Reviewer’s report

Title: The influence of active coping and perceived stress on health disparities in a multi-ethnic low income sample

Version: 2 Date: 12 November 2007

Reviewer: Ari Haukkala

Reviewer’s report:

The manuscript has improved from last version and authors have made detailed response to earlier comments. However, there is still major problem in the paper that must be addressed.

The analyses of the hypotheses are based on testing interaction terms in regression analyses. The aim in interaction term between continuous measures is does the term add anything to main effects model. In my opinion authors should show only main effects in table 4 and report if interaction term adds statistically significantly anything to two main effect model (including age). If the main effects are based on model that include interaction terms same time in the model, these coefficients are not meaningful. However, this is possible if variables are centered but there is no indication of centering in data analyses section or anywhere else in paper. So I do not know are the results of the paper based on correct analyses. As an example in the abstract the first sentence in result section including regression coefficient for interaction term (b=-.59 ...) is not understandable. There were several other sentences in the abstract that state that something is significant (probably) but there is no indication what kind of relationship there was. The conclusion ends also to this kind of sentence.

As a minor comment for analyses I believe standardized coefficients would be more informative with this kind of variables.

Sources of interaction terms are

Cohen Jacob (1988)

centering


There are several good internet sources as well for this topic.

Relating to regression analyses I do not know how reliable results are when authors are using ordinal scale (subjective health) as an outcome. I would confirm the results using logistic regression and dichotomous subjective health indicators.

More generally the cross-sectional design is still major problem when testing
hypothesis like John Henryism. Coping is related to actual stressors and should be tested in longitudinal setting. It is difficult to say is this study support or not support for original hypothesis. The aim of the paper (page 6) promise too much in causal terms “… how stress and coping influence …..

There must be some indication about the validity of subjective oral health. Both citations to subjective health measures are related to general health (page 8). Because the oral health is more important here as it might include some new information this must be addressed better in method section and discussion.

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

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests