

preparedness and having children residing in the household were positively associated with community resilience in lower resilience quantiles (Q10, Q25). Age was negatively associated with community resilience in a low quantile (Q25). The results of the linear model failed to reveal the association between the preparedness measure and community resilience, and demonstrated only the association with age and having children in the household.

**Conclusion:** Encouragement to take actions to increase preparedness, could also help raise resilience in an earthquake scenario. Efforts to enhance community resilience should focus on specific population groups such as childless households (often the elderly).

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### Anticipating the Psychosocial Impact of Disasters and Crises: The Need for an Interdisciplinary Social Science Framework

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**Study/Objective:** An interdisciplinary social science framework is presented to answer the question: how to anticipate the psychosocial impact of disasters and crises?

**Background:** The scientific knowledge on health effects, and the quality of aftercare in a disaster context is strongly rooted in epidemiology and mental health care research. Although this knowledge base is sufficient to understand the psychosocial impact, conceptualizing an adequate reaction requires a broader approach incorporating less traditional disciplines such as public administration, organization studies, implementation science, sociology and disaster risk reduction.

**Methods:** The starting point for the development of the framework was a model proposed by Alexander (2012), in which the combination of exposure, cultural and historical factors influences the vulnerability of human socio-economic systems. This “plexus of context and consequences” determines the human consequences of disaster. Recent research findings from different disciplines were combined into a framework focusing on the psychosocial dimension of disasters and crises.

**Results:** The framework contains three domains. Exposure has a direct impact on the well-being, functioning and health of affected people (“health”). Exposure, history and culture directly influence interrelated sets of capacities at the individual, community and society level (“capacity”). Capacity is linked to health, partly in a paradoxical way – as well as, a third domain: psychosocial support provided by professionals and comprehensive inter-organizational programs (“psychosocial support”). The relationship between psychosocial support and health is amply understood. Theoretically, psychosocial support is most effective when capacity is strengthened and utilized.

**Conclusion:** The framework emphasizes two complicated causal attribution issues, and encourages interdisciplinary research into mechanisms linking domains that generally have been studied as isolated topics.

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### Mindfulness in Disaster Response

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**Study/Objective:** To review the literature of pre-deployment Mindfulness Based Stress Reduction (MBSR) interventions for disaster responders, to minimize acute stress response, depression and Post Traumatic Stress Disorder (PTSD).

**Background:** ‘Mindfulness’ is derived from Buddhist meditation practice. Mindfulness programs have been shown to improve clinicians’ perceived stress, anxiety and performance in medical practice. Mindfulness, specifically MBSR, an evidence based approach that uses mindfulness meditation, is successfully used for treatment of PTSD in populations such as veterans. Disaster responders, like the military, are a population potentially vulnerable to adverse psychological effects given the nature of disaster response: unexpected, sudden, devastating events. A quarter to one third of disaster responders report symptoms of anxiety, depression and PTSD, secondary to exposure to stressors of disaster response. Teaching MBSR practice to disaster responders, prior to deployment, has potential to decrease the psychological consequences of disaster response.

**Methods:** The authors performed a systematic review of peer reviewed literature indexed in PubMed, Web of Science and Google Scholar. Abstracts were limited to human studies, in English, and search terms MBSR, disaster responders, pre-deployment, acute stress response, depression and PTSD. Articles were also found by searching citations of retrieved articles.

**Results:** Literature exists showing that pre-deployment mindfulness training in military personnel improves perceived stress and stress response, but no similar research was found for disaster responders. A limitation encountered was that, few high quality Randomized Clinical Trials (RCTs) and studies exist, as conceptual mindfulness has limitations of its study within rigorous, scientific research methodology.

**Conclusion:** More research is needed to explore the potential of mindfulness training on disaster medicine clinicians, prior to deployment. It is a tool that may prevent the detrimental psychological consequences of disaster response work.

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### Dialogue in Emergencies - Interpreters of Sign Language in Israel

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**Study/Objective:** To identify obstacles in the area of translating emergency information into sign language.