Reviewer’s report

Title: Decision-making styles in the context of colorectal cancer screening

Version: 2 Date: 12 Oct 2019

Reviewer: Jozef Bavolar

Reviewer's report:

I appreciate the work done by the authors in the revision. They incorporated most of my comments, and even when I had different opinion, they provided a solid rational for their solution. Similarly, I see a high potential of the chosen aim of the study - investigating real-life consequences of the decision-making characteristics, that can be used in clinical praxis. On the other side, I still view two issues as problematic, mainly in the results section, resulting from the used methods.

Firstly, I do not agree with dividing the sample according to their score (under/over 15). It clearly devalvates data and has the only effect in comparing these groups in CRC screening. The same can be found out by simple correlations of each style and CRC screening.

Secondly, I do not agree also with the way how regression analysis was conducted. It should surely include all decision-making styles inserted at the same moment (with controls), but if I understand it properly, there was logistic regression for each style separately (authors write: each decision-making style separately entered as independent variable).

The possible solution for both issses would be to present correlations of the decision-making styles, decisional conflict and CRC screening together with the results of regression with all predictors together (styles in one step, conflict in the other step). Multiple regression is not used only for prediction, it also says which variables and to what degree can explain the dependent variable. As obvious from Table 3, the decision-making styles are not independent and should be treated as interrelated.

Minor issue - I would recommend changing the coding of CRC screening to 0- no paticipation, 1 - participation. It would make the results more easily interpretable.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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I am able to assess the statistics

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