**Reviewer's report**

**Title:** Development of an e-learning prototype for assessing occupational stress-related disorders: a qualitative study

**Version:** 0  **Date:** 24 Jan 2019

**Reviewer:** Justin Newton Scanlan

**Reviewer's report:**

This paper reports on first-stage user testing of an e-learning package designed to enhance knowledge of occupational physicians in diagnosing (and preventing) occupation-related stress disorders. While the method is clearly reported, I am not sure what this paper adds to the overall literature. This "user testing" component of the development of this e-learning package is a critical component of ensuring that the final resource is useful. However, the data reported in this paper is very specific to the development of this specific resource, so think it has fairly limited contribution as a stand-alone paper. Perhaps what is presented in this paper might be more suited to be one section of a fuller description of the overall user-testing process.

While I am not sure that this paper is substantial enough for stand-alone publication, I offer the following comments to assist in the further development of this project:

**Background.**

The first sentence of the background states "Common mental disorders, defined as minor, non-psychotic mental-health problems" - I don't agree that all common mental health disorders are "minor" - I would suggest rewording this so as not to minimise the disruption or distress that if often associated with common mental disorders.

Burnout is usually presented as one word (in the manuscript it is presented as "burn-out"). On line 59, burnout is also presented as a "disorder". While there is debate in the area about this, burnout is not currently - to my knowledge - classified as a distinct disorder.

Line 64-65: The sentence "However, consensus among occupational physicians (OPs) when it comes to assessing their work-related factors is debatable [3]." needs revision as it is currently fairly circular. Additionally the "their" is not properly identified - whose work related factors are being discussed? A revision might be "However, consensus has not been achieved among occupational physicians (OPs) when it comes to assessing the work-factors related associated with occupational stress-related disorders."

On line 69, the authors refer to "occupational diseases" - I think this should be revised to occupational stress-related disorders for consistency with other nomenclature used in the paper.
as well as to specify that this guide applies only to OSRD rather than the whole gamut of occupational diseases.

Overall, if this paper continues as a stand-alone paper, I think the background (and discussion) requires quite a lot of revisions to support a better description of how the results from this study have applicability to the broader field of medical education.

Methods:

Line 122: the authors describe the sample as "representative". This isn't generally a term used in qualitative studies, and is also not accurate. A representative sample is one that is drawn at random from the full population sampling frame. Participants in this study were not selected in this way.

Line 124-126: While it is good to get multiple different perspectives in a study like this, the addition of representatives from the professional association is not really a form of "triangulation", so should be described differently.

RESULTS

It would be typical to present demographics table with more detail about the participants. This helps the reader to determine if the results from this study may be applicable to their population.

I think that there is a typo on line 172: "For perceived usefulness, all sub-themes 77 620were related to the theme 'diagnosing and preventing 173 occupational diseases'" - I'm not sure what "77 620" refers to.

In the section starting at line 177, the authors report "The participants who relied on this approach generally perceived the e-learning programme as less useful, since its structure and steps did not suit their intuitive way of diagnosing and preventing OSRDs, or the personal approach or system they had developed over the years.", I would like to see more detail about how this conclusion was drawn and a deeper explanation of how many individuals described this approach and who they were (e.g., how long had they been practising / specialising in this area?). I think that this is an important finding. When coming back to this finding in the discussion, it is generally dismissed without much discussion, and I think that more could be done here. Are these "experts" the target group for this e-learning package? Did they report that the e-learning packages would be good for novice Ops? Did they think the step-based approach presented in the package was worthwhile or did they perceive that it was missing important components? I think more attention needs to be paid to this section in the results and the discussion to more fully "pick apart" the result and then examine the implications of this.
DISCUSSION

As mentioned above, I think that the discussion need to be substantially revised to make more clear the implications that this research has to the broader field of medical education. While some reference is made back to existing literature, these references are generally to fairly well established "best practice principles" of the development of e-learning materials. If this paper is to stand alone, I think that a much more nuanced discussion is necessary.

As mentioned in the results section, I think that the issue around more experienced OPs reporting that the e-learning package didn't assist them in gaining "the full picture" needs more discussion and exploration in this section. Overall, as I have mentioned, I commend the authors for investing time in this first step of user evaluation of the elearning package. However, I don't think that this paper in its current form is substantial enough to stand alone as a useful contribution to the current literature.

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.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Not relevant to this manuscript

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