.49$ and $\beta=-0.20$); all relationships are significant at the 99% confidence level. Also, the results of the argument show that the neuroticism component had a positive effect on post-traumatic stress disorder, the relationship between neuroticism and post-traumatic stress disorder is directly equal ($t = 9.23$ and $\beta = 0.41$) and at the confidence level 99% is significant.

Conclusion

Because neurotic people are prone to experiences such as mental distress, irrational beliefs, unattainable desires and inconsistent responses, they also make negative evaluations when facing traumatic events and experience more negative and undesirable emotions. Post-traumatic stress disorder can also be among the consequences of such emotions that arise specifically after experiencing traumatic events. On the other hand, one of the characteristics of a personality that can act as a buffer against traumatic events is resilience or the degree of cognitive flexibility. Since this trait is one of the components of openness to experience, it can be expected that people exposed to a traumatic event without impairment in this trait have a high score. Finally, the personality factor of conscientiousness also includes characteristics such as adequacy, orderliness, self-discipline, etc. Each feature can also be a way to deal with traumatic stress and protect a person from emotional distress, including post-traumatic stress disorder (Cox et al., 2004).

After facing a psychological injury, neurotic people with mental ruminations about the incident, emotional avoidance, high guilt about the incident, and maladaptive coping strategies increase the possibility of long-term effects of the injury, especially post-traumatic stress disorder. On the other hand, people with his conscientiousness trait do not put themselves in situations they feel guilty about later. Secondly, with positive characteristics such as positive emotions, self-discipline, and high self-confidence, these people can effectively face a traumatic event and suffer less from its long-term effects (Karvatkov, 2008).

People with low adjustment try to avoid thoughts, feelings, or conversations related to the trauma and activities, places, or people that remind them of the trauma. In addition, they show a significant reduction or lack of interest in dealing with important matters and feel alienated among others. Also, limiting the range of their emotional states and that this disorder affects social and occupational functions or other important areas of work significantly disrupts the person. Due to the problems they have in adapting to the environment, they feel threatened and difficult, and while experiencing stress, sometimes they react untimely and try to distance themselves from the ambiguous stimulus. It seems that when faced with an ambiguity or an ambiguous issue, reactions from the ear to a strong ringing are triggered in this group of patients. Finally, it should be noted that in unstable people, emotional instability and imbalance, the possibility of aggressive reactions, complaints of numerous physical pains, anxiety, obsession, self-deprecation, lack of

independence, lack of vitality and guilt are seen. This causes stress in them to intensify (Holiva & Tarier, 2001).

Considering the extent of post-traumatic stress disorder, it is suggested that this research topic be implemented in other types and cities. It is suggested that the moderating role of post-traumatic stress disorder should be investigated in future research. In order to find out the causes and factors affecting post-traumatic stress disorder in Kermanshah earthquake victims and to complete the findings of this research, it is necessary to conduct in-depth qualitative research (Ali Yari, 2016).

Based on research findings, empowering people at risk of post-traumatic stress disorder in terms of emotion regulation skills can effectively prevent the disorder. On the other hand, according to the findings, more emphasis on applying techniques based on the training of emotion regulation strategies in people who have post-traumatic stress disorder to recover and empower them as quickly as possible is proposed as a suggestion. Based on the research findings, in clinical applications, it is possible to strengthen the use of cognitive evaluation strategies in the regulation of emotion in earthquake victims, thereby reducing the symptoms and improving the health of earthquake victims and the quality of life of these people. In general, the results of this research show the role of personality traits in predicting post-traumatic stress disorder in Kermanshah earthquake victims, so paying attention to personality components in the clinical screening of these people can be beneficial in improving the disorder.

References

- Bleidorn, W., Hill, P. L., Back, M. D., Denissen, J. J., Hennecke, M., Hopwood, C. J., & Roberts, B. (2019). The policy relevance of personality traits. *American Psychologist*, 74(9), 1056.
- Bomyea, J., & Lang, A. J. (2016). Accounting for intrusive thoughts in PTSD: Contributions of cognitive control and deliberate regulation strategies. *Journal of Affective Disorders*, 192, 184–190. <https://doi.org/10.1016/j.jad.2015.12.021>
- Hughes, D. J., Kratsiotis, I. K., Niven, K., & Holman, D. (2020). Personality traits and emotion regulation: A targeted review and recommendations. *Emotion*, 20(1), 63.
- Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National Estimates of Exposure to Traumatic Events and PTSD Prevalence Using DSM-IV and DSM-5 Criteria: DSM-5 PTSD Prevalence. *Journal of Traumatic Stress*, 26(5), 537–547. <https://doi.org/10.1002/jts.21848>
- Kothgassner, O. D., Goreis, A., Kafka, J. X., Van Eickels, R. L., Plener, P. L., & Felnhofner, A. (2019). Virtual reality exposure therapy for posttraumatic stress disorder (PTSD): a meta-analysis. *European journal of psychotraumatology*, 10(1), 1654782.
- Mattson, E., James, L., & Engdahl, B. (2018). Personality factors and their impact on PTSD and post-traumatic growth is mediated by coping style among OIF/OEF veterans. *Military medicine*, 183(9-10), e475-e480.
- Schweizer, S., & Dalgleish, T. (2011). Emotional working memory capacity in posttraumatic stress disorder (PTSD). *Behaviour Research and Therapy*, 49(8), 498–504. <https://doi.org/10.1016/j.brat.2011.05.007>
- Vicario, C. M., & Felmingham, K. L. (2018). Slower Time estimation in Post-Traumatic Stress Disorder. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-017-18907-5>
- White, S. F., Costanzo, M. E., Blair, J. R., & Roy, M. J. (2015). PTSD symptom severity is associated with increased recruitment of top-down attentional control in a trauma-

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exposed sample. NeuroImage: Clinical, 7, 19–27.
<https://doi.org/10.1016/j.nicl.2014.11.012>