Author's response to reviews

Title: How do postgraduate GP-trainees regulate their learning and what helps and hinders them? A qualitative study.

Authors:

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Author's response to reviews: see over
Dear editor,

Please find enclosed our revised manuscript entitled ‘How do postgraduate GP-trainees regulate their learning and what helps and hinders them? A qualitative study’ by Margaretha H Sagasser, Anneke WM Kramer and Cees PM Van der Vleuten.

First we want to thank the two reviewers for critically reading our manuscript and providing us with feedback in order to improve the quality of our manuscript.

In this letter we will give a point-by-point response to the comments raised by the two reviewers. Please find below the comments of the two reviewers with our response in italic.

Reviewer’s report

Title: How do postgraduate trainees regulate their learning and what helps and hinders them? A qualitative study.

Version: 1 Date: 14 April 2012

Reviewer: Marc Van Nuland

Reviewer’s report:

This is an original and well written report of a qualitative study which took me great interest in reading it. My comments don’t regard fundamental objections but are rather suggestions to improve the article (Discretionary Revisions).

1. I guess the title should mention this report is about GP trainees (generalizing to all trainees has not been addressed in the discussion section: it could be an option to mention it in the discussion but I don’t find it a necessity)

We added ‘GP’ in the title concurring with reviewer’s suggestion.

2. Abstract: the method section mentions ‘saturation’ – it seems better to me to mention this in the results section

Within qualitative research we view saturation as part of data-analysis, where one is constantly comparing new data to already analyzed data, testing whether new insights arise. Therefore we chose to describe saturation within the methods-section.

3. Methods/design:

3.1. “Stratified purposeful sampling” is mentioned but the author doesn’t explain how this was done (stratified to year one and three I suppose, but also male/female, Maastricht/Nijmegen trainees, etc? – which purpose or purposes were considered in the ‘purposeful sampling’? – how secure was this done?)

We explained how stratified purposeful sampling was done.
3.2. “in order to enhance transferability of the findings”: I would like to see this more explained
We reformulated ‘transferability’.

3.3. I propose to mention the initials of the researchers in the sentence telling about the members of the research team to make it clear “who is who” – it’s surprising that 4 researchers contributed and only 3 are mentioned as authors...
We added initials of the research team following the reviewer’s suggestion.

3.4. Was there any pilot testing of the semi-structured interviews?
Before interviewing we indeed did conduct two pilot-interviews. We now described this in the manuscript.

3.5. There is no explanation about by which procedure the different interview topics (appendix 1) were formulated: was this done by the whole research team?
We added the way interview topics were generated.

4. Methods/ Data analysis: I would prefer to mention saturation after analyzing 14 transcripts in the result section – the method section could mention that when saturation was met, the remaining transcript were used to confirm the results. This also shows that data retrieval took place before the analysis started and also suggests that the researchers overestimated the number needed to obtain saturation. Maybe this can be mentioned.
Also see point 2: Within qualitative research we view saturation as part of data-analysis, where one is constantly comparing new data to already analyzed data, testing whether new insights arise. Therefore we chose to describe saturation within the methods-section/data-analysis. Although the 7 remaining interviews did not gain new information on themes and dimensions, they did enrich our views on these topics, thereby confirming our findings.

5. Results:
5.1. Coding: there is little information about how many codes finally have been retrieved and how they were organized: the author mentions ‘higher-order codes’, ‘dimensions’ and ‘themes’ but it is unclear to me, as a reader, how this was conceptualized. Similarly, it remains unclear on which level ‘saturation’ was assessed: no new ‘specific codes’, no new ‘higher order codes’ or no new ‘dimensions’?
We described in more detail the number of codes and on what level saturation was reached.

5.2. Little mentioning of differences between first and third years trainees in the result section, whereas this was a particular point of interest in the design of this research project. The differences we found between first and third year GP-trainees were already described in the results section, namely in the description of the loops of self-regulation. In our discussion section we described and explained these differences. We also added that we did not find differences in the influencing elements.
6. Discussion:
6.1. I find it an interesting choice to discuss the findings from the perspective of theories.

6.1.1. I would change the final sentence of the first paragraph of the discussion: 
...we will discuss the two self-regulation loops from the perspective of ‘learning theory’ and the three elements influencing self-regulation from the perspective of ‘Self determination theory (SDT)’
*We adjusted this sentence.*

6.1.2. I would not put the paragraph discussing ‘differences between first and third years trainees’ between the paragraphs discussing the results from the perspective of theory, but rather would put it before (or incorporate it in) the ‘Strengths and weaknesses of the study’.
*We put this paragraph before the ‘strengths and weaknesses’ paragraph, following reviewer’s suggestion.*

6.2. Wouldn’t it be better to put the short section discussing ‘further research’ in the discussion section than in the conclusion?
*We agreed with the reviewer to separate ‘further research’ from the ‘conclusion’ section. We chose to put this under the ‘strengths and weaknesses’ paragraph.*

7. Acknowledgements: SBOH is not explained
*SBOH is a Dutch abbreviation for the formal employer of GP-trainees. We adjusted this sentence.*

**Level of interest:** An article of importance in its field
**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

**Reviewer’s report**
**Title:** How do postgraduate trainees regulate their learning and what helps and hinders them? A qualitative study.
**Version:** 1  **Date:** 18 May 2012
**Reviewer:** Erkki Olkinuora

**Reviewer's report:**
When assessing the above manuscript I take into account the points recommended by BMC editorial:

1. The research questions set by the authors are clearly defined and produce from the theoretical point of view interesting and practically useful knowledge about postgraduate students’ self-regulation in professional training sessions.
There is much more knowledge about students’ learning in ordinary, less complicated study courses, but we need much more knowledge about the more demanding practice-oriented clinical study sessions, which produces key competencies for future work. Many students who are successful in theoretical studies are not so successful in practical training and on the contrary. However, both kind
of studies should contribute to each other in order to produce really competent physicians.

2. The theoretical background for setting aforementioned research questions is clear and relevant. However, in order to be able to elaborate certain analysis of results and their interpretation it would have been beneficial to enlarge a little bit the theoretical points of view. When we think the connections between theoretical studies and the ability to make high level clinical diagnosis and treatment plans one can assume that instead of general medical knowledge measured in this case by ordinary knowledge test we would have needed measures representing deep conceptual knowledge in order to know whether students have learned relevant theoretical concepts in their right scientific meaning or perhaps adopted them only partially or even in the form of misconceptions. One would have expected also some theoretical considerations with respect to Vermunt’s classification of dimensions of self-regulation included in his well-known ILS-theory. Also the role of meta-cognitive awareness of students in professional type of action would have deserved attention in theoretical part. Referring to results it seems that there are two levels of metacognitions, one linked to short loop of self-regulation and the other connected more to the long loop. I admit however, that everything cannot be included in a compact theoretical framework and already in the present form theoretical framework is ok. In order to take more fully into account also certain affective aspects likely influencing the ways of students’ self-regulation in learning and their readiness to seek and accept external assessment student’s study and learning orientations should perhaps been noted, too. They have been demonstrated to influence crucially students’ learning strategies and outcomes in higher education. Situation-specific learning orientations has an effect on the ways students experience different learning situations in general and those very challenging and demanding study situations emphasized in this study in special. Intermediate study orientations influence how students experience different parts of their studies (for instance, theoretical study courses versus practical studies) and so-called general study orientations have an effect on the meaning of one’s studies as a whole. Express will to become a good doctor may include a combination of certain types of general and intermediate study orientations, which would help to define more exactly the motivational structure of this general level of interest and its effects on ways of studying. We expanded our theoretical background by describing the relation between self-regulation and learning orientation. In this perspective we also mention learning styles. Also the role of meta-cognition is mentioned. We added 3 references on these topics (no 7-9). However, as our research questions did not focus on learning orientation or learning styles, it is difficult to describe our results in this perspective, but we did mention learning orientation in our discussion paragraph. We do recognize however the importance of these topics in this research field, and will take them into account when designing other studies.

3. The qualitative methods applied in this study are based on good arguments and have been skillfully and carefully implemented. They have produced results which seem to be thrust-worthy and credible. However, the larger validity and generality of results presupposes relating these phenomenological results to behavioural measures, which can be done in future research. We adjusted the text on ‘further research’

4. The design of the study is relevant for giving good possibilities to answer to the defined research questions. In order to be able to catch larger variation of contextual factors it is good to have post-
graduate students from two universities. This creates however, also possibilities to compare those group with each other for finding whether there are so crucial differences in the study environments between the universities in question that it could be seen also in certain results.

We incorporated trainees from two universities for the purpose of making our results applicable for similar training situations. The purpose was not to compare two study environments. We do recognize that it is an interesting research question.

5. An interesting finding was that few students (however, not many) were dissatisfied to their supervisors. If we assume that the relationship of a postgraduate students to his/her supervisor is a very basic factor concerning the effectiveness of his/her self-regulation of learning in clinical study sessions (as seems to be the case according to the results) one would have tried to analyse the internal consistency of answers of these students in the interview. Are negative experiences concerning the methods of supervision or the personality traits of supervisors largely reflected in the level of dissatisfaction to their present practical studies.

We added more specific results giving insight in trainees’ negative experiences in the relation with their supervisor.

6. The discussion and the conclusions seem to be well balanced and adequately supported by the data. Researchers are well aware of the restrictions of their study, but also of the merits of their phenomenological approach. Relating main results to Eraut’s and Schön’s conceptual differentiations and the elements influencing self-regulation to Self-Determination Theory clarifies further the meaning of these research findings and their credibility. I agree with the authors’ statement that relying on informal learning may involve certain risks and therefore critical reflection is needed. However, one should specify what they mean by critical reflection in this connection. Is it only critical comparison of alternative paths of action based on comprehensive utilisation of also external feedback, or should it include also one’s own conceptual starting points and even attitudes (cf. Mezirow’s analysis of different levels or types of reflection).

We specified what is meant by critical reflection in this respect, based on the referenced article.

7. I have mentioned above some limitations of the theoretical background and in some measures and analyses. However, they can be regarded as Discretionary Revisions, which the authors can choose or ignore. Such points of view can be taken into account in future studies targeted at similar themes or when experimenting with certain elaborative analyses.

8. It seems that authors are clearly acknowledging most central of the work upon which they are building their own research.

9. The title and abstract convey accurately enough what has been found.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:** I declare that I have no competing interests
Furthermore in the discussion paragraph we added the sentence ‘This is important.....least proficiency’ with reference to literature (no 51) to stress the importance of external feedback and the role of supervisors. In this respect we also added a reference to literature (no 50) in the discussion paragraph.

We hope we clearly described what revisions were made based on reviewers comments.

Yours sincerely,
On behalf of all the authors,

Margaretha H Sagasser

Anneke WM Kramer
Cees PM Van der Vleuten