Author's response to reviews

Title: The influence of the cultural climate of the training environment on physicians' self-perception of competence and preparedness for practice.

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Version: 4 Date: 22 September 2008

Author's response to reviews: see over
Response to reviewers comments:

Title: The influence of the cultural climate of the training environment on physicians' self-perception of competence and preparedness for practice.
Version: 3 Date: 15 September 2008
Reviewer: Douglas Curran-Everett

Reviewer's report:

Major Compulsory Revisions

1. Power analysis. I am not clear on what makes G*Power unique. On p 8, what outcome was used to estimate the sample size of 40 subjects?

Kindly see page 7 lines 5-9 (link to reference accessed on 20/09/08)
Based on the computation, the outcome was based on a power of 80%, at a significance level of 0.05.

2. Statistical analyses. Why were parametric procedures (t test, analysis of variance, regression) used on ordinal data? Were assumptions for proper use of these procedures satisfied? Nonparametric procedures are appropriate in this situation. Descriptive statistics can be reported as medians and interquartile ranges, although with a 4-point Likert scale, it is difficult to see how an estimate of variability will be useful.

The reviewer has raised a valid point on the choice of statistical test we chose. To begin with variables scored on likert-scales lie "in between" ordinal and interval variables as reflected in our four-point scale i.e. values "totally agree", "agree", "disagree" and "totally disagree". In a situation where one cannot be sure that the intervals between each of these four values are the same, then one cannot classify them as interval variables, but rather as ordinal variables. In order to be able to use statistics that assume the variable is interval, we assumed that the intervals were equally spaced.

We also plotted the frequency distribution of the participants by age group and year of graduation and this reflected a normal distribution of the study population. Further both groups were equally distributed per gender and training location. As we assumed that we had a normal Gaussian distribution, parametric tests (t-test and ANOVA) were used for data analysis. It is also known that even when the distribution of individual observations is not normal, the distribution of the sample means will be normally distributed if ones sample size is about 30 or larger. This is due to the "central limit theorem" that shows that even when a population is non-normally distributed, the distribution of the "sample means" will be normally distributed with a sample size of 30 or more.

Finally, based on the point raised by the reviewer and for the sake of completeness we conducted a Mann Whitney test on our data. The result of the analysis was
similar to that of the parametric tests we conducted with only a significant difference in the perceived preparedness as manager (66,000; \(P=0.11\)) in favour of the physicians who trained in Curacao.

3. Statistical analyses. How were the statistical analyses performed? I was unable to find a reference to the software used.

We used the SPSS software package and reference has been made to this in the manuscript (see p 8, line 22-23)

4. Bonferroni adjustment for multiple comparisons, p 10. Why was the Bonferroni procedure used to control for multiple comparisons? Although it is effective at controlling the overall error rate, its power is quite low.

We agree with the reviewer’s remark on this. However, we conducted the Bonferroni test following the specific advice of the expert who proof-read our manuscript prior to submission.

Minor Essential Revisions
1. Abstract, Results, lines 15-16. Based on the estimates you report, how can you say that overall perception of preparedness in the Caribbean group was even slightly higher than the European group?

We have removed the term “slightly higher” and rephrased the sentence.

2. Questionnaires, p 8, line 15. On what basis were the 4 incorrectly filled-out questionnaires excluded?

Kindly see p 7 (line 14-15)

3. Percentages, Results and Tables. Is 0.1% all that meaningful? Please report percentages to the nearest integer. The values will be easier to read as integers, and you want your manuscript to be as easy to read as possible.

The results in the tables have been corrected as suggested
Reviewer's report
Title: The influence of the cultural climate of the training environment on physicians' self-perception of competence and preparedness for practice.
Version: 3 Date: 13 August 2008
Reviewer: Robert McKinley

Reviewer's report:
The first point in my review (application of today’s standards to yesterday’s training) have not been specifically addressed in the revision. I acknowledge that a legitimate interpretation of these data is that the training the SpRs received up to 27 years ago was remarkably “future proof” in that it measured very well to standards first published in 2005, up to 25 years after graduation. They could perhaps make more of this in their discussion.

Again, we thank the reviewer for the constructive feedback that has been provided. This has been very helpful for us in improving the quality of our manuscript.

Like the reviewer rightly stated, the framework for the professional training of paediatric SPRs has not undergone major changes until after 2005 when the new recommendations were introduced by the Dutch council of medical specialists. Over the years however, there have been several changes in the content of the curriculum which have been closely linked to the changing trends of known and emerging diseases, as well as, knew knowledge related to the diagnosis and treatment of these diseases. Due to the constraints related to the length of our paper as it is, and our shared view that adding this point to the discussion would not significantly boost the message we wish to convey, we have chosen to leave this bit out of the discussion. Nonetheless, we fully share and acknowledge the reviewers feedback on this point.

General
Please also clarify whether you received an official ethical waiver and if so, document this within your manuscript giving the name of the ethics committee which provided this.

Please see p6 line 19-20 and p16 line 11