Author's response to reviews

Title: Resveratrol food supplements: a survey on the role of individual consumer characteristics in explaining attitudes and adoption intention in a US and Danish sample

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Author's response to reviews: see over
Point by point reaction to reviewers:

Major compulsory revisions

1 General comments: An interesting report of a growing set of consumer behaviours. One of the first studies to examine psychographic explanatory variables.

2 The writing style could be more concise and phrased in past tense. There several typographic and grammatical errors. I can provide some corrections.

   We have changed to past tense wherever the time did not appear appropriate, and looked for further errors. As suggested, we can send it to further and final professional editing, if wished. We have also partly condensed the text in the results and discussion section to be more concise.

3 Methods: Can you give more evidence in support of the validity of the measures you have used here? Mention that the validity and reliabilities of the scales listed in the tables where available.

   We have added further explanations for why we chose an already existing measure and where possible who has developed and tested it how, in the method section.

4 Methods: Was resveratrol clearly defined in the questionnaire? Many people do not know what it is. Did all the respondents understand the term? Please list the questions asked of the respondents in the Methods section.

   Thank you for that observation. We have added the introductory sentences that explained resveratrol to the respondents, and clarified that understanding of the latter was not further tested.

5 Methods: The term “Mediterranean Kitchen” should be defined early on in the paper. It is not used in some countries. Was it defined for the respondents?

   We have added an explanation of the French paradox as well as the main characteristics of the Mediterranean diet to the introduction.

6 Discussion: Describe the main limitations of the study such as the cross sectional nature of the design, the use of quota rather than random probability sampling, the possibility of overlap between the independent measures.

   We have added limitations after the conclusion section, mentioning the points raised, except for the possible overlap of the independent measures, as this should not be disturbing results given multi-collinearity had been checked.

Discretionary revisions

1 Results: Can you give the R square values associated with each block of predictor variables in tables 3 and 5 and comment on them in the Results/Discussion?

   Thank you for that suggestion. We have conducted an analysis for the blocks of variables and added R square and F values to the two results tables, to shed further light on their strengths. The strength of the effect is now more often commented on in the text.

Discussion: Some indication of possible future research directions would be useful as would reflection on the public health importance of this topic.
We have commented on possible need for further research in the discussion and added an overall sentence on why we think research on consumers dealing with supplements is important to research further from a public health point of view in the conclusions.

Thank you for inviting me to review this paper, which has presented the comparative analysis of the socio-demographic and psychographic determinants of resveratrol supplement attitudes and likelihood of its adoption in two countries, US an Denmark. The choice of the substance is based on the current gap in the literature examining this plant food supplement and a broad range of (reduction of disease) health claims associated with its use.

The paper was clearly written and describes well the domain of interest. The descriptive focus however is also the article’s weakness as I was struggling to understand the broader theoretical as well as empirical implications of the study – what is the added value of the research question in the broader context of a) plant-food supplement literature and b) behavioural literature contextualised within this domain of study? For instance, there is a considerable debate in the literature about the plant food supplements sitting uncomfortably between food and medicine – what insights does the current data contribute to this issue? The authors discuss “inverse supplement hypothesis”, however beyond stating the presence of this phenomenon in the current data, have not further explored its causes and correlates.

We hope with rewriting the research questions, that the four areas the questions refer to are more apparent. It is true that with these four, it is not possible to explore the relevant literature in detail to each.

We have added a sentence on the possible cause of the inverse supplement hypothesis in the introduction, and some more references to resveratrol as an example of a botanical that might be perceived as closer to medicine than other supplements.

Specifically, my comments are as follows:

Major revisions:

Methods and measures (p9-11):

1. What determined the selection of the variables to be included into the analysis – what theoretical rationale/what research question drove the analytical strategy? It reads very much as the off the shelf collection of the variables included.

We have rephrased the research questions in the introduction in a way that we hope more clearly shows due to which reasons we have chosen the measures described more in detail in the methods section. The research question now focuses less on listing the measures, but describing what is the thought behind the set chosen. We refer to the number of the research question in the method section.

2. Please give example of the items – Table 2 does that to an extent, but need further example for e.g. natural product interest.
We have added a supplementary table that shows the statements of all measures, for which in table 2 we only referred to the respective publication. That way the reader can more easily access them.

3. How do the authors make sense of “frequency of use” – e.g. what would be the “occasional use” of the supplement, or what would be considered a “frequent use”?

We provide the question and scale we used.

The results section:
4. What type of regression analysis was used? How was the regression model developed? What values (R2 and F) were associated with what variables – please add this in the text. What was the strength of the relationship of different DVs on the two IVs?
A simple linear regression model, entering all independents simultaneously, was used, we commented on this. We now list the R square and F values for each set of variables (entered as a block in an extra regression in order to provide the values) associated with each research question, as had been suggested by the other reviewer (but not for each variable due to space). We added more comments on the strength of the relationship, based on the values presented.
5. Para 2, p13: I can’t find some of the results talked about in the table: a. the significant results of the negative influence of natural product interest on attitudes in the US b. the significant results for the claim that favourable attitude towards the supplement is related to a preference for Mediterranean diet for the Danish sample (Table 4).

Thank you for that comment. We had highlighted all variables that are significant on a 5% level of significance in bold, but had commented on variables only significant on a 10% level of significance in the text nevertheless. That is confusing for sure. It is right that the variables on a 10% level of significance are of rather little effect, which is why little weight should be given to them – they are more interesting for further research, but should not be regarded as a significant result. We now only comment on these as a tendency and only in the results section, and we underline that they are not significant at the 5% threshold. Applying the latter, in the discussion and conclusion, we only write about the significant variables.

The Discussion section: Currently, this is to a large extent the reiteration of the results. The analysis should be contextualised within the broader literature on food plant supplements and the related issues. For instance, what is the theoretical implication of the CAM self-reported use being related to the favourable attitude to resveratrol? What does it say about the relationship between past behaviour and attitudes – how can Socio-psychological literature be brought to bear on this? What is the implication for the attitude to resveratrol the fact that both the CAM variable and the food indulgence variable are predictive of the intention to use, since the former aligns it with medicine and the latter with food? This may be further explored in the light of the inverse health hypothesis not being confirmed.

We have condensed the discussion and conclusions section in order to avoid repetition of results, and have worked on improving the structure. We have added further comments on both the inverse supplement hypothesis and the CAM usage with regard to resveratrol and botanicals.

Limitations: Please describe what these might be
We have now added a section on limitations after the conclusions.
Minor revisions:
a. The regression analysis is about prediction, please be careful with directionality (“In turn, a favourable attitude towards the resveratrol supplement in Denmark is related to a preference for Mediterranean kitchen”).
b. Please refer to the tables throughout the text.

We have added frequent references to the tables in the results section.