Reviewer's report

Title: Psychological distress and academic self-perception among international medical students: the role of peer social support

Version: 2 Date: 17 July 2014

Reviewer: Silvia Florescu

Reviewer's report:

Minor essential revisions

1. As regards the theoretical frame of the paper: I was wondering why were not considered the following:
   - the objective assessment of the academic performance (mark at the end of previous year, for those in 1st grade, the mark at admission)
   - characteristics that could explain the stress (the financial arrangements, economical status)
   - characteristics that could express the self esteem (Rosenberg scale) or the personal traits
   - characteristics that could explain the availability of peer social support (lodging in campus or in private settings)

2. About the measures used, there is a different level of explanations and the explanations can be found either in methods or results/discussion sections. I would propose to make a table with the measurements used, number of items, and range of values, cut off points or threshold values, alteration done on variables, type of analysis. I think this could help the understanding.

3. I expected to find the definition of the psychological distress, peer social support and academic self perception before to be explained the possible correlates, theories, models.

4. The number of observations is quite small and for some important subgroups extremely low. I expected to find clarifications in contingency tables about the real size of every subgroup (low peer support- academic self perception -psychological distress).

5. The nature of variables used and their distribution deserve at least a short description.

6. I could not find some aspects about the sampling (considered probabilistic or not, exhaustive or not?), I could not find an explanation for the important non response/non participation rate.

7. The section of Conclusions is too short.
8. The table 1 contains 4 rows with mean and SD (for MSWBI, MSPPD_FRI, MSPPS_FAM, MSPPS_SO) and 9 rows with absolute figures and percentages. I found difficult to read this table and I propose a separation either by another lineation (separate columns for n,%, and mean, SD) or simply to split in two tables.

10. I found some minor errors

DIFFERENT VALUES OF P VALUE (AT 3RD DECIMAL)

Table 1 presented the characteristics of students according to one’s academic self-perception.

2 43% of participated students were classified to be distressed and there were more distressed

3 students among those who perceived their academic performance to be poor than those who did not (p=0.065).

SF In the table 1, actually that p value is 0.064

11 Two DOTS INSTEAD OF one

On the other hand, when one experiences poor academic performance as a stressor, which can result in negative feelings about themselves, emotional support elevating

15 one’s level of self-esteem is assumed to be needed. For both types of social supports, similar

16 others PEER who have experienced, or are experiencing, the same, or similar, situations are presumed

17 to be optimal sources [20].

12 AN ADDITIONAL SPACE BEFORE THE COMMA

4 not (p=0.065). Students with poor academic self-perception had a higher score of MSWBI

5 (p=0.000), rated their local language proficiency to be poor (p=0.018), and had lower score of

6 MSPPS_FRI (p=0.001) and MSPPS_FAM (p=0.006).

13 THE MATTERS OF DOUBLE/MULTIPLE PARENTHESIS

PARENTHESIS USE – I also suggest to use the Formula writing as “/” has different meaning within text.

interaction: SI= [(odds ratio for joint exposure to both risk factors-1) / [(odds ratio for one risk factor-1) + (odds ratio for other risk factor-1))] [36].
performance to be poor as compared to those with high peer support (adjusted odds ratio (OR) \(=3.6\) (95% confidence interval (CI): 1.4–9.0)).

Among the types of social supports described by Cohen, et.al (i.e. tangible, appraisal, and emotional (self-esteem, belonging) supports), appraisal and emotional support appear to be relevant to medical students experiencing poor academic performance and/or psychological distress.

Figure 1 presented the joint association between psychological distress and low peer support on poor academic self-perception, adjusted by local language proficiency and family support. Of the domains of burnout (emotional exhaustion and depersonalisation), depression, stress, fatigue, the MSWBI scores were both dichotomised into the ‘distress’ and ‘not distressed’ using #4 as the

OMMISSIONS

was 59%). No significant difference was observed in the students characteristics in table 1 between the 138 students and those excluded from the analyses.

SF I think here should be mentioned the characteristics the authors are discussing about.

The only variable(s) which was (were) associated with poor academic performance was included as possible confounder(s) in the following analyses.

SF I waited for an enumeration of that/those variables.

Psychological distress

Psychological distress was measured using the Medical Student Well-1 Being Index (MSWBI) [27] with permission to use it from the developers.
SF (I waited to be mentioned the developers).

16 NOT CLEAR ENOUGH

12 $=3.6$ (95% confidence interval (CI): 1.4–9.0)). One score decrease in the MSPSS-FRI was
13 associated with a higher OR of 1.1 (95% CI: 1.0-1.2), while one score increase in the MSWBI
14 scale was associated with a higher OR of 1.5 (95% CI: 1.1–1.9) for poor academic self15
perception.

SF I would prefer a reformulation of the description and then an interpretation of the findings.

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

'I declare that I have no competing interests'