

# Review of: "Government Communication and Behavioral Change amidst COVID-19: Role of Awareness and Fear & Panic"

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Potential competing interests: No potential competing interests to declare.

The research questions on the role of awareness opposed to F&P in how effective communication is to achieve BC, and the applied framework are interesting and relevant. Better knowledge on this has the potential to make handling of future pandemics or similar events more effective. The overall study design seems to be sound, but there are some issues that negatively affect the study's validity and conclusion in my view, especially regarding sampling.

Disclaimer: I am only remotely familiar with the employed methods and can not make adequate statements on whether they are appropriate.

## Major points:

- the sample seems to be heavily biased towards tertiary education (not sure about statistics in Ghana but maybe such a high share of tertiary is not representative: <https://tradingeconomics.com/ghana/school-enrollment-tertiary-percent-gross-wb-data.html>). This is possibly connected to the sampling strategy.

I understand that an inclusion requirement was having secondary education, but is it the case that almost all people that have a secondary degree also have a tertiary? Is this a serious limitation and limits the generalization of the results? All those that finish primary education, would they really not comprehend the questionnaire items? If so, why were they constructed this way and was it not possibly otherwise?

Higher education possibly correlates with better uptake of communication, and higher awareness. I suggest to think conceptually narrowing down the sample population as people with tertiary education, and frame the reason for focusing on people with 2ndary + education a little bit differently. Even if that limit the meaning of the results, it could open for a richer discussion and more opportunities for future research.

- Parts of the discussion might be condensed (such as the extensive description of BC mechanics), instead the authors perspective of strengths and weaknesses of the be of relevance

- The conclusion could be extended beyond the meaning of the framework & study, what does that might mean in practice for government communication/policy makers in Ghana, how is this study useful, possibly also how the findings are lacking in relation to wider policy implications

**Minor points:**

- Abstract typo: SPPS
- Abstract: Info on specific software not crucial information in abstract
- This sentence is not entirely clear to me:  
 "Government in an attempt to enhance the awareness of self-protection of citizens, and also to ensure that the measures put in place are properly adhered to, engaged in active information dissemination on confirmed cases, recoveries, and death (Li et al., 2020)." Governments in general or the government of Ghana?
- Introduction: does precautionary entail mandatory? The extent to whether the measures in the communication were mandatory or might be important context information
- " A study by So et al. (2016) revealed that anxiety brings about a high level of motivation to attain information than fear. " Should it say higher?
- The current study believes -> suggest to reword to "hypothesizes"
- Less than 3 considered negative: this might be an issue because for example ten people answering 3 and one 2 would result in 2.909 . IMO a figure with histograms for the different items might be helpful, also bec. likert scales do no yield continuous but ordinal categorical data and hence taking the mean might be less appropriate.
- "This suggests that respondents heavily relied on sources other than the government, for news and reports on COVID-19. These channels may also include unauthorized platforms which could be spreading false news and updates on COVID-19, to create F&P among citizens." this is stated under Results 3.2 ,descriptive analysis. Regarding the first part, does that really follow? Maybe people just were not interested in any source. Regarding the second part it would be good to back that up with more data, but this maybe is not possible (ie relation of F&P and different sources) or have it as part of a discussion.
- Fig 3: Its not clear to me what e23 & e22 stand for
- empty brackets "()" after this sentence: "To assess the mediating effect of awareness, the effect of government communication on awareness was first estimated and found to be significantly positive". Also the sentence right after Fig 3. Several more occurrences throughout the text.
- Fig 4: having 4 legend items is a little confusing? Would the first 2 be enough?
- I am missing information on whether people in the sample are urban or rural residents, this is also relevant in connection with the discussion on the inclusion of 2ndary + educational attainment.
- More details on prior sample size considerations and sampling strategy would benefit the write up. Was there a target sample size, how was it calculated, by whom and how was the questionnaire shared on the platforms (FB adds? shared by researchers

- Extension of the discussion to how the governments role in the information space in relation to other actors and how they communicate, how this influences F&P vs awareness
- A couple of sentences of future research in relation to the present findings
- having the exact survey questions + cover letter as an appendix would substantially improve transparency and meaning of items . Relatedly, how the questions were constructed and if and how they are informed by existing literature