

## EXAMINATION OF THE FACTORS INFLUENCING POST-TRAUMATIC SYMPTOMS IN THE LONG-TERM AFTERMATH OF THE FEBRUARY 6TH KAHRAMANMARAŞ EARTHQUAKE

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**BACKGROUND AND AIM:** The objective of this study was to ascertain the prevalence of trauma symptoms in individuals residing within the seismic region 18 months after the February 6th 2023, Maraş earthquake, and to examine the factors contributing to these symptoms.

**METHODS:** The study included 339 participants who experienced the earthquake. The participants were administered sociodemographic data form, Traumatic Stress Symptom Scale (TSSC), and Earthquake Stress Coping Scale (ESCS). Ethical approval was obtained from NEU Ethics Committee(199-2024/5025).

**RESULTS:** According to the TSSC, 20% (n:68) of the 339 participants were determined to have possible PTSD (pPTSD). In the pPTSD group, rate of damage or destruction in the home ( $p=0.003$ ), rate of women ( $p=0.006$ ), rate of loss of life in relatives ( $p=0.003$ ), rate of property loss( $p<0.001$ ), and rate of receiving psychiatric support( $p=0.012$ ) were significantly higher. The pPTSD group demonstrated significantly lower positive reappraisal ( $p<0.001$ ) and seeking social support ( $p=0.018$ ) subscores compared to the non-PTSD group. TSSC scores were negatively correlated with positive reappraisal ( $r=-0.26$ ,  $p<0.001$ ), seeking social support ( $r=0.14$ ,  $p=0.01$ ), and

religious coping ( $r=-0.19$ ,  $p=0.03$ ) subscores of the ESCS among all participants. Regression analyses revealed that the presence of long-term pPTSD was predicted with being female(Exp(B)=2.1,  $p=0.02$ ), loss of life in relatives (Exp(B)=1.84,  $p=0.49$ ), property loss (Exp(B)=2.26,  $p=0.01$ ), and the need for psychiatric support (Exp(B)=2.59,  $p=0.002$ ). Additionally, positive reappraisal(Exp(B)=1.12,  $p=0.006$ ) and seeking social support (Exp(B)=1.14,  $p=0.03$ ) coping mechanisms were shown to decrease the risk of developing pPTSD.

**CONCLUSIONS:** Current research suggest that traumatic symptoms may persist long after major natural disasters. Consequently, the provision of psychological support services, the enhancement of social support networks, and the dissemination of stress management methods following disasters such as earthquakes should be sustained over an extended period in high-risk regions. It is anticipated that the findings of this study will serve as a guide for researchers, clinicians, and policymakers, facilitating the development of effective strategies for the management of post-disaster mental health needs.

**Keywords:** Coping mechanism, earthquake, post-traumatic symptoms