Reviewer’s report

Title: Dietary Quality linkage to Overall Competence at School and Emotional Disturbance in Representative Taiwanese Young Adolescents: dependence on Gender, Parental Characteristics and Personal Behaviors

Version: 1 Date: 14 Dec 2017

Reviewer: Megan Whatnall

Reviewer's report:

Overall comments

The manuscript has been improved, however some previous comments have not been addressed and some further revisions are needed - mainly to the discussion section.

Background

The aims and hypotheses are now clearer in the text. I would say lines 37-43 and the preceding background are now sufficient explanation in this regard - Figure 1 does not really represent the aims and I would not refer to here. Referring to Figure 1 at this stage in the paper is out of place as you are referring to your results before getting to the results section of the paper?

OC and OCS have been used interchangeably in the background and throughout the paper. Use one consistently - it should be OCS.

Line 20 - As suggested in the previous revision comments references 20 and 21 are not relevant or appropriate. Replace or remove this part of the sentence.


‘BACKGROUND AND OBJECTIVES: Cognitive impairment develops with pre-diabetes and dementia is a complication of diabetes. Natural products like turmeric and cinnamon may ameliorate the underlying pathogenesis.’

'To determine incidence of dementia in type 2 diabetic (T2DM) patients, and whether there are adverse or favorable effects of oral agents (OA) in DM'

Measures

Line 47 - Here it is indicated that participants were aged 11-16 years. In the abstract participants were reported as 12-16 years? This needs to be clarified and corrected.

Line 54 - It is still not entirely clear who completed each of the different measures. The article abstract indicates that 'Parents provided family socio-demographics and students completed a behavioural and dietary questionnaire', while response to previous review comments indicates adolescents completed these face-to-face interviews. This detail needs to be clarified and added here and throughout the measures section.

Line 77-78 - 'As previously described, the first six subscales were scored….' Previously described where? Please clarify or provide a reference.

Line 83 - Please provide a reference for the use of the 13 cut point

Line 123 - Incorrect reference has been added for physical activity recommendations

Lines 124-128 - Sufficient explanation has now been added with regards to BMI classifications, however a reference still needs to be provided.

Results

As per previous revision comment - the results section is really long and there is quite a bit of repetition of what is in the tables. Recommend cutting back to key results

Discussion

Discussion has improved, however still needs some revisions.

As per previous revision comment - It would be recommended to add an opening paragraph to briefly reiterate the study aims and summarise the main findings in relation to the aims.

Line 264 - this first section has too much repetition of the results and there is no discussion of findings compared with other literature. This needs to be addressed

Line 265 - The sentence - 'For the collective and particular measures of emotional disturbance reflected in SAED, there were consistently negative associations' - this sentence is incomplete,
assume consistently negative associations with OCS given the sub-heading this falls under however for clarity I would recommend stating this clearly.

Line 280 - It would add to the discussion to address in this section - How the dietary quality scores of the current study sample compare with other comparable studies using the YHEI-TW?

Line 317 - 'who are the students at risk -puberty and gender' There is no discussion or reference to other literature in this section

Line 334 - 'In the present study, for girls, we found BMI to be independently associated with OC, which is likely to have captured physical activity information.' This statement is a bit of an over-reach

Line 326 - the favourable/unfavourable in brackets here doesn't work because you have started the sentence with 'one or other of emotional disturbance or school performance' - i.e. there is no clarity as to which of these the information in brackets refers to

It's not needed to refer to tables and figures within the discussion section - this has already been done in the results.

As per previous revision comment - It would also be recommended to add a paragraph to the discussion on the implications of the study findings e.g. what does this paper add to the evidence base? What are the implications for health promotion practitioners or others working with adolescents in the school setting?

Tables and Figures

Figure 1 - as per comment above this shouldn't be referred to in the background. If authors decide to keep this figure a footnote needs to be added to clarify these are the results of the current study, except where reference to other studies are provided.

Tables 1 and 2 - the number of decimal places reported should be consistent throughout.

Tables 1 and 2

As per previous revision comment - If characteristics are presented by overall competence categories, percentages within each overall competence category should add to 100 rather the percentages for each characteristic category adding to 100. i.e. for gender it should be the percentage of the group with z-score ≤ 6 who are male/female adding to 100% and the same for the group with z-score >6.

Still recommend this change.
Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal