**Suggested Changes for the Survey**

|  |  |  |  |
| --- | --- | --- | --- |
| **Question N** | **Issue** | **Proposed Solution** | **Source** |
| **Issues with questions’ content and interpretation** | | | |
| A1 | Respondents receive text message alerts which do not qualify as cellphone apps | Replace the answer **“Cell app”** to **“Cell app/SMS”** | Interview 1 and 2 and others |
| A1 (online) | Respondents are confused if they can check multiple answers | Add clarification “*Please check all that applies*” to the online surveys | Interview 3, 7, 12 |
| A3 (online) | Respondents try to write in letters and spaces resulting in errors | Add instructions *“Please only insert a number”* | Interview 3, 8, 9, 10, 11 |
| A3 (online) | Respondents enter large numbers resulting in an error | Increase the limit on numbers from 100 to 2000 minutes, add the pop-up window if a number exceeds 2000 minutes | Interview 5 ,8 |
| B3 | Respondents write-in different options into other which would qualify as either interior or exterior room (in our mind): bathrooms, closets, hallways | Replace exterior/interior room to exterior/interior area (?)  Or:  Replace exterior/interior room to room with a window/room without a window  Or add the question:  **Does your sheltering area have windows? Yes/No** | Interviews 2, 3, 7, 10 |
| C1 | We leave just one option while many respondents would use more nuanced approaches: check TV and then shelter or shelter, check Internet and then get out or not | Instead of **“What would you do in this scenario?”** use **“What is the first thing you would do in this scenario?”** | Interview 1, 2, and likely others |
| C2 | Not clear what drive out of the path means | Replace “**Drive out of the path**” to “**Drive out of the tornado path**” | Interview 2 |
| C1 and C2 | One respondent points out that he/she will receive a warning, but she would be still asleep🡪 choose Nothing | Replace the answer **“I would never receive a warning at that time**” to “**I would never learn about a tornado warning at this time**”; change receive to learn about a warning in questions too | Interview 7 |
| C6 (online) | Unclear if respondents can choose multiple answers | Allow multiple answers and add the instruction *“Please check all that applies”* | Interview 2 |
| C7 and C8 | Shelter can relate both to shelter in place or to sheltering outside | Replace **“Shelter”** to **“Shelter in place”** answer | Interview 1, 3 |
| C7 and C8 | Shelter can relate both to shelter in place or to sheltering outside; respondents think that driving to a shelter=fleeing which is not intended | Add the options **“Shelter at home”,** **“Drive to a shelter**” instead of just **“Shelter”** | Interview 1, 3 |
| C7 and C8 | Several respondents expect to wait and look for more information, but this is not an explicit option | Leave it is as it is. **“Neither”** still describes their behavior and adding another option would require space and no clear use for the information | Interview 1, 2, 9 |
| D1 | Respondent expect to drive to another house but still chooses shelter at home or near as shelter (in their mind) refers to a public shelter | Change to “**Drive to a shelter or another house/structure”** | Interview 7 |
| D2 | Multiple tornados are mentioned, while there is only one in other scenarios | Use **“the chance of a tornado”** instead (Spanish too) |  |
| E1 | At least one respondent was uncertain if the question refers to a one-time payment or to an annual payment (despite it being mentioned in the question) | Replace *“per year”* to ***“each year”*** and make it bold. | Interview 8 |
| E2 | Question refers to E1 “above”, but E1 is really on the previous page | Replace “question E1 above” on the “previous question E1” | Interview 1 |
| F1 | Respondent has suggested language improvement | Instead of “**What gender are you?”** use **“What is your sex?”** (?) | Interview 7 |
| F4 and F5 | People have diverse interpretations of what it means to make decisions independently from others or follow decisions of others | Use two question instead:  **F4. Do you have children or incapacitated household members who follow your decisions on tornado protection?**  And:  **F5.** **How many children and incapacitated household members follow your decisions on tornado protection?** | Interviews 2, 4, 6 |
| F8 | Native speakers are unsure whether they speak English perfectly | Change the answer **“Perfectly**” to **“Perfectly/Native” (?)** | Interviews 1, 3 |
| **Spanish Translation Issues** | | | |
| Consent Form | Respondent has suggested language improvement | Should be “Soy mayor de 18 años y estoy de acuerdo en participar en esta investigación” | Interview 9 |
| B4 | Respondents don’t understand whether the question asks about the number of cars or whether it asks about car’s capacity to transport everybody | “Does your car(s) have enough room to transport everybody in the household?” Yes/No/We have no car  Or:  Change option 3 to **“Uno o mas coches, suficiente para transportar a todos en el hogar”** | Interview 9, 11, 12 |
| E3 | Spanish speakers aren’t used to Likert scales | Add a clarification: *“Donde “1” es “no es nada probable, y “5” es extremadamente probable”* | Interview 9, 12 |
| A3 and C4 | Respondents don’t understand that time should be calculated in minutes (forgot to include it in the translation) | Add “minutos” to the write-up field plus extending instructions | Interviews 9, 10, 11 |
| **Other Changes/Suggestions (Not Necessarily Coming from the Interviews)** | | | |
| New | We don’t know the number of people in the household to estimate whether it’s crowded or not | Add a new question:**How many people in total live in your household (including children)?**  **\_\_\_\_\_ (people)** |  |
| C6 | We don’t know information sources if respondents never choose to seek more information for standard warnings but start seeking info with extended warnings | Remove the qualifier ANSWER ONLY IF YOU PREVIOUSLY SELECTED “SEEK MORE INFORMATION WITHOUT TAKING SHELTER”. Change the question to “What sources of information would you use to seek more information if there is a tornado danger?” |  |
| D1 | The question collects the same information as D2 and D4 | Remove D1? |  |
| C9 | Respondents have very little idea how long they will stay in their shelters, but mostly say until the danger has passed | Might consider removing this question as responses would be unreliable and instead use the average duration of a tornado warning as time estimate for opportunity costs | Interview 2, 3, 7, 11, 12 |
| C7 | When people know tornado’s location and direction, they are more likely to flee 🡪 giving an exact location of a tornado might actually increase casualties | No action is necessary, but it’s interesting | Interviews 1 and 6 |