ENHANCING FLOOD RESILIENCE BY INTEGRATING RISK PERCEPTION AND COMMUNICATION WITHIN RISK MANAGEMENT

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Flood risk management (FRM) is slowly shifting from a risk-based approach to an integrated one, which among other components considers risk communication (RC) as a means by which to increase resilience. Despite the above, few researchers have addressed so far the integration of RC into FRM. In this regard, this study aims to explore the potential of implementing an RC strategy on achieving a reliable and cost-efficient FRM. Through a longitudinal approach, we assess risk perception and awareness regarding a civil protection plan (CPP) developed at the local level (i.e., municipality of Navaluenga, Central Spain). To this purpose, a questionnaire survey was designed, and 201 adults (representing roughly 10% of the population census) were interviewed twice within a one-year period. Before the second survey, an RC strategy was designed. The RC strategy comprised briefings, quiz-answers, storytelling and flood images competitions, and intergenerational workshops. T-test for paired samples analyses and a general linear model (GLM) repeated measures ANOVA were implemented to detect changes in risk perception and awareness. Our findings show that after application of the RC strategy, there is an increase in lifetime risk perception in Navaluenga. There are also statistically significant differences regarding the awareness level of the different aspects that constitute the CPP. Construal-level theory of psychological distance should be taken into account to explain these results. The implementation of well-designed RC strategies is critical to improving resilience, especially in geographic contexts such as the Iberian Peninsula, where climate change scenarios indicate high vulnerability to floods.

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