Response to reviewers of

Ontological Realism for the Research Domain Criteria for Mental Disorders

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We are pleased to inform you that your Paper for presentation, entitled Ontological Realism for the Research Domain Criteria for Mental Disorders (Id=214), has been provisionally accepted for presentation at Informatics for Health 2017 in Manchester, UK.

For final acceptance, it is important that you:
- submit a final version of your paper, addressing any issues raised by the reviewers, in MS Word format, no later than February 10th.
- register and have payment confirmed by February 24th, the early bird registration deadline.

We're looking forward to seeing you in Manchester in April.

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Comments:

Strong accepted as Paper for presentation

Reviewer 1:

Authors propose to eliminate the shortcomings of assessing the terminological and ontological quality of biomedical representations by resorting to definitions and formal representations under the umbrella of Ontological Realism as they already have been developed in the areas of mental health, anatomy and biological functions. However they work is not validated by the doctors and there are too many assumptions that make it difficult to apply to the real life situations.

→ This comment is very unclear. This paper does not deal with 'biomedical representations' in general, but with the RDoC. It is unclear what is meant by 'they work': if it is our previous work on ontological realism as applied to "mental health, anatomy and biological functions", then the reviewer errs as there is an abundance of literature showing the work is well accepted. If the reviewer means the RDoC work itself, the reviewer is partly right since that is work in progress under supervision of the NIMH. If it is our work presented for this paper, then we don't see what doctors should be validating. It is also unclear what this reviewer means with 'real life situations'. Perhaps this refers to clinical real-life

situations? Or do they mean data/informatics real-life situations? Finally, what assumptions is this reviewer talking about?

Conclusion, no revision possible on the basis of these comments

The reformulate of the definitions of RDoC constructs is not clear and difficult to follow.

→ We do not reformulate definitions of the constructs, but rather propose one possible way of doing so by appeal to the ontological analysis of 'bodily system'. We agree this is a very difficult subject which requires thorough understanding of prior work which is referenced. There is no space to elaborate on this in the paper, but will make the material more palatable in the presentation.

Also there is no case study to show how it might be implemented it real life.
→ The implementation would be in the same way as the RDoC, but removing the ambiguities and informalities.

Reviewer 2
Maybe an improvement should be to emphasize why the enthusiasm and why skepticism... "has been received both with enthusiasm (by neuroscientists) and skepticism (by traditional psychiatrists)"

→ We mention in the closing remarks that "the latter [skepticism] have primarily to do with the way the matrix is currently organized and the lack of expressiveness". The referenced paper provides all the details which we will list in the presentation.

Another possible improvement is regarding elaborate more in the conclusions.

→ This really is a repeat of the first comment, essentially wanting more sum-up and justification for our proposal. But, given the space limitations and the fact this is a conference paper, there is not much room for this. Nevertheless, we stressed again the need for formalization along the lines of the bodily systems approach.

Congrats for the References !
→ you're welcome.

Reviewer 3
Please shortly list what "function of well-known quality assessment criteria and recommendations" you use.

→ we added some examples. We will be more exhaustive in the presentation.
Typo: "Therefor,"
→ corrected
Reviewer 3c: Typo: "the value would be 1 month. months'."
→ corrected