

**Title:** Training Effects on Emergency Management Activation Response  
**Subject Area:** Social  
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**Abstract:**

This study considered whether local and long-term emergency management training could produce different behavioral reactions to severe weather situations. Results indicate a significant effect for both long-term and local training on emergency management behavioral response. Individuals with higher levels of training engaged a significantly higher proportion of emergency response activation.

**Supporting Summary:**

As the frequency of natural and man-made disasters continues to increase worldwide (National Weather Service, 2012), it is vital for emergency management professionals to maintain a constant state of preparedness to respond effectively. Effective preparedness and response for emergency management authorities may require appropriate training and proficiency in a variety of areas, including natural disasters, industrial accidents, and terrorism. Researchers have shown that effective training and development can potentially increase an individual's knowledge and skills related to his or her job (Ittner & Larcker, 2003), can increase employee morale (Rothwell, 2008), and may lead to higher productivity on organizational tasks (Erickson, Noonan, & McCall, 2012; Lim & Morris, 2006), however very little is known about the effects of training on actual preparedness and response for individuals working in the field of emergency management (Caruson, & MacManus, 2007). This study considered whether local training exercises and long-term (over the span of 5-years) emergency management training courses could produce different behavioral reactions to severe weather situations. A total of 1,224 participants working in the emergency management field completed the online survey where they answered a variety of questions related to their emergency management experience, including an indication of what types of emergency training exercises had they experienced locally and what types of emergency training courses have been taken over the past 5-years (categories included: natural disasters (hurricanes, floods, tornadoes), industrial/chemical accidents, terrorism, mass transportation disasters, and an 'other,' fill-in-the blank category was provided) . At the end of the survey, behavioral responses to three proposed extreme weather scenarios (one tornado warning and two scenarios of confirmed tornadoes on the ground) were recorded. Stepwise regression analyses indicate age, local training exercises, and long-term training courses can explain a significant amount (nearly 30% on all three scenarios) of the variation in response by our emergency management participants. Long-term training courses and local training exercises had a significant effect on all three extreme weather scenarios; individuals with higher levels of training engaged a significantly higher proportion of emergency response activation. Additionally, participant age had an effect on the proportion of activation engaged for the first weather scenario which involved the first notification tornado warning; specifically individuals aged 45 and younger were less likely to activate the emergency response system (no significant differences in age were found when examining reactions to the two confirmed tornado scenarios). Although researchers argue a wide assortment of individual difference variables may affect whether or not emergency management responses are appropriate or successful (Schumacher et al., 2010), these results indicate undoubtedly factors such as the specificity of training, time spent in training, and actual experience with disaster can play a critical role in the planning and response to disaster situations and needs to be further explored and understood (Kendra and Wachtendorf 2003; Moynihan 2005).