

Interactive comment on “Assessing institutional capacities to adapt to climate change – integrating psychological dimensions in the Adaptive Capacity Wheel” by T. Grothmann et al.

Anonymous Referee #3

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The paper makes an important contribution to the discussion on climate change adaptation by further elaborating on and specifying the Adaptive Capacity Wheel developed by Gupta and colleagues. Particularly the first part of the paper is very well structured and provides a good overview about relevant pieces of work. In order to further strengthen the paper and make it publishable further reflections and specifications is necessary and this both on the conceptual and methodological level.

The paper distinguishes between “soft social factors” (institutions, perceptions, social capital) and “hard social factors” and is based on the assumption that “soft” factors “can probably be changed faster than ‘hard social factors’” (the latter: economic and

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technological development). This statement is problematic on the analytical level as well as on the normative level.

Analytically, the difference appears only convincing at first sight. Since the paper is about “institutional capacity” the reviewer presumes that authors are familiar with the voluminous debate on institutions and what is particular about them. While there are many different ways of understanding and theorising institutions, most authors share the view that institutions are not changeable instantly; it is rather a defining characteristics of institutions that they have a certain historicity in order to become and being understood as institutions (otherwise they probably would just be perceived as habits). Berger und Luckmann for instance state: only when “the institutional world ‘hardens’ and ‘thickens’” (1967, 59) to an extent that it appears to the individual as it would be naturally given, only at this point it is possible to speak of a social world: The institutional world “has a history that antedates the individual’s birth and is not accessible to this biographical recollection. It was there before he was born, and it will be there after his death” (ibid., 60). Whether one agrees with this view on institutions or not, is not the point: it should just make obvious, that a simple juxtaposition of “soft” and “hard” is misleading as well as the normative claim that institutions can be “changed faster than ‘hard social factors’”, since even soft social factors persist quick alterations. Additionally, economic and technological developments are embedded and closely intertwined with an institutional setting making the difference even more problematic.

The review asks the authors to either further elaborate and also problematize this juxtaposition, or simply leave it out; the paper will not loose any substance by not referring to this difference. This applies to the entire paper (e.g. page 796, 9ff; 797, 1ff).

Operationalisation of adaptation motivation: While the description of adaptive motivation is very concise and clear, its operationalisation in the questionnaire might appear to some readers a bit awkward, since it focuses on the relevance of climate change adaptation and not on the motivation to adapt. Relevance and motivation are two very different issues: A topic might be very relevant for an organisation; but the organisation

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might not have any motivation to engage with this issue and vice versa (or might even not be responsible for an issue, although it might be considered as relevant by single person in an organisation or the organisation itself).

The reviewer is aware that the discrepancy between “relevance” and “motivation” cannot easily be dealt with or even solved satisfyingly in this paper, since the study was already conducted. However the authors are asked to reflect more about this discrepancy and what it might imply for the validity of their empirical results.

Interviews: The authors are asked to provide more information on their interviews. Even basic information seem to be missing: How many interviews were conducted in total and how many interviews were conducted in the four difference sectors?

Role of “psychology” in an institutional/organisational setting: adaptation motivation as well as adaptation believes are not primarily a result of psychological factors, as suggested in chapter 3 (i.e. risk perception; self-efficacy or outcome-efficacy), they are rather (and probably predominantly) a function of institutional/organisational decisions and contexts. As a consequence, the simple juxtaposition between objective (financial resources, institutional entitlements) and subjective perception (page 804, final paragraph) is hardly helpful in this strongly regulated context, it is even misleading. “Subjective” expressions individuals provide in the interviews, are surely NOT exclusively their personal ones, but also that of organisations and the broader institutional setting interview partners are representing.

Authors are asked to further specify the interrelation of psychological factors in a highly regulated and institutionalised organisational setting by being more explicit on the interplay of individual cognitive factors in a specific organisational setting and the wider institutional environment influencing and spaping both the organisational roles and responsibilities as well as individuals’ motivations and beliefs. This appears all the more relevant, as the paper is exactly based on the assumption that the integration of psychological factors is a relevant topic in an institutional/organisational context in order to

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understand the adaptive capacity of actors, whereas it is not clear whether the paper understands individual role-holders within an organisation as the relevant actors or the organisation itself.

Generally, the three main parts of the paper need to be better integrated in order to make the paper more consistent; single parts appear to a certain extent independent and hardly relate to each other (see also comment Nr 5 of reviewer #2).

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