

Citizens' Perceptions of Flood Hazard Adjustments: An Application of the Protective Action Decision Model

Teun Terpstra¹ and Michael K. Lindell²

¹HKV CONSULTANTS, Lelystad, Netherlands

²Texas A&M University, College Station, USA

Abstract

Although research indicates that adoption of flood preparations among Europeans is low, only a few studies have attempted to explain citizens' preparedness behavior. This article applies the Protective Action Decision Model (PADM) to explain flood preparedness intentions in the Netherlands. Survey data (N = 1,115) showed that hazard-related attributes (e.g., perceived efficacy in protecting persons) were positively correlated, but failed to show that resource-related attributes (e.g., perceived costs) were negatively correlated with preparedness intentions. Although respondents rated the hazard-related attributes as more important than the resource-related attributes, moderated regression failed to detect practically meaningful interaction effects. Risk perception was also positively correlated with preparedness intentions but explained less variance than did the hazard-related attributes. Among the demographic characteristics, only female gender was consistently correlated with higher risk perception and the hazard-related attributes. Finally, risk area was correlated with perceived flood likelihood and consequences as well as the hazard-related attributes. Implications are discussed.

Keywords

flood, preparedness, hazard adjustment attributes, attribute importance, risk perception

Environment and Behavior 45. Page 993– 1018.

The full article can be requested at the publisher or at HKV CONSULTANTS (C.Meijer@hkv.nl)