Reviewer’s report

Title: A randomised controlled trial of an educational intervention to promote safe behaviours in petrochemical workers: a study protocol

Version: 0 Date: 28 Mar 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?
No - there are minor issues

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
Not sure - key details are missing from the manuscript

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?
N/A - no experiments or analyses

STATISTICS - Is the use of statistics in the manuscript appropriate?
N/A - there are no statistics in this study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
N/A - no results to interpret

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?
Maybe - with major revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: My overall impression of the study protocol is that it is well designed and reflects a comprehensive approach. It is still a bit imbalanced with a major focus on the qualitative study at the start of the project. The approach that will be taken is well described and seems appropriate for the purpose of gathering elements for a conceptual model. The next steps in this thesis protocol are less well described. There is insufficient information on how the questionnaire will be designed and tested. It is also not very clear how the RCT will be performed, especially on how the intervention will be distributed to the participants and what
will be done for the control group. This may be due to uncertain outcomes of the former phases of the research but at this moment it does not show how the different parts will work together.

REQUESTED REVISIONS:
In my opinion, the objectives are clearly divided but not formulated in a measurable form. If you want to promote safe behavior, what are you going to use as a measure for the result? They may also be a bit broad which makes it even more difficult to know if they are reached in the end.

The description of the questionnaire study should be improved: how is the conceptual model from phase 1 used to measure safety behavior (unsafe behavior?).

The design of the RCT needs more detail on how the sample size was determined, how the distribution of participants will be to intervention and control group, what will be the intervention exactly and which treatment the control group participants will get, what the outcome measure will be and how they will be analyzed.

ADDITIONAL REQUESTS/SUGGESTIONS:
The language should be improved by involving a native speaker in English. Some references are missing, such as Heinrich, 1931 and Robert and Michael, 2001

Note: This reviewer report can be downloaded - see attached pdf file.

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

No

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

No

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.

Not relevant to this manuscript

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