Reviewer’s report

Title: A model of the pre-assessment learning effects of assessment is operational in an undergraduate clinical context

Version: 1 Date: 24 September 2011

Reviewer: Kalman Winston

Reviewer’s report:

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1 Background, paragraph 9 (p6): “An approach informed by process theory rather than variance theory also seemed appropriate”

This is followed by a quote, but I can’t clearly see why you have deemed one approach more appropriate than the other.

2 In the very next paragraph, it states: “Given the as yet tentative nature of the model, its complexity and the temporal and contextual variability of the relationships in the model, we believed that a qualitative approach was appropriate.”

I think you might find additional reasons to justify a qualitative approach. Perhaps the hard-to-measure, broad nature of the components of the model make a qualitative, rather than quantitative approach necessary?

3 The results section gives a lot of good detail about the element that was different in the clinical context (preceptors), but does not really show us any examples of how the rest of the model was validated. A few quotes showing this would make the claims of validation much more believable. Or, if you think the quotes given relate to aspects of the model in figure 1, perhaps you need to use the same terminology and be more explicit?

4 Discussion, paragraph 1, you state, “The propositions in the model have proved testable insofar as the evidence presented supports the existence of and relationships between source, mechanism and effect factors in this new context.”

But, it seems you have stated this support in the results section and table, rather than presented evidence for it.

5 Discussion, paragraph 4: “As an aside, it is sad to note the dearth of literature about preventing and improving such adverse interactions.” Isn’t the whole competency movement based on changing this? I think the literature may actually be vast (although I could be wrong about this).

6 Discussion, paragraph 5, “Making assessment summative is one way of making assessment consequential.” Is it possible to make questions asked in the midst of ward rounds summative?
7 Conclusion: Personally, I feel the model is too broad to be very useful as a planning tool. However, this breadth inevitably means it’s likely to appear to be more generalizable in multiple contexts.

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

8 You claim this is a new context, “can the model be used to explain observations about the impact of assessment on learning in a new context?” But it appears that this is the same dataset as used in the context from which the model is derived – same interviews, same subjects. Have I misunderstood this? If not, then although this analysis may be drawn from parts of the interviews that refer to a different context, I think it is hard to validate a theoretical model drawn from one set of interviews with the very same set of interviews. This needs to be stated as a clear limitation of this work, I think.

"Minor issues not for publication"

9 Last paragraph of background: Each research question needs to start with a capital letter.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.