Reviewer's report

Title: Are variations in rates of attending cultural activities associated with population health in the United States?

Version: 3 Date: 28 February 2007

Reviewer: Amanda Nicholson

Reviewer's report:

General
Thank you for the further revision and your continued constructive dialogue. The paper is clearer and I am happy with your changes, with just a few points remaining mainly concerning methods.

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

Diagrams, Method
Figure 1: I am sorry if my previous comments referred to c' as the mediated effect. I think calling c' the mediated effect might be confusing. c' is the direct effect - ie the effect that is not mediated. a*b is the mediated/indirect effect. I am basing my comments on http://davidakenny.net/cm/mediate.htm.

Is it possible to mark a,b,c etc on the Figures 2a-2c? Am I right that the number given for bottom line is c (total unmediated effect) rather than c'? Methods: p7, para 1, last sentence: To state (in words) that a*b = c-c' would make it crystal clear. Should the equation for % of total effect mediated be (a*b) /c rather than (a*b)/c'?

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

Title to Table 3 should make it clear it is a multivariate model.

page 9, para 1,line 6 should read “ binary and categorical”.
I think these negative results are important to state as they clarify the nature of the relationship between health & events attended.

p10,para 1,line 3. - 0.0.43

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, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.