Author’s response to reviews

Title: Believability of messages about preventing breast cancer and heart disease through physical activity

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Author’s response to reviews:

January 9, 2018

Dear Dr. Asimakopoulou

Thank you for the opportunity to revise our manuscript “Believability of messages about preventing breast cancer and heart disease through physical activity”.

As outlined in the attached response to reviewers, we have carefully revised the manuscript in response to the reviewers’ comments.

Thank you for your time and consideration.

Sincerely,

Tanya R. Berry, PhD

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Response to reviewers.

Technical Comments:

1. Please include, at minimum the names, institutions, countries and email addresses of all authors, and the full postal address of the submitting author in the Title page.
   
   - This has been done. Also, please note the Faculty of Physical Education and Recreation has been changed to the Faculty of Kinesiology, Sport, and Recreation for authors Berry, Jones, Courneya, Rodgers, and Spence. Our faculty officially changed its name on January 1, 2018.

2. Please include a Background header after Keywords section.

   - This has been done.

Editor Comments:

This is a sound paper that needs only very minor work to bring it to the standard required. Please see below for the required, minor changes.

- Thank you for the positive comments. We have addressed all the comments made by the reviewers. We thank both reviewers for their time and effort in improving our work.

Reviewer 1:

This is a well written and interesting paper that is topical. The aim of the paper was to examine message involvement and believability of information associated with physical activity as a preventive factor for breast cancer and heart disease in women.

- Thank you for the positive comments.

I would like to know how many women were approached to take part in the study (i.e. what is the response rate?)

- This is very difficult to answer given the nature of recruitment; we don’t know how many women may have seen the posters or e-mails. Also, the recruitment materials specified the study was for women who had not been diagnosed with heart disease or breast cancer and we don’t know how many women at the university, senior centre, or religious institution were disease free and may also
have seen the posters or e-mails. The following has been added to the Participants section of the Methods section (p. 7, lines 136-137): “Given that participants contacted the researchers if they wanted to participate after seeing recruitment information it is not possible to determine response rate.”

I also feel that the results section is wordy and wonder whether the results could be tabulated to improve clarity.

- Two tables have been created - one for the demographic information (Table 1, page 23) and the other for the results of the regression models (Table 3, pp 26-27).

There are also some typographical / grammatical errors that remain.

- The manuscript has been carefully reviewed for typographical and grammatical errors, and for clarity.

I feel that the implications of this research - the "so what" element - could be expanded upon. The following has been added to the conclusions section (p. 18, lines 378-389): “These results highlight that health promoters may be at risk of reaching those already engaged in prevention behaviors. Finding innovative ways of reaching those who are not interested in physical activity is needed. For example, investigating if inactive women find prevention information threatening is warranted. Other researchers have reported that healthy women who were moderate alcohol drinkers automatically avoided cancer-related words after being informed that alcohol is a risk factor for breast cancer, but self-affirmation moderated this relationship [18]. It is likely women who were not self-affirmed found the information threatening. Further, the current research showed that breast cancer prevention messages are likely not as strongly internalized as heart disease prevention messages. Women fear breast cancer and greater understanding of how to mitigate these fears, and how these fears are related to responses to prevention messages, is a rich area of study that may contribute to more effective health promotion.”

Reviewer 2:

A well written, well described study. There are clear hypotheses stated, and the stats are clear and easy to understand.

- Thank you for the positive comments.

suggestions:

line 102 - suggest change wording 'controllably' - difficult to understand

- This sentence (p. 5, line 102) has been rewritten: “Given that heart disease is considered controllable through lifestyle behaviors…”

page 11 - include % as well as n for demographics
- The demographic information is now in Table 1, which includes both n and %.

line 385 - remove the word 'that' the second time its mentioned

- This has been done authors could acknowledge the benefits and limitations of using a within subjects design

- the following has been added to the limitations section (p. 17, lines 355-359):
  “However, although less error variance existed between messages because participants responded to both disease messages, the within subjects’ design may also have resulted in carryover effects from one reading to the next, such that reading about one disease may have influenced responses to the subsequently read message. This was somewhat mitigated by counterbalancing the reading order.”

overall, the authors should re-read the manuscript and made it as clear and as understandable as possible as the concepts discussed might be difficult for some to get their head around.

- The manuscript has been carefully reviewed for typographical and grammatical errors, and for clarity.

suggestions for future research could be stronger, and the practical issues of what the findings mean could be discussed further.

- As noted in our response to reviewer 1, a section has been added to the conclusions section (p. 18, lines 378-389).