Reviewer's report

Title: Relation between body mass index and depression: A structural equation modeling approach

Version: 2 Date: 28 January 2007

Reviewer: Hui-Xin Wang

Reviewer's report:

General

The manuscript can be improved by improving the language, scientific writing and avoiding unnecessary sentences. In addition, the interpretation of the results should be with caution and some parts of the discussion needs to be extended.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Specifically:

ABSTRACT

Results: the following sentence is repeated twice: “higher BMI is associated with ....”

Conclusion: “the two major diseases of obesity and depression” can be written as “the two major diseases, obesity and depression” or simply “obesity and depression”.

METHODS

• The description of SEM is too long, some of them are unnecessary.
• There is a number of “CCHS-1.2” and “in this analysis” through the section. It is not necessary to repeat it all the time.
• Depression: “It was no other continuous variable in the dataset to measure depression or its severity.” Is it relevant information?
• Social economic status (SES): the language in the whole paragraph needs to be improved.

DISCUSSION

• The 2nd paragraph, 2nd sentence, “It can be concluded from model 3 and table 2 ....”, does this mean that the model 3 in table 2, or both of the model 3 and table 2?
• The 4th paragraph, “In male, .....” this sentence is confusing. In the study, the direction was assigned using the SEM method, although one cannot conclude any causality, the results indicate that the level of BMI was positively related to the level of depression. On the contrary, the level of depression was negatively related to the level of BMI. The possible explanation of these associations should be discussed.
• The last paragraph, “This work showed these two diseases are associated but the form of the relation is different BETWEEN males and females”. Is it BETWEEN or AMONG?
• Limitations should be placed before the conclusion.

There are a number of these kinds of phenomena through out the MS, all need to be carefully checked and modified.

In addition, where does the figure on last page come from? It was not mentioned anywhere in the text.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major
compulsory revisions

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

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I declare that I have no competing interests.