Imagining Replications: Graphical Prediction & Discrete Visualizations Improve Recall & Estimation of Effect Uncertainty

Supplemental Material: Preliminary Evaluation

1) Percentage intervals for response time, satisfaction rating, and accuracy (log KL divergence) estimates from Bayesian mixed effects models for discrete-outcome and continuous interfaces in preliminary survey.

1. Percentage intervals for response time, satisfaction rating, and accuracy (log KL divergence) for discrete-outcome and continuous interfaces

| Interface | Response Time (Time in s) | Satisfaction Rating | Accuracy (Log KLD) |
|---------------------------------|------------------------------|------------------------|-----------------------|
| Balls-and-bins 20 | [57.7,115.1] | [35.5,54.8] | [-1.95,-1.43] |
| Balls-and-bins 50 | [68.3,127.6] | [40.1,60.9] | [-2,-1.47] |
| Fill-down paint-by-dragging 20 | [49.3,113.1] | [40.4,61.6] | [-1.76,-1.18] |
| Fill-down paint-by-dragging 100 | [75.8,141.7] | [55.4,78.1] | [-1.63,-1] |
| Paint-by-dragging 20 | [31,98.9] | [46.2,68.6] | [-1.36,-0.74] |
| Paint-by-dragging 100 | [99.8,173.7] | [48.4,74] | [-1.5,-0.82] |
| Continuous-pull-up | [39.3,102.4] | [61.4,82.7] | [-2.83,-2.24] |
| Continuous-line-drag | [36.6,129.2] | [45.1,77] | [-2.15,-1.27] |
| Pull-up 20 | [65.3,124.9] | [43.5,64.1] | [-2.07,-1.54] |
| Pull-up 100 | [131.9,194.6] | [52.4,74.2] | [-2,-1.42] |
| Rolling-balls 20 | [59.8,119.7] | [27.1,48.1] | [-1.41,-0.84] |
| Rolling-balls 100 | [127,195.5] | [26.5,48.9] | [-1.38,-0.77] |