

## Interactive comment on "Flood warnings in coastal areas: how do social and behavioural patterns influence alert services?" by G. Pescaroli and M. Magni

## **Anonymous Referee #2**

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The paper is well written and scientifically relevant. It addresses a topic of study, the influence of social and behavioural patterns on alert (i.e. technical systems), that is underrepresented in research and it therefore offers significant contributions with its findings. It is suggested that the paper be published after minor revisions. At the same time, it is recommended that the reviewers reconsider the title of the paper, at the moment it is a bit misleading. The article focuses primarily on the respondents' past flood experiences and exposure to information (therefore awareness and perception) and how this then influences responses (behavior) to alert services. More generally, the paper should return to and consider the use of the terms 'cultural', 'social, 'psy-

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chological', 'behavioural', 'perception', and 'awareness' and all variations, as these seem to be used interchangeably, where the reader could easily misunderstand the authors' meaning. Along these lines, the paper would benefit from definition of 'culture' in the context of risk and this paper. Or alternatively, the paper should avoid attributing differences here.

P 642. Line 4: In regard to the use of 'psychological' in this sentence. Should this be replaced with behavioural, as used in the title and further in the abstract. P 642. Line 21: It is not clear what these are referring to, disaster victims means displaced people, since number of deaths are 6 out of 10? And what is considered 'worst natural disasters'. Suggest using percents for all statistics, i.e. 60% and 40%. In 2012, they caused 53 % of disaster victims and six of the ten worst natural disasters for number of victims and four out of ten in terms of number of deaths. P 645. Line 5: It is not clear why the years between 2000 and 2013 were selected for review. The early phases of our research involved a screening of European publications on flood warnings released between 2000 and 2013. P 652. Line 11. This sentence should be made clearer. It is the perception of the interviewees regarding the effectiveness of the barriers that is influenced by local flood history - it is not the effectiveness alone. Structural protection barriers were generally perceived to be insufficiently effective, and this is likely to be influenced by local flood history. P 654. Line 7-9. Is there a reason or explanation for why shopkeepers in the area of Porto Canale were more concerned with training? Furthermore, the need for training was strongly perceived by shopkeepers, especially in the area near the "Porto Canale". P 658. Line 10. The paper states that it will avoid a discussion on risk perception However, in some instances perception is included. It is suggested that the author review this element in the paper, and either reduce the statement, or make it clearer as to what is meant, for example distinguishing between perception and awareness. Please note that we will avoid a discussion of our results focussed on risk perception, as this could be the subject of a paper on its own. P 659. Line 22. Remove 'be' so that it reads 'but can also be ignored'. '(...) daytime and at night, but can be also easily be ignored, not heard or misinterpreted. P 659.

Line28. The use of the term 'cultural' should be reviewed in this sentence. While Romania certainly is a different culture than Italy, it is questionable whether this is the most influencing factor as the sentence currently suggests. Especially as the paper focuses more on experience/awareness, as opposed to the broader idea of 'culture'. 'defined in other cultural contexts, such as in Romania, where about 52 % of people' P 660. Line 19. Should read '42 % would prepare'. '42 % would prepared to evacuate and 10 % would do nothing or would' P 661. Line 2 to 4. It is unclear why there is a discussion on 'risk perception' when it is stated on P 658. Line 10 that the paper will avoid a discussion of risk perception. Perhaps it should be changed to risk 'awareness'. P 662. Line 20 to 22. Suggest that the authors review this statement. Here again, is it not awareness that affects patterns. 'Our case study shows in detail how the different behavioural and social patterns provide an essential background that enables us to understand the critical interactions that affect warning services.' P 663 Line 1. Should be considered. 'As structural measures were not consider effective, lack of information seems to' P 663. Line 19. Should be an SMS 'Warning services, such as SMS one, may be perceived as very useful even' P 663. Line 27. This may be true, but there is no evidence coming from the paper. 'Again, this problem has its roots in deficiencies in the national culture of risk management.'

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