Reviewer's report

Title: The 18 Household Food Security Survey items provide valid food security classifications for adults and children in the Caribbean

Version: 1 Date: 19 October 2005

Reviewer: Janice Stuff

Reviewer's report:

General
This paper is of general interest to the general public health community, whether the US 18 item food security survey can be applied and used in a poor Caribbean population. The authors rely on several technical statistical procedures to test whether the item discrimination of the survey in the US holds up in the Caribbean population. The authors assume the general audience of this journal has a working knowledge of item response theory, and at times does not give the reader enough context and background to interpret the range and meaning of the results, scores, and plots. Since this is a highly statistical and methodological paper, perhaps it is a better fit for a statistical journal rather than a general public health journal.

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

Aim/objective. The authors need to be clearer on the objective of the paper in the abstract and at the end of the introduction. The title provides more clarity. Isn't the point to evaluate whether scaling of the survey holds up in the Caribbean population, and discriminates into known food security categories? Their term ‘to evaluate’ is incomplete and needs to mention the benchmark, scale, or technique to be used.

Abstract: reword the phrase ‘modeling varying item…..'

Methods:
The authors administered a questionnaire by self-administration; the survey is generally administered by interview, and has complex skip patterns. Please comment.
In relation to this also, what is the literacy level of this poor population?

Expand and describe the terms of ethnic groups: Afro-Caribbean and Indo-Caribbean and Mixed.

Results:
Expand the interpretation and meaning of the ranges of ‘item calibrations’ in Tables 1 and 2, including the positive or negative signs.

Is there a way to connect the results from Table 1,2,3 to results in Table 4? In other words does the high prevalence of food insecurity fit or conflict with the other results?

Figure: Label unclear (no mention of food security)
Results and point is not intuitive to the non-statistician.

Discussion (middle paragraph) and Conclusion ‘Our results perform the same as the US survey’..... do we need a comparison table, or citing of the item response ranges to support these statements?
Table 3 title, does not have ‘food security’ listed

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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: Acceptable

Statistical review: Yes

Declaration of competing interests:

'I declare that I have no competing interests'