

Posttraumatic growth after earthquake: A systematic review and meta-analysis

By: Amiri, H (Amiri, Hadis)^[1]; Nakhaee, N (Nakhaee, Nouzar)^[2]; Nagyova, I (Nagyova, Iveta)^[3]; Timkova, V (Timkova, Vladimira)^[3]; Okhovati, M (Okhovati, Maryam)^[4]; Nekoei-Moghadam, M (Nekoei-Moghadam, Mahmoud)^[5]; Zahedi, R (Zahedi, Razie)^[6]

Abstract

Background:

Posttraumatic growth (PTG) represents a positive personal change after adverse events, such as natural disasters, including earthquake. However, the association between exposure to earthquake and level of PTG is still unknown. Thus, the aim of this systematic review and meta-analyses (MA) is to assess the level of PTG in people exposed to earthquake.

Methods:

Studies were identified via Scopus, PsycInfo, Web of Science, PubMed, EMBASE, ProQuest, Cochran Library, Ovid, Google Scholar, OpenGrey, congress, and conferences research papers. The level of PTG was presented as mean and standard deviation. Subgroup analyses were conducted to control for the amount of time that had passed since stressor onset and age of the study population. The meta-regression was used to explore the sources of between-study heterogeneity, including sample size and age.

Results:

The MA of all 21 studies using no restrictions related to age and time of the PTG measurement since traumatic event showed low level of PTG (41.71; 95%CI = 34.26; 49.16, I-2: 62.44%, p: .000). Subgroup analyses controlled for the age demonstrated that level of PTG was higher in adults (49.47; 95% CI = 42.35; 56.58, I-2: 0%, p = .466) when compared to children and adolescents (35.38; 95% CI = 23.65; 47.11, I-2: 69.09%, p < .00). Moreover, the pooled weight mean of PTG measured 1 year and less than 1 year since the earthquake varied between medium (46.04; 95%CI = 34.45; 57.63, I-2:51.2%, p: .037) and high (59.03; 95%CI = 41.46; 76.41, I-2: 0%, p: .990) levels, respectively.

Conclusion:

The results of our MA showed low level of PTG in earthquake survivors. However, the mean value of PTG in adults was higher when compared to children and adolescents. In addition, the mean PTG was found to decrease over time since traumatic events.

Keywords

Author Keywords: Posttraumatic growth; earthquake; systematic review; meta-analysis