Reviewer A

Thank you for the opportunity to review this manuscript. Understanding reactions to COVID-19 will remain important as the world continues to deal with this health crisis. The paper was generally well written. However, I believe it needs more consideration of the literature, a focus on some theory for why variables were chosen, and some more clarity around the analysis.

Reply to reviewer A: Thank you for taking the time to read our paper. We really appreciate your comments.

Comment 1: The Introduction summaries the world experience of COVID, before going into some different variables in separate sections. However, these sections are largely separate and do not link. There is also not an underlying theory for the chosen variables - why choose gender, age, conspiracy theories, and some motivation variables over all the other variables that could have been chosen? I'm not saying these should not have been investigated, but why these? More detail is needed. Was this group of young people, chosen because of rising rates, because media do not portray them as at risk, perhaps young people more generally feel impervious to bad things happening to them?

Reply 1: Thank you, we have edited the whole introduction section based on your useful comments. We hope this has addressed your points.
Changes in text: Page 5. Specifically, lines 103-121 includes a rationale for young people.

Comment 2: It is unclear until much later in the Introduction that the interest of the paper is young people. Much earlier, it needs to be stated why young people were chosen. Then the authors could go into the variables chosen.

Reply 2: Thank you. We have added an earlier rationale for selecting young people.
Changes in text: Page 5. Specifically, lines 103-121 includes a rationale for young people.

Comment 3: I do not follow the comment made about women having a higher proportion of COVID-19 cases. At 52%, isn't the population of women in Spain 52%? In which case, this is what we would expect? Are the authors suggesting women should be lower given the research on women enacting more health behaviours? More explanation here is needed.

Reply 3: Thank you. We agree with your comment here and have removed this text.

Comment 4: I am unclear why (as I state above) conspiracy theories were chosen to focus on? Not that this isn't a legitimate area, but why was this chosen with this group? Was it that we don't know how young people's conspiracy theory beliefs impact on preventative measure use? Are young people becoming more focused on such theories, etc.? This is where theoretical explanation is needed as the variables chosen have been extensively investigated.

Reply 4: Thank you. We have added literature to this section that specifically explains why young people are more likely to believe conspiracies.
Changes in text: Page 7, lines 173-181.

Comment 5: The section on high-risk behaviours doesn't really fit where it is. I would recommend revisiting the entire Introduction to see if there is a better structure. For example, maybe high risk and preventative approaches need to be discussed together?

Reply 5: Thank you, we agree. We have revisited the intro and we have restructured it.
Changes in text: The introduction section, pages 3-8.

Comment 6: In the Method, it is unclear why 100-150 participants were desired? Was a power analysis conducted?

Thank you. Unfortunately, we did not conduct an a-priori power calculation. The recruitment strategy was of convenience, over a limited time period, hence the relatively small sample. We have removed that the "target" was 100-150, as this was incorrect. We hope the sample size has been addressed by the use of non-parametric statistics, which are typically more stringent with significance, and adding the sample size as a limitation in the discussion.
Changes in text: Page 17, line 457-459

Comment 7: More detail is required on the motivation items used.

Reply 7: Thank you. We added the list of 10 motivations as well as the measure that was used.
Changes in text: Page 10, lines 262-268

Comment 8: For the Results, the analysis procedure made use of largely univariate tests. Why weren't mutlivariate approaches used, such as totalling dependent variables and using regression, for example?

Reply 8: Thank you. We were limited with the analysis due to the non-parametric distribution of our variables. However, we do agree that the gender analyses should be multivariate and hence I have changed this analysis in the text.

Changes in text: Page 11, lines 275 and 281.

Comment 9: The Discussion again would benefit from more theory. Why might conspiracy theories prevent young people from listening to and engaging in health behaviours? Is the reason similar or different to other groups? How might the variables fit together - how might conspiracy theories and experience of COVID (e.g., with family) interact?

Reply 9: Thank you for your comment, we have added this into our discussion
Changes in text: Page 16, lines 425-434

Comment 10: I hope my comments are useful.
Reply 10: Again, thank you for your time to review our work. We found your comments extremely useful.

Reviewer B

Reply to Reviewer B: Thank you for taking the time to read our paper. We really appreciate your comments.

Comment 11: It would help the paper if you could do a single analysis that examined the associations between the various factors you studied. As it stands, it is difficult to determine what the major conclusions are. Is it the personal motivations or the belief in conspiracies that were more influential?

Reply 8: Thank you. We were limited with the analysis (r.e. regressions) due to the non-parametric distribution of our variables. However, we do agree that the gender analyses should be multivariate and hence I have changed this analysis in the text. We hope this is satisfactory.
Changes in text: Page 11, lines 275 and 281.

Comment 12: You should also take note that some of the items you used regarding conspiracy beliefs were not truly measures of conspiracies. One need not be a conspiracy believer to think that masks are ineffective, for example. Such beliefs are examples of belief in misinformation but not necessarily conspiracies.

Reply 12: Thank you. We added this to the limitations section.

Changes in text: Page 17, line 461-465

Comment 13: I also don't know what Table 1 is showing. What are Media? And what are the scores? Should you not show this in relation to gender, if that is an important consideration?

Reply: 13 Thank you. We agree, the table was incorrectly labelled, our apologies. We have reformatted the table and added a gender comparison.

Changes in text: Table 1.

Comment 14: I think the sample is also quite limited in its ability to provide information about young people in general. This is a serious limitation and should be noted.

Reply 14: Thank you. We agree and have added some more detail regarding recruitment (convenience) and in the limitations section.

Changes in text: Page 17, lines 457-459 Page 17, lines 467-468.

Reviewer C

Reply to Reviewer C: Thank you for taking the time to read our paper. We really appreciate your comments.

Comment15 : My major concern about this article is whether or not the survey sample size achieves statistical significance. With Spain's population of 18-29-year-olds slightly exceeding 6 million, and with a male population of just over 3 million and a female population of just under 3 million (https://www.statista.com/statistics/1323343/population-age-gender-spain/), is 100 survey responses sufficient? Furthermore, are just 27 male responses statistically significant? According to my calculations, you should have had a target of at least overall 380 responses, using your stated p-value of 0.05 (Line 251). If your study in fact achieves statistical significance, please explain in more detail in the Results section (starting with line 253).

Reply 15: Thank you. Unfortunately, we did not conduct an a-priori power calculation as the recruitment strategy was of convenience, over a limited time period, hence the relatively small sample. We have removed that the "target" was 100-150 in the methods, as this was incorrect. We hope the sample size has been addressed by the use of non-parametric statistics, which are typically more stringent with significance, and adding the sample size as a limitation in the discussion. We

have stated that application of findings should be done with caution. However, we feel there are some useful preliminary findings in our study that may help with future studies. We hope this is satisfactory.

Changes in text: Page 17, lines 457-459. Page 17, lines 467-468

Comment 16: Now I am going to address some editorial concerns. On line 24 "...medicines developments..." could be more clearly stated as "... development of medicines..." In line 61, there seems to be an incomplete parenthetic reference made immediately prior to the reference number (2) - please remove the parenthetic reference. At the end of the sentence in line 322 "... nothing else was going one (8%)." does not seem to make much sense. Please rewrite this sentence.

Comment 16: Thank you, we have corrected these sentences.
Changes in text: Page 2, line 25; Page 3, line 70 and see Page 13, line 349.

Comment 17: Additionally, according to the Guidelines for Authors, you have too many Keywords (7). It should be limited to 3-5 in total. Many of them are too broad and non-specific. I would suggest searching the PubMed MESH database for ideas on how to make your keywords more specific (https://www.ncbi.nlm.nih.gov/mesh). Normally, I would not refer someone to an outside publisher's guidelines. However, please refer to the Journal of Medical Internet Research (JMIR) guidelines on Choosing Keywords (https://support.jmir.org/hc/en-us/articles/360016786231-Choosing-Keywords).

Comment 17: Thank you, we have modified our key words,
Changes in text: Page 2, lines 54.

Comment 18: Your Bibliography also requires significant cleanup. The Guidelines for Authors require the use of the Vancouver citation style. First, the following website citations are not in this style, along with citations 5, 6, 8, 10, 11, 12, and 13 having either broken or inaccessible links. Furthermore, none of your website citations include an access date. I would strongly suggest double-checking all of your citations to make sure that they are in Vancouver style. The MyBib Free Vancouver Citation Generator is a great tool to assist you (https://www.mybib.com/tools/vancouver-citation-generator). And if you have the URLs or DOIs for any of the cited journal articles, please refer to the University of Queensland Library's guide Vancouver Referencing Style for further guidance on their inclusion (https://guides.library.uq.edu.au/referencing/vancouver/journals).

Comment 18: Thank you so much for the feedback, we have edited the bibliography using

Vancouver Referencing Style and we have added the accessed date to the website citations.

Changes in text: Pages 18-21, lines 505-649

Comment 19: Finally, some work is required on your Tables and Figures. Your 2nd Table is not numbered, nor are any of your Figures. Therefore, I can only make educated guesses of where they fit into the article. Also, I would suggest including at least one male/female comparison chart or figure, being that this is the impetus of your study.

Reply 19: Thank you. We have tidied up the Tables and Figures, added captions and clearly identified their location in the text. We have also added gender comparisons to Table 1 and in a new Figure 2.

Changes in text: All tables and figures.