

Personalising the message: promoting the uptake of cyclone protection in North Queensland

In Australia, tropical cyclones caused over \$6 billion in insured damage between 2006 and 2016 (Harwood, Smith & Henderson 2016). Housing is particularly vulnerable as cyclones can cause significant structural damage (Smith, Henderson & Ginger 2015). However, some of this damage is preventable if appropriate structural measures are in place, for example, cyclone shutters can be installed to reduce window damage caused by cyclones (Smith, Henderson & Ginger 2015). Despite these benefits, installation of cyclone shutters is low in high-risk areas such as North Queensland (Harwood, Smith & Henderson 2016). This paper identifies some of the psychological factors that explain why people choose to invest or not in cyclone shutters. A method of segmenting risk communication messaging is investigated with the aim of improving the uptake of structural damage mitigation measures. Past research has identified a range of psychological factors that help predict mitigation behaviour for natural hazards (Koerth, Vafeidis & Hinkle 2016; Bubeck, Botzen & Aerts 2012; Kellens, Terpstra & de Maye 2013; Smith et al. 2016; Kanakis & McShane 2016). Psychological factors are considered better predictors of mitigation behaviour than demographic factors (Lindell & Hwang 2008; Peacock 2003, Ge, Peacock & Lindell 2011). In particular, psychological factors within two popular psychological models, the Protective Action Decision Model (PADM) and the Protective Motivation Theory (PMT), have been found to be reliable predictors of mitigation behaviour (Bubeck et al. 2013; Poussin, Botzen & Aerts 2014; Grothmann & Reusswig 2006; Terpstra & Lindell 2013; Ge, Peacock & Lindell 2011). Although the conceptualisation of factors within these models differs, most studies have found that perceived threat (threat appraisal) and perceived ability to respond to the threat (coping appraisal) are significant predictors of mitigation behaviour.