Reviewer's report

Title: Cognitive Testing of Physical Activity and Acculturation Questions in Recent and Long-Term Latino Immigrants in the US

Version: 1 Date: 30 March 2010

Reviewer: C Barroso

Reviewer's report:

Abstract (MAJOR COMPULSORY REVISION)
The last sentence of the “Background” section is unclear. Why would other developed countries with growing numbers of immigrants be concerned about how language use (English/Spanish) and residence in the U.S. influence self-reported acculturation status and physical activity? Not all developed countries use English or at least American English. Please revise. The “Methods” section does not correspond to the purpose statement in the “Background” section. In particular, what was done in the study is unclear. The “Results” are difficult to understand since the methods were not adequately described. The “Conclusion” was also difficult to understand because it did not correspond to the purpose statement and the concept of “cross-cultural equivalence” was mentioned and not previously introduced.

Introduction (MAJOR COMPULSORY REVISION)
The authors attempt to provide a rationale for their study purpose. However, their thesis evokes several questions about their decision process that are unanswered.

These questions include but not limited to:
1) How do the authors define acculturation?
2) Is acculturation different from language use and residence time in host country?
3) Does acculturation include socio-economic status (SES) including educational attainment?
4) How do the authors define the word “cognitive?”
5) Do the authors suspect that SES and educational attainment may influence cognitive abilities or at least expression of cognitive abilities?

Page 7, last paragraph, last sentence: “...rather than asking about particular behaviors, we chose to instead the following question...” This sentence is incomplete, please revise. Furthermore, this sentence in question describes what the authors did and is better suited for the “Methods” section instead of the “Introduction.” This sentence in question also appears to provide an example from the 2000 National Health Interview Survey as to what type of survey item may be display cross-cultural equivalence regarding physical activity. If the latter
is the case, then the sentence needs to be revised to communicate this.

Please consider using only Latino or only Hispanic instead of interchanging.

Methods (MAJOR COMPULSORY REVISION)

Page 9 (EXCEPTION – CLARIFICATION: MINOR ESSENTIAL REVISION)
Recommend making the first paragraph of the “Methods” section into two paragraphs. Information about the items used regarding physical activity can be in a separate paragraph (content for the second paragraph).

(MAJOR COMPULSORY REVISION)

Page 10, first full paragraph: The authors finally provide a working definition of acculturation and support from the literature regarding the use of the term “acculturation.” This information should be presented in the “Introduction” so that the reader knows the premise from which the authors are building from and contributing.

Page 12, “Recruitment,” last two sentences: The authors do not define what the three design conditions are. It is unknown what qualifies an individual to be low acculturation/Spanish, high acculturation/Spanish, or high acculturation/English. The authors (page 10) stated that they selected items from various instruments, but there is no mention as to what constituted the three design conditions. (Only Table 1 provides how the three design conditions are defined.)

Page 14, “Analytic Approach,” last paragraph: The authors finally provide a working definition of cognition (“…Items were determined to contain features producing difficulties related to…”). What cognition means in this study should also be presented in the “Introduction” so like the term “acculturation” the reader knows and understands the premise from which the authors are building from and contributing.

Page 17, last paragraph: Please provide a more detailed description of Q-bank coding scheme used.

Overall, the methods used are appropriate for the study design. However, because key concepts were not defined and the rationale for the study (Introduction) was not adequately described, the logic for this study is questionable at most and at minimum needs more detail and clarification. Areas related to acculturation and cognition need to be revised for clarity.

Results & Tables (MAJOR COMPULSORY REVISION)

The authors reiterated the study purpose in the first sentence of the “Results” section; however, this sentence and the study purpose from the “Introduction” are not the same. Please clarify what is the purpose of the current study.

Table 3: Please include in the legend the definition for the design conditions (even if only two of three conditions are included in the table) instead of informing the reader to go elsewhere.
Table 4: A more detailed description of the data displayed is needed.

Discussion (MAJOR COMPULSORY REVISION)

The implications of the study findings are vast and of import; however, the manuscript needs to be revised so that the complete story can be clearly explained. Overall, the “Discussion” is appropriate.

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: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.