

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC1
<https://doi.org/10.5194/nhess-2021-379-RC1>, 2022
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Comment on nhess-2021-379

Anonymous Referee #1

Referee comment on "The determinants affecting the intention of urban residents to prepare for flood risk in China" by Tiantian Wang et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2021-379-RC1>, 2022

The determinants affecting the intention of urban residents to prevent flooding in China

General remarks

This is a very interesting article, related to the topics of interest of the Journal. Overall, literature review and methodology are thorough, and there are only few issues regarding presentation, comprehension, structure, and use of language. I think it's worth accepting after addressing these issues.

Significant remarks

First of all, the **title** can be improved as it is not accurate. In my opinion, the residents are not expected to prevent flooding, but to prepare against flood risk, to be able to cope with flooding...etc. I would suggest to chose another expression.

The major issue concerns model hypotheses: In the illustrated model it appears that attitude is considered a mediator between trust and intention. Also, that PC and PL mediate the effects of trust on worry and intention. These are not reported as hypotheses, which makes reading of results confusing. In general, I would suggest to remove the words direct/indirect in hypotheses, and to refer to effects and specify the mediations. The subject of the paper is what affects preparedness intention, and which are the underlying mechanisms (here worry, risk perception and attitude). This need to be better expressed. Direct/indirect could be directly used in Results.

Results: A lot of information provided here belong to Methods. I suggest the methodological approach to be analysed in the previous section, while 'Results' to present only the SEM results and reliability/validity/significance results, not the theoretical background. This makes it difficult to follow results and understand the effects.

L289: I thought PMT was the basis for the proposed model. Why are the authors referring to a PMT model, which has not been previously illustrated as a stand alone model analysed within this paper? This is confusing, as the reader does not recognize which part of the Fig1 model is the PMT. In Methods, there was not any reference to analysis and comparison of 2 models. Please be clear on these issues.

Specific remarks

References are ok, except Holub et al., 2012 (L32) that does not seem relevant.

L50: Please consider being more specific: 'communication' of what, and/or with who?

L54: Section XX?

L112: Please correct 'have' to 'has'

L134: Please consider using a singular form: a direct effect.

Table 1: a) in Oper.def. of Self-efficacy: please consider changing the wording 'Personal...your ability' to e.g. 'perceived personal ability...' to be consistent with wording used in the rest of the definitions. B) in definition of Trust: Please correct as: trust in the government's...

L202: Please merge the two sentences.

L207: Please consider rephrasing, as 'hypothesis test the survey data' does not sound correct.

L208-211: Please consider rephrasing. It is difficult to read these sentences. Also, too

many 'and', even in the beginning of a sentence. SEM could better introduced.

L224: This explication about women needs clarification. What was the title and introduction of the questionnaire, and how they affected the attraction of female respondents. Otherwise, this difference is commonly statistically expected (based on population statistics).

L225: Please don't start a sentence with 'And'. This is the case also in other parts of the paper.

L230: I would suggest to add in parenthesis income in USA dollars or Euros.

L241: Replace comma with fullstop.

Table S2: Please consider adding notes for what CR and AVE signify.

L247: Please use small letter for p (value)

L275. Please rephrase to produce complete sentences. VIF was lower than 1.7. The critical value is 3.3 (not less, the critical value is one, and the acceptable ones lie below this).

L284. Please don't use >< within the flow of the written speech. These are usually used in parentheses, eg for p-value. Replace with lower/less/more/higher than.

L287: it is probably better to use the word threshold than categories and rephrase. Actually, as I understand there are four levels defined by three thresholds. I assume that below 0.1 it is unacceptable.

Table 4: Add note to explain the initials. Why do you report R2 for each construct, and not the overall R2 of the model? The same question applies for the preceding text.

L321-323. These 2 sentences, should be somehow merged. 'Because' is a conjunction.

L331-L334: Very confusing. Attitude here is considered a mediator?? This was not reported in the model introduction or among hypotheses. This is an issue that needs to be addressed properly.

L334-335: what do you mean? Which effects were insignificant? The point is that worry and attitude mediated trust.

L338: As I suggested previously, in my opinion wording here is inaccurate. Residents are not expected to prevent flooding but prepare against flood risk.

L349: Please correct: consequence 'from, due to....', not 'to'.

L355: Please merge the sentences, don't cut them in the middle with fullstop (! this is a recurrent issue throughout the article).

L356: Please replace the word 'poor' with a more suitable one, eg negative.

L368-369: Again, merge the sentences.

L388: Another social context factor to consider is the protection of public flood protection measures: Please rephrase, it is not understandable.

L405-407: This needs to be rephrased. Especially 'how to do' and 'extreme floods exceeding standards'.

L407-408: Please rephrase and merge (again the same issue with fullstop in the middle of nowhere.)

L409: Please rephrase (what will be delayed??)

L416-417: Please rephrase. The sentences sound awkward, they need correction.

