PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	How can general paediatric training be optimised in highly-specialised tertiary settings? 12 tips from an interview-based study of trainees
AUTHORS	Al-Yassin, Amina; Long, Andrew; Sharma, Sanjv; May, Joanne

VERSION 1 - REVIEW

REVIEWER	Morgan, Jess Centre for Reviews and Dissemination, University of York, UK Competing interests: nil
REVIEW RETURNED	13-Jun-2017

GENERAL COMMENTS	This is a very good paper, tackling an important issue for trainees. The authors use an interesting model in Appreciative Inquiry to explore potential ways to improve the training experience in a tertiary hospital. This matches with their intended objectives. Their findings are clear and, in particular, Table 4 is informative and well constructed. My comments are relatively minor and are outlined numerically below for ease of response: 1. I suggest that the objectives come before the final paragraph of the introduction, for easier flow when reading the work. I also think these would be best introduced within the text rather than simply placed in a box and not referred to. Essentially the links between introduction, objectives and then the selected methodology could be more explicit. 2. The authors discussed that the "methodology was informed by grounded theory and constructivism"(page 4, lines 5 and 6) and then later that they were "inspired by appreciative inquiry methodology" (page 4, lines 24 and 25) - this seems somewhat confusing when the reader attempts to understand the process. My own interpretation is that they have used grounded theory and constructivism as the underlying theory, with the appreciative inquiry model informing their interview design (in line with the aims of their research objective). I could have understood incorrectly. Using simpler but more precise language may enable the methods to be followed with less 'work' for the reader. 3. Regarding the sampling, there are a couple of minor issues. First, the authors use "purposive sampling"(page 4, line 15), the phrase "total population sampling" might be more accurate and the rationale for this could be explored. Second, the sentence "Interviews were undertaken with all who volunteered, and until the point of saturation was reached"(page 4, lines 19-20) does not seem quite right. It would be unusual for saturation to occur at the exact point where all

	participants are interviewed. I would assume that instead one or the other would be correct. Is it that the researchers intended to speak to all potential participants, or was the plan to sample to saturation? What were the prespecified definitions of saturation, if this was to be the stopping point, and can they show that these were reached? 4. The included participants (page 4, lines 50-53) are worthy of more discussion. Why do you think there are more SHOs than registrars? How do those interviewed differ from those not interviewed? Might those who did not participate have different views from those included? This imbalance should also be discussed within the limitations. Might the registrars be different from the SHOs and therefore the findings of this work may not be as representative of Registrar opinions. How does this impact on implementation etc? (Or does it not? and why?) 5. Please explain the codes used after quotes within the table. 6. It is important to explore whether the suggested improvements or enhancing factors are feasible, particularly in terms of time and resources for tertiary hospitals, which are already described as stretched. How could these be facilitated? It may be beneficial to highlight how the changes they have already implemented have impacted on time and resources. 7. In the comparison with the existing literature, I think it is essential to either provide an exploration of the broader literature (in which case, most, if not all, of the topics in Table 5 will have been discussed) or to be more explicit regarding why they have limited to the PHEEM and SPEED studies. I suspect that the first of these suggestion is more ideal, but it is also more extensive, and therefore the authors may opt for the second. 8. As discussed previously, I recommend a greater emphasis on the factors which the authors are already implementing from this work. This is a significant strength of the research, demonstrating clear impact, and should therefore play a greater part in the Implications section of this manuscript. 9. Within the unanswered questions, I suggest that the second also includes a question towards how to implement best practice. 10. Within the contributions, please clarify what SS and JM contributed to the research process and why they qualify as authors. At present this is not clear.

REVIEWER	Roland, Damian Leicester University, UK Competing interests: N/A
REVIEW RETURNED	20-Jun-2017

GENERAL COMMENTS	At the moment in the UK understanding the concerns of junior doctors, and adequately responding to them, rather than just acknowledging them, is of critical importance so this is timely study. It was well laid out at the tables easy to understand. The concepts suggested have strong face validity and the conclusions drawn form the data presented reasonable.

	Given the nature of the information presented I think it is important to be clearer about reaching saturation in this group. It appears only 3 registrars (ST4-8) were included in the data in a very narrow range of specialties. It seems surprising in such a small number key themes were identified so soon. It may be these were similar to the ST1-3 group. Given the different educational needs for both groups I would find this fact unusual and if this is the case it would be useful to provide some supporting evidence as to why you think this did occur. It would be useful to know the background of the researchers undertaking the interviews, and how long they lasted (on average)

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

1. The objectives have been repositioned as per your recommendations. We have tried to make the link clearer between the intro, objectives and methodology by the introduction of the last paragraph (The current tools to measure educational environments have limitations....)

2. Thank you for bringing this up. We have tried to rephrase our methodology to make it clearer.

3. The term total population sampling has been adopted, as this is reflective of what we did (invited all who met the inclusion criteria to join the study). We have also removed the point about saturation. Towards the end, most of the themes mentioned by participants were repeated and this was what was meant by saturation. However, everyone who volunteered was interviewed and this was the stopping point so this had been made clearer.

4. We have made this limitation clearer, and explained the reasons for it. These mainly are that the SHOs are not on the on-call and night shift rota whereas the registrars are, so it is likely they are under more time-constraint. Secondly, most registrars at our hospital are sub-speciality trainees or fellows whereas the SHOs are all still general paediatric trainees.

5. These have been changed to participant numbers to make it clearer.

6 + 8 + 9. This is an important point and has now been included, thank you

7. The PHEEM and SPEED measures are the most widely used measures of educational environment hence the focus on them in the literature review, this has now been made clearer.

10. Sorry about this omission, this has now been updated.

Reviewer 2

1. As per 3 above

2. Thank you, the background of the researcher and the time spent on the interview has now been done