Reviewer’s report

Title: The Virtual Supermarket: An Innovative Research Tool to Study Consumer Behaviour

Version: 2 Date: 11 March 2011

Reviewer: Brad Appelhans

Reviewer’s report:

Dear Dr. Powell,

Thank you for the opportunity to review, “The Virtual Supermarket: An innovative research tool to study consumer behavior” for BMC Public Health.” The manuscript describes a new electronic tool that measures food purchasing patterns in a simulated supermarket and reports data from a pilot study using the tool. I have used the Virtual Supermarket several times during the past few days and can attest to the fact that it is quite innovative and would meet an important need in the research community. However, as I do not speak Dutch, I could not understand the text included in the program interface or in the data files produced by the program. I am enthusiastic about the program and would be very interested in an English-based version. My comments and suggestions are listed below.

Comments on the program:

1) I noticed the program worked very well on my newer laptop with Windows XP, but did not work well on an older desktop computer with the same operating system (Windows XP).
2) Overall, I had a favorable impression of the program. The graphics and navigation were smooth, the program ran smoothly without any glitches, and the controls were straightforward and intuitive.
3) Discretionary revision: I have been trying to develop a program very similar to the Virtual Supermarket that would provide researchers with a summary of the nutritional composition of food purchases. The nutrition information for each item is available in the Virtual Supermarket, and can be displayed by clicking on a button in the “front end” display that the participants view. However, the authors did not mention nutritional measures in the manuscript and I think the scientific community would find this very valuable. Does the Virtual Supermarket have the ability to provide a summary of a shopper’s purchases based on nutrition (e.g., amount of fat purchased, servings of vegetables, etc)? If so, this should be included in the manuscript. If it cannot, that is OK.

Comments on the manuscript:

1) Compulsory revision: I see that a previous reviewer requested more emphasis on the pilot study. I agree with this comment. The “Implementation” section should be formatted into a more traditional “Methods” section, where the
participants, survey measures, and the virtual supermarket are described in the usual order. It was confusing that the pilot study was described in the Discussion section of the manuscript. In fact, I would advise the authors to reorganize the manuscript around the “feasibility test” of the virtual supermarket rather than simply a description of the tool itself.

2) Minor essential revision: What was the mean age of the sample? Experience with computers (and video games) would be expected to influence the participant ratings, and would likely be higher among younger participants.

3) Discretionary revision: Page 10 – What is meant by “well-rewarded”? 

4) Discretionary revision: Are there plans to validate the program against actual food purchases at grocery stores? This would be valuable.

**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'