# **Peer Review Report**

# Review Report on Religious conspiracy theories about the COVID-19 pandemic are associated with negative mental health

Original Article, Int J Public Health

Reviewer: Rochelle Frounfelker Submitted on: 13 Jun 2022

Article DOI: 10.3389/ijph.2022.1604324

#### **EVALUATION**

### Q 1 Please summarize the main findings of the study.

This study assessed the association between religiosity and religious conspiracy beliefs. Furthermore, there was an association between religious conspiracy beliefs and negative religious coping strategies and mental health.

# Q 2 Please highlight the limitations and strengths.

I appreciate the opportunity to review this manuscript. The strength of this manuscript is the large sample size and exploration of a unique topic of relevance to COVID-19 public health. The limitations include the use of a cross-sectional study design, and the choice of statistical tests (logistic regression) as opposed to assessing mental health as a continuous outcome, which would be appropriate for the scales used.

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Thank you very much for the opportunity to review this manuscript. Here are some thoughts regarding this paper.

## Minor issues:

I would suggest clarifying in the abstract that you will be speaking about religious conspiracy theories related to COVID-19. This is an important aspect of your study. Although I appreciate and realize there are always word limit constraints, i do think it would be important to spend some time in the introduction discussing what exactly is meant by "negative" religious coping strategies. That is never articulated and clarified in the manuscript, and is a key feature of the paper. The idea of labeling a religious coping strategy as "negative" may also be contentious and value-laden. Provide more information on how this construct is explored in the literature and defined for the purpose of this study.

#### Major issues:

I think my greatest concern, and the primary weakness of the paper, is the transformation of outcome variables to dichotomous variables and use of logistic regression. This is particularly problematic when it comes to validated mental health assessments. Unless the authors use a predetermined and validated cutoff for a probable diagnosis of depression and anxiety, for instance, this should not be done. It calls into question the validity of your findings. It is unclear why the authors made these choices, and how they made the decisions they did (i.e., was it data driven? theory driven?) . They write in the statistical analysis that variables were not normally distributed. If they are referring to the outcome variables, then there are other statistical strategies that can be used to address this, notably standardizing the scores, using factor scores, or converting them to theta values using item response theory.

Another main question I have is related to missing data. Was there no missing data? i.e., were participants made to select answers for all questions? was a response of "not applicable" used for any variables?

PLEASE COMMENT	
Q 4	Is the title appropriate, concise, attractive?
Yes	
Q 5	Are the keywords appropriate?
yes	
Q 6	Is the English language of sufficient quality?
yes	
Q 7	Is the quality of the figures and tables satisfactory?
Yes.	
Q 8	Does the reference list cover the relevant literature adequately and in an unbiased manner?)
yes	
QUALITY ASSESSMENT	
Q 9	Originality
Q 10	Rigor
Q 11	Significance to the field
Q 12	Interest to a general audience
Q 13	Quality of the writing
Q 14	Overall scientific quality of the study
REVISION LEVEL	
Q 15	Please make a recommendation based on your comments:

Major revisions.