Reviewer’s report

Title: Effects of a cognitive ergonomics workplace intervention (CogErg) on cognitive strain and well-being: a cluster-randomized controlled trial. A study protocol

Version: 0 Date: 08 Oct 2019

Reviewer: Thomas Rigotti

Reviewer's report:

CogErg: A group-level cluster-randomized controlled trial to evaluate the effects of a cognitive ergonomics intervention on cognitive straining working conditions, workflow, and well-being in knowledge work

This large scale, partly randomized intervention study aims to compare a so called cognitive ergonomics intervention with an intervention focusing on recovery, as well as an inactive control group. Effects of the intervention(s) are assumed on primary indicators (cognitive workload) as well as secondary indicators (well-being). In addition process evaluation is used to study potential moderators.

Overall, I am very impressed by the study design, and I cannot wait to see the final results. This is one of very rare studies with an appropriate design about the evaluation of interventions within the organizational setting. The large sample, as well as the detailed rationales and descriptions on the procedure are outstanding. I only have very few suggestions you may want to consider when including the final results:

(1) The title of the paper is very long. I recommend shortening it to 12-15 words max.

(2) In the introduction, you could provide a bit more information on the intervention program, and how it expands and related to existing programs in order to further stress the contribution of your study.

(3) Concerning the choice of secondary outcome variables, please provide a little bit more explanation.

(4) In addition, especially for the proposed moderators (participation percentage, commitment of supervisors, participants' responses to the intervention) I missed arguments why you chose to look at these three aspects, and not others.

(5) Please number your hypotheses consecutively.

(6) When describing the study design on p. 6, please also describe the number and timing of measurement points, as well as the frequency and process of the interventions. You can also refer to figure 1 already here. This would make the following sections easier to comprehend.
(7) It is fine for me to present the instruments in a table, but I would recommend to include one sample item each as well as information about Cronbachs Alpha.

(8) In order to keep the overall manuscript comprehensible you may decide to focus your analyses on certain aspects.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Unable to assess

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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