Effect of Type of Source on Response Change

Cognitive Science 1 Report

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Master 1 Promo 3 2022/2023

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Method C: Step by step (Chaymae)

In this step-by-step part, we will be breaking down the experimental process into the series of specific steps used to develop the survey that the participants filled.

In this experiment, we used the Qualtrics platform that offers many advanced features and customization options. To introduce participants to the experiment, we started with a consent form in which participants agreed to participate in a study after being fully informed about the study's purpose, procedures, risks, benefits, and alternative options.

Informed consent was a fundamental aspect of ethical research and was necessary to ensure that participants' rights and well-being are protected as seen below in Figure 4.

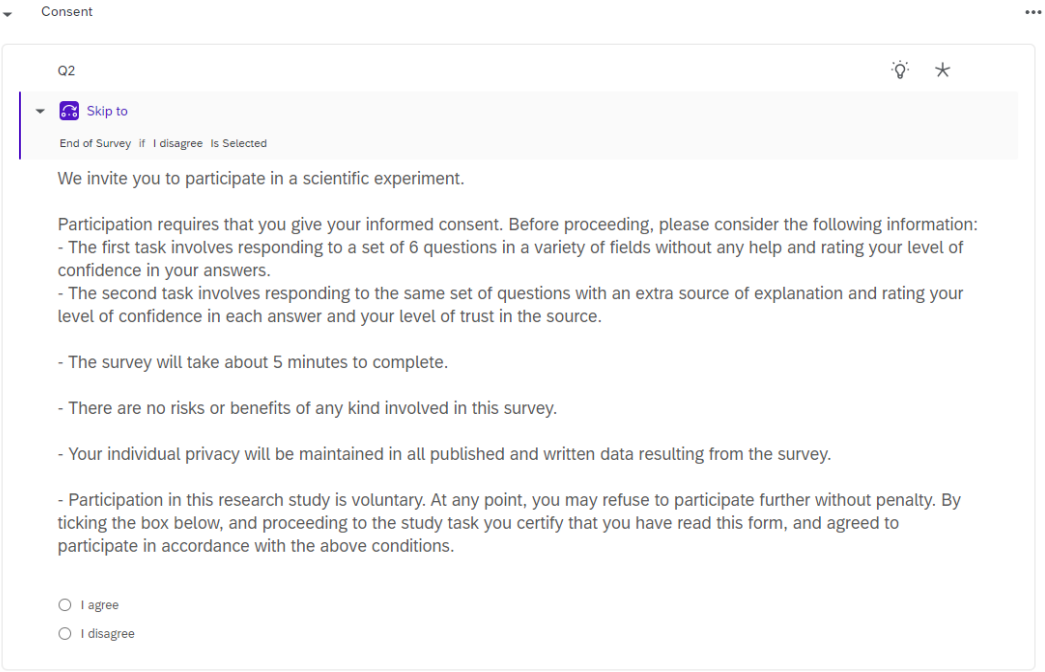

Figure 4: Consent of the experiment

Participants were exposed to two sections: section 1 shows 6 blocks in a variety of fields and with no explanation only one question and a rate of level of confidence in the answer in each block, adding up to a total of 2 questions per block as seen in Figure 5. Section 2 shows the same structure of questions but we added two explanations expert and anonymous and level of confidence in response and level of trust in the source as the Figure 6 shows, with a total of three questions per block.

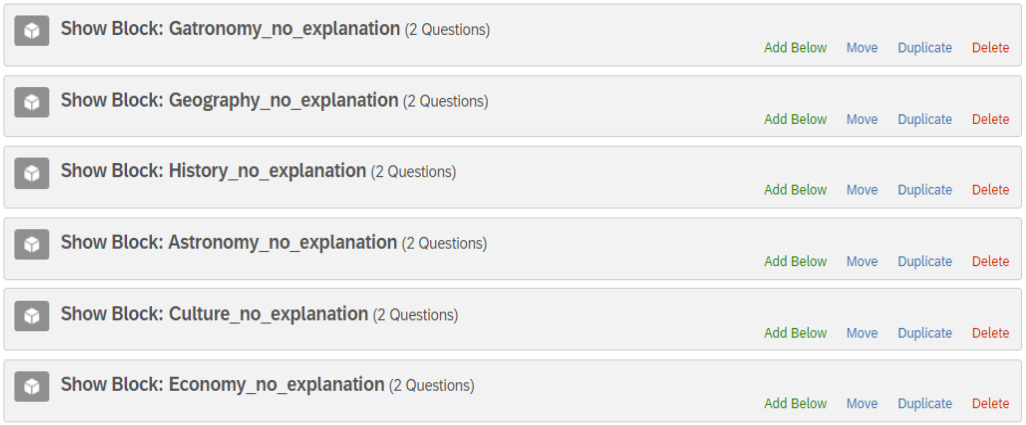

Figure 5: Section 1 no explanation

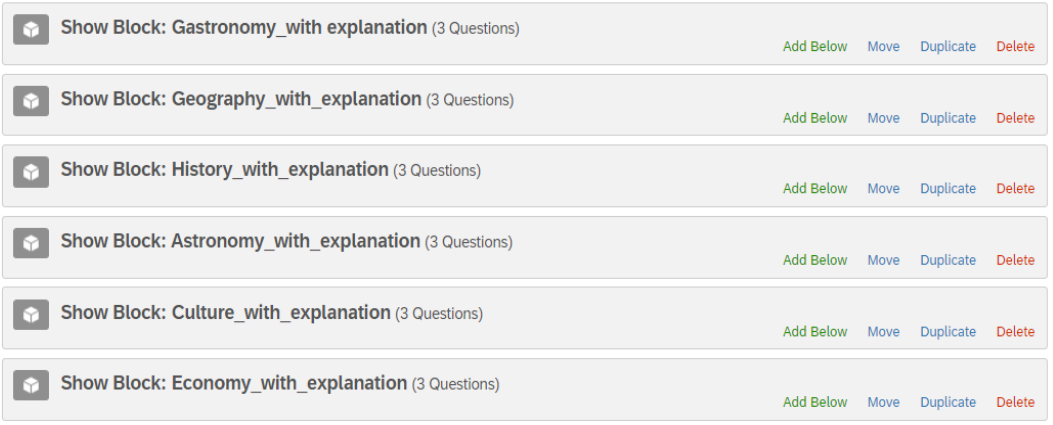

Figure 6: Section 2 with explanation (Explanation/Anonymous)

The first section had 6 blocks without any explanations and with only 1 question per block with 5 possible answers among which only 1 is correct and also another question to rate on a scale (from 1 minimum confidence to 7 maximum confidence) the confidence in response, as the Figure 7 shows.

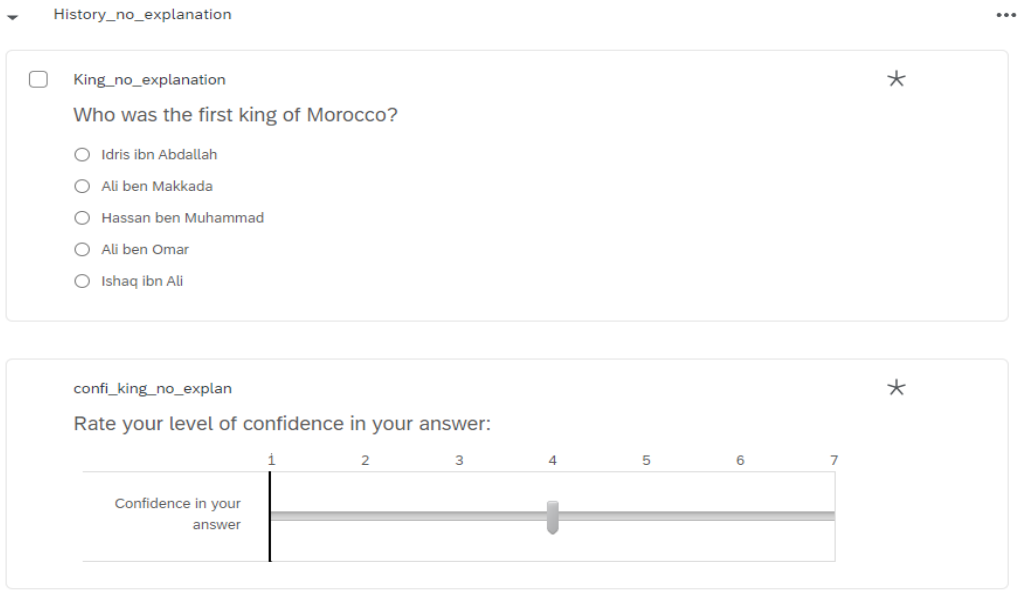

Figure 7: Example of a question in section 1.

The second section starts with an introduction to explain the next step to the participants, (Figure 8). This section contains 6 blocks and each block has the same questions as the first section. The only difference is that Qualtrics will choose to display either the first question with an anonymous explanation or the second one with an expert explanation. As previously mentioned about the Stimuli, the only difference between the two explanations is the clause. After this question, the participant will be exposed to two scale measurements (1 minimum to 7 maximum) to rate their levels of confidence in the answer and trust in the source as the following Figure 9 shows.

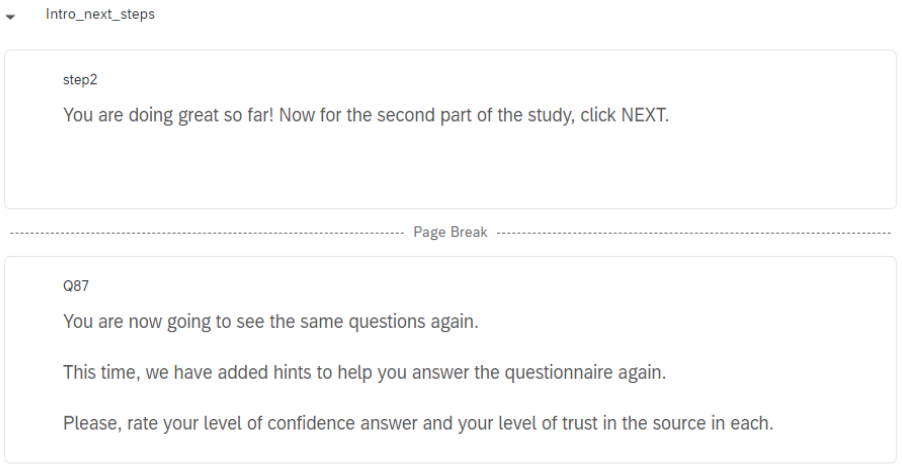

Figure 8: Introduction to section 2.

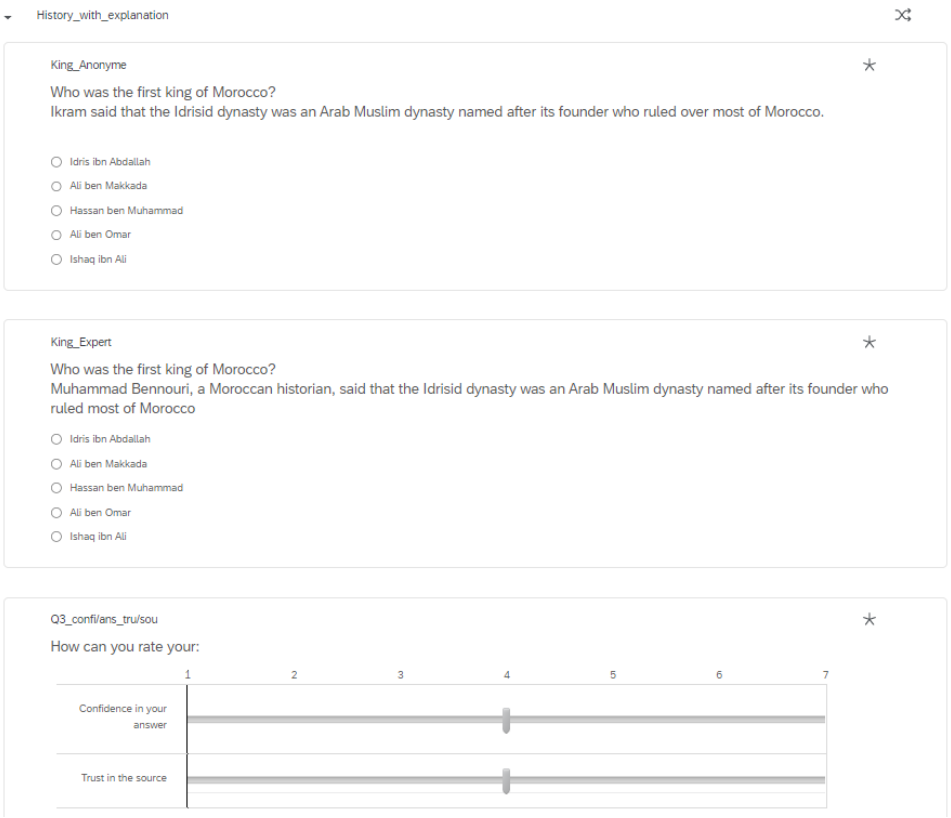

Figure 9: Example of a question in section 2.

For both sections we have used randomization between the blocks, and not the answers. Randomization has a process of randomly assigning participants to questions in a random order to avoid memorizing the order of questions, as seen in the following Figures 10 and 11.

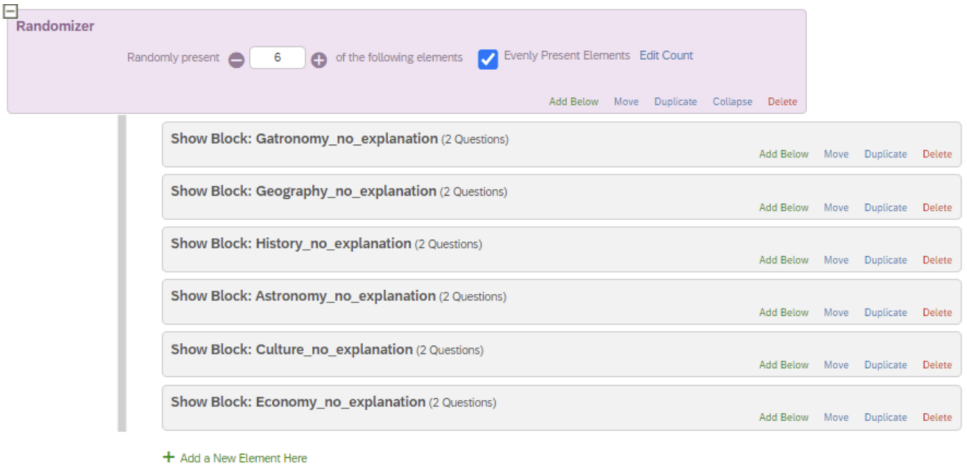

Figure 10: Randomization in section 1.

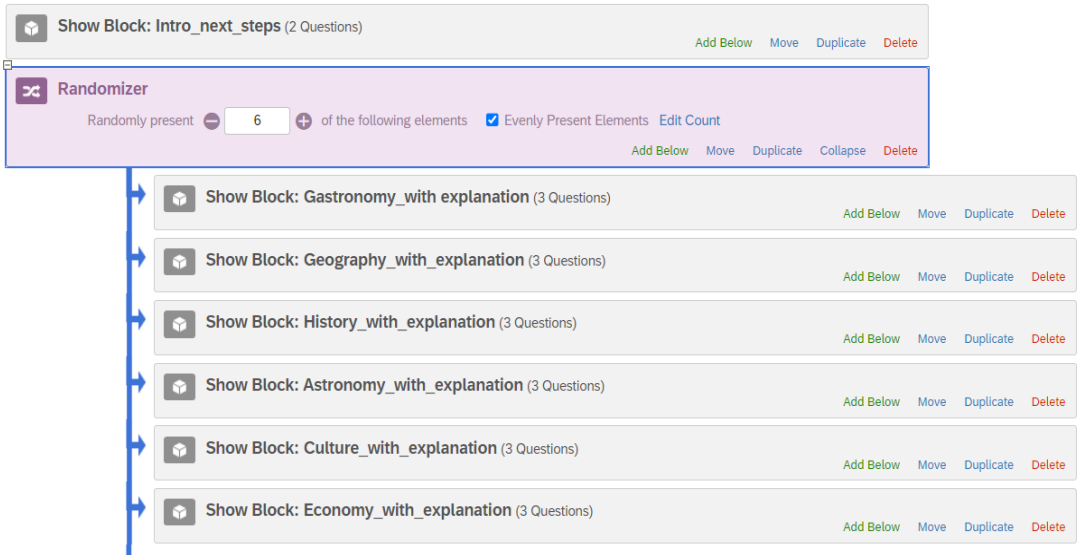

Figure 11: Randomization in section 2.

Counterbalancing was used in section 2 between the two type questions with explanations to display only one question to the participant, either the anonymous or the expert. As the following figure 12 shows one example of the questions.

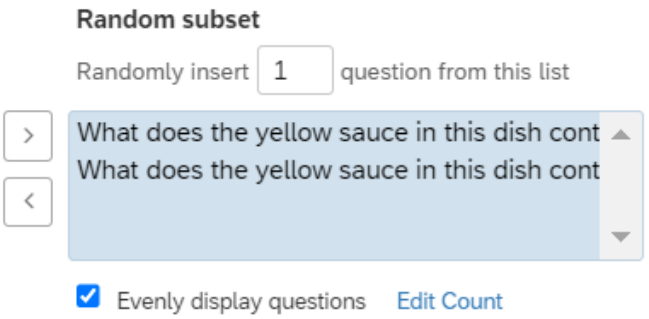

Figure 12: Counterbalancing between two questions.

By using both randomization and counterbalancing, we can increase the internal validity of this study and reduce the impact of extraneous variables on the results. This helps to ensure that the effects observed in the study are due to the independent variable, rather than other factors that could confound the results.

Conclusion (Ghizlane, Fidelis, Chaymae)

From this study, we could conclude that:

1. The mean subjects' confidence in response is higher in expert than in anonymous.
2. The mean trust in explanations from expert source is slightly higher than anonymous.
3. Everyone changes their response after being privy to expert explanation.

In summary, this study provides evidence for the effect of source type on response change, and suggests that exposure to a trusted source leads to a greater change in beliefs or attitudes compared to exposure to an untrusted source. Nonetheless, this should be tested statistically for significance. The results have important implications for understanding how individuals process information and update their beliefs or attitudes. We may consider the level of difficulty and level of familiarity with questions as other parameters to control in future work.

Future research could expand on these findings by exploring other factors that influence the credibility of information and their effect on response change. Subject fatigue may be another limitation to further investigate when trying to generalize our results since the participants would have to answer questions twice. Additionally, research could also examine the effects of type of source on other aspects of information processing, such as attention and memory. We may improve subjects' focus by allowing them to rest before taking the second part of the experiment. This will also help the participants forget the previous answers and thus reduce the influence of previously answering the question on their new response and basing this new response solely on the explanation provided.

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