

Supplementary Material

Survey

This questionnaire has been created to evaluate the impact of internal patterns in bar charts on data interpretation and the estimation of bar values. The information gathered will be highly beneficial for designing and improving bar charts to enhance the effectiveness of communication through such visualizations.

The questionnaire consists of 3 sections: 1) General information 2) Questions 3) Additional feedback

Section 1: General Information

Gender: [multiple choice]

Age: [multiple choice]

Education level: [multiple choice]

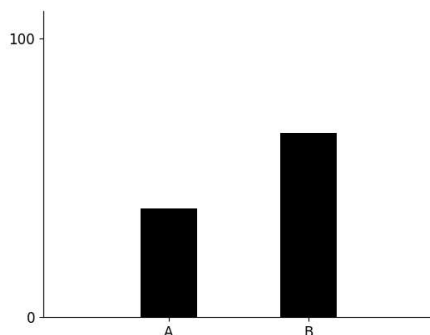
Eyesight level: [multiple choice]

Screen size: [multiple choice]

Questionnaire Explanation

Each question will be timed, but there is no time limit as the research will incorporate time data into the analysis. The questionnaire consists of 15 questions and is expected to take no more than 10 minutes to complete. Please refrain from clicking the back button under any circumstances (as it will interfere with the time evaluation).

Question Sample



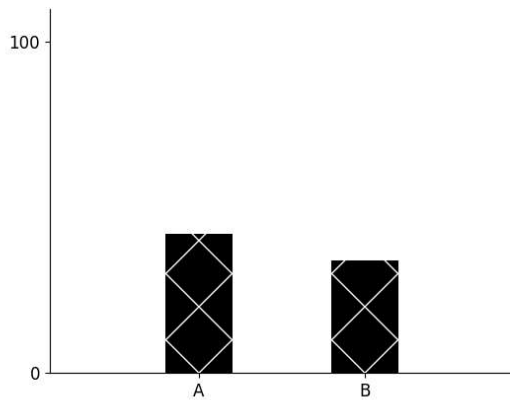
Value of A: [integers between 0-100]

Value of B: [integers between 0-100]

Please continue when you are ready, the next section will start the timer.

Section 2: Questions

Question 1



1.1) Value of A: [integers between 0-100]

1.2) Value of B: [integers between 0-100]

[the above question is repeated 15 times for 15 different stimuli in its set.]

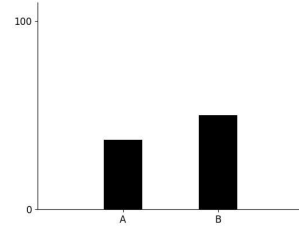
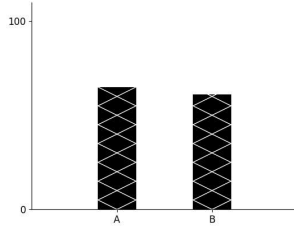
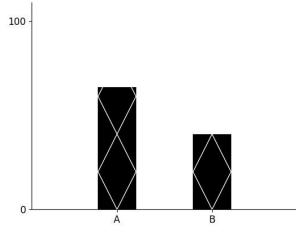
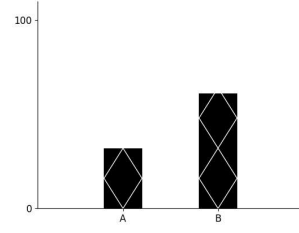
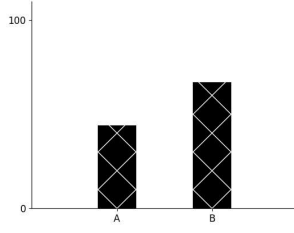
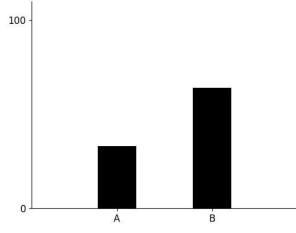
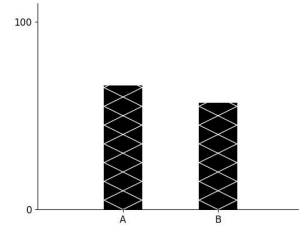
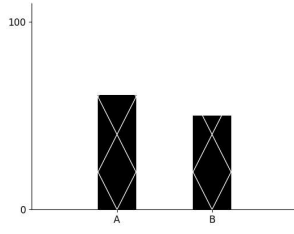
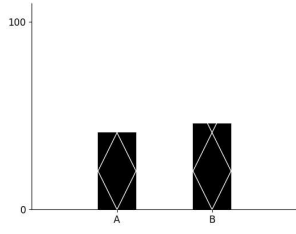
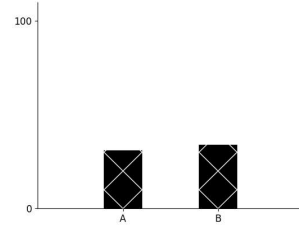
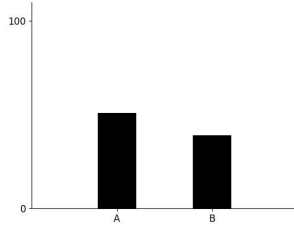
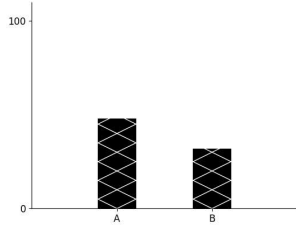
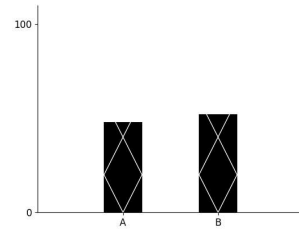
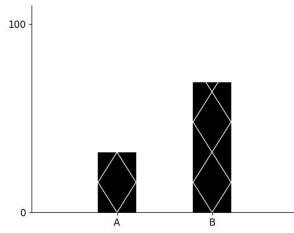
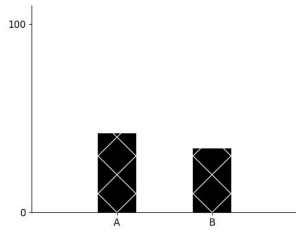
Section 3 : Additional Feedback

Understanding of the task in this survey: [multiple choice]

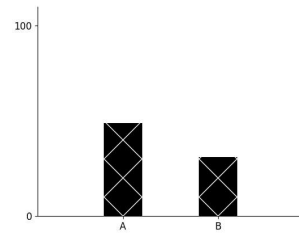
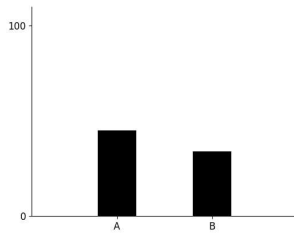
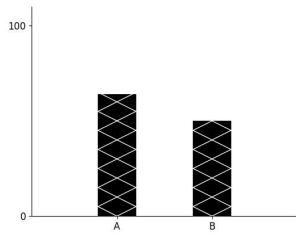
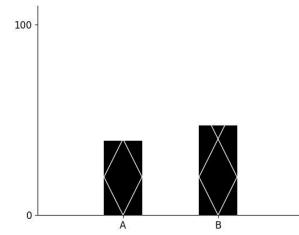
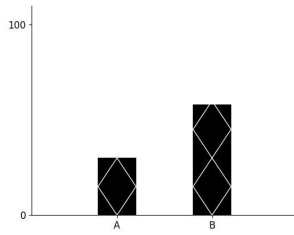
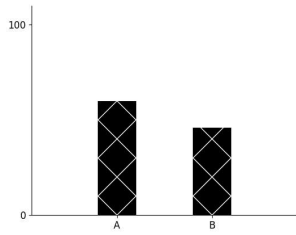
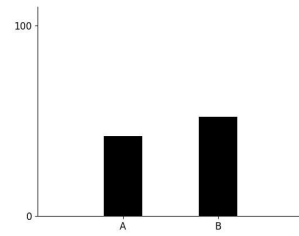
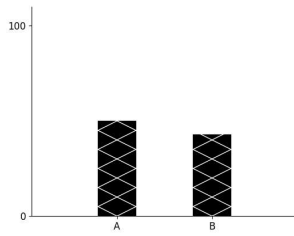
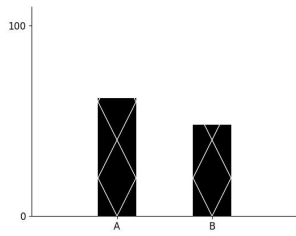
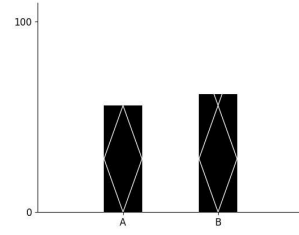
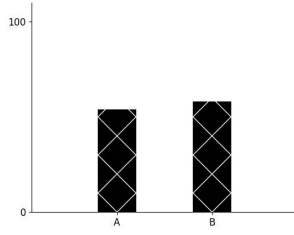
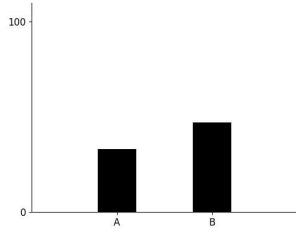
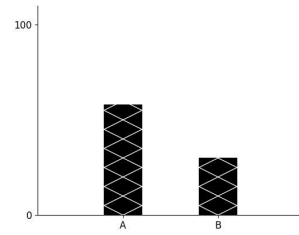
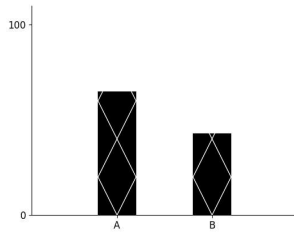
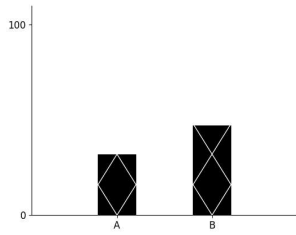
Difficulty level of this survey: [Likert scale]

Additional feedback and suggestions: [free text]

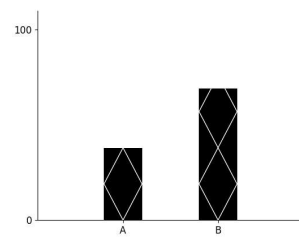
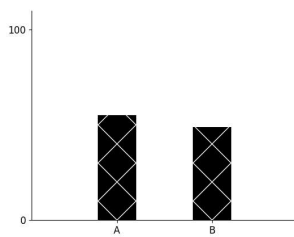
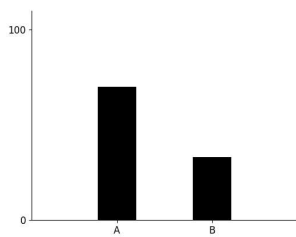
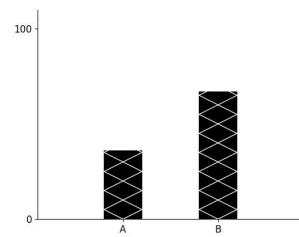
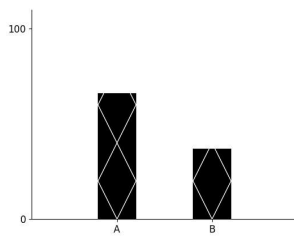
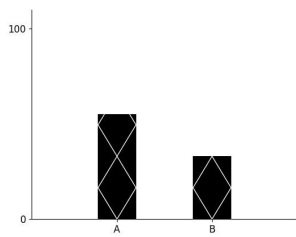
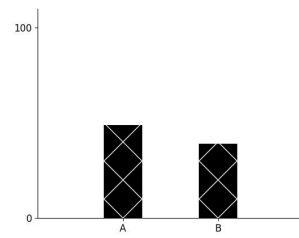
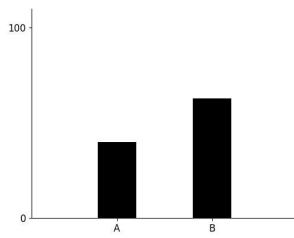
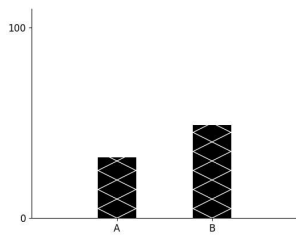
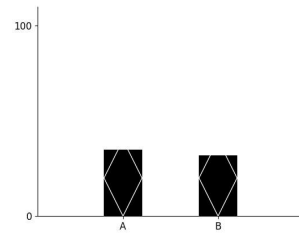
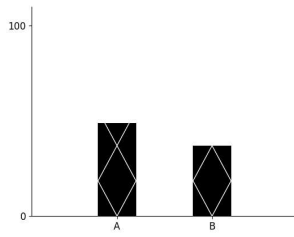
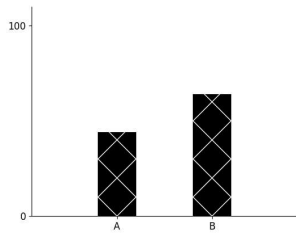
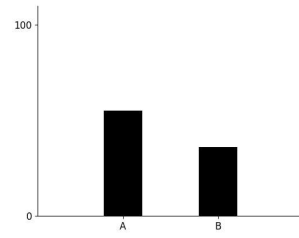
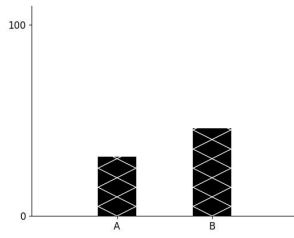
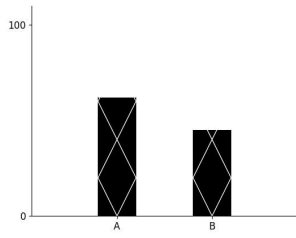
Stimuli Set 1



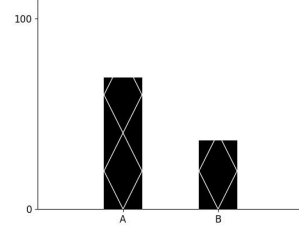
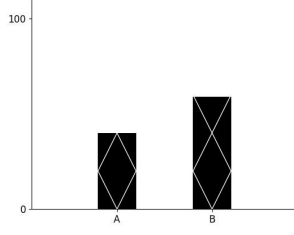
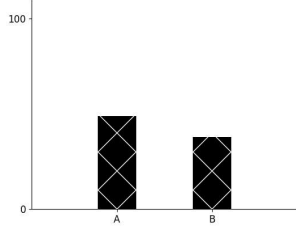
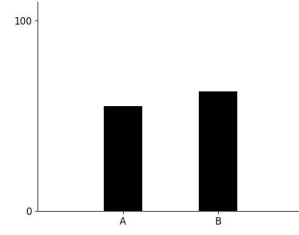
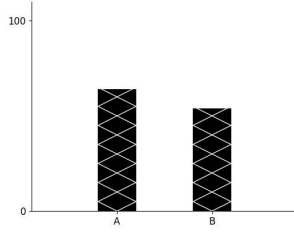
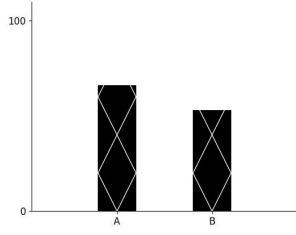
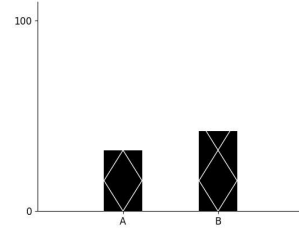
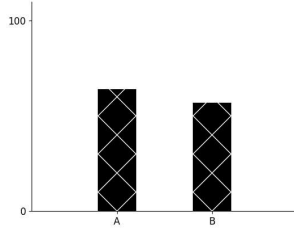
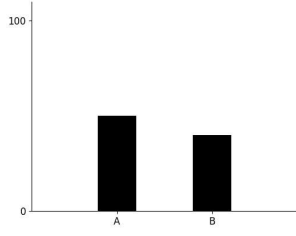
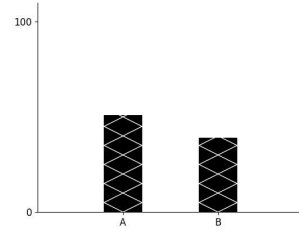
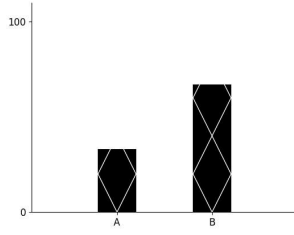
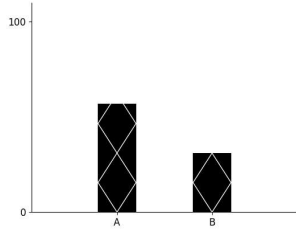
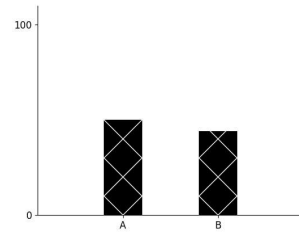
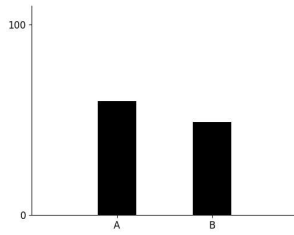
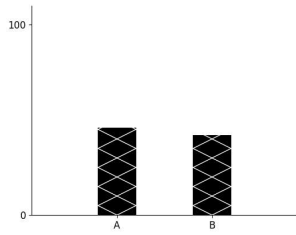
Stimuli Set 2



Stimuli Set 3



Stimuli Set 4



Stimuli Set 5

