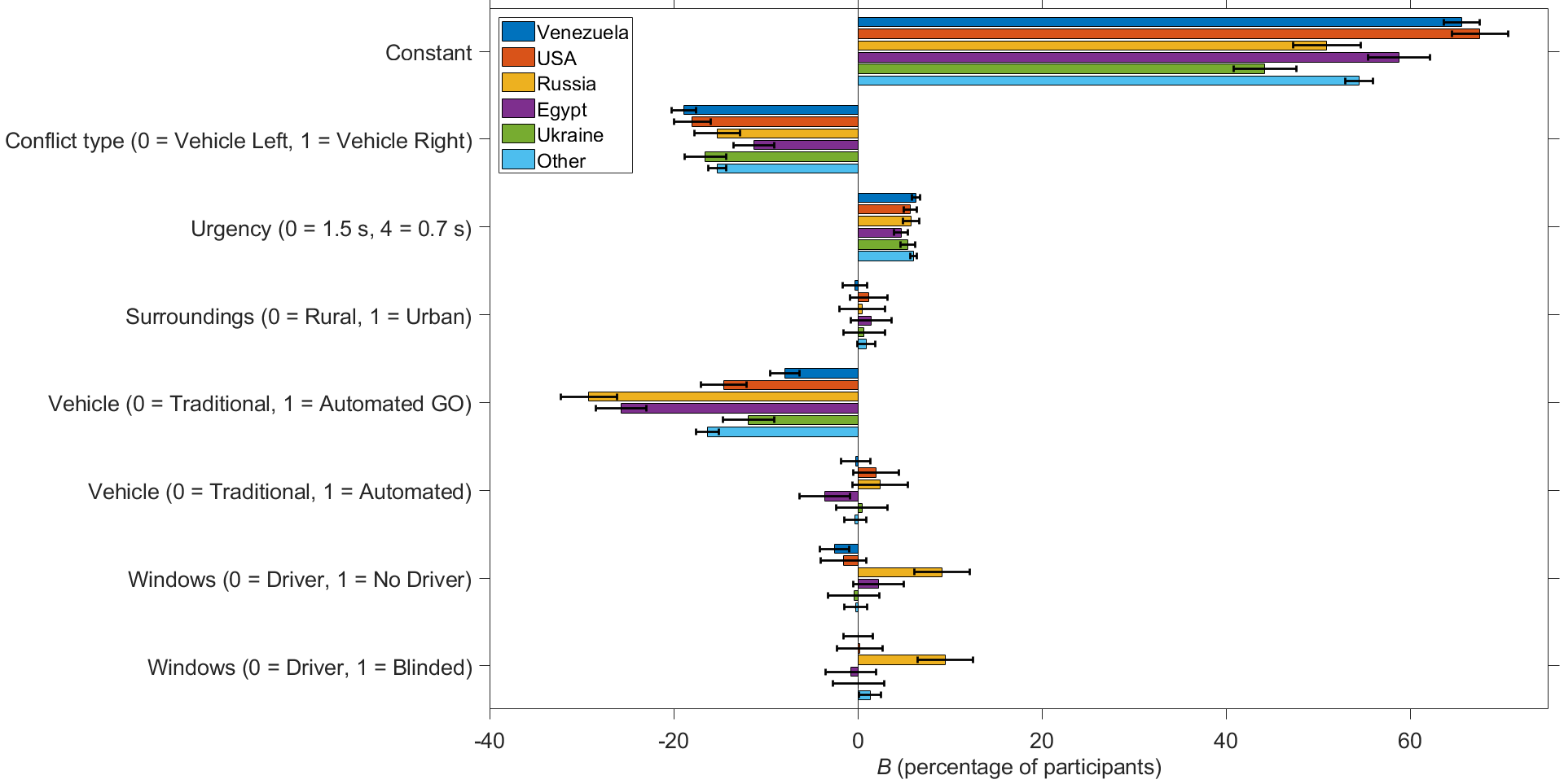
## Supplementary Material

Blinded windows and empty driver seats: The effects of automated vehicle characteristics on cyclists’ decision-making

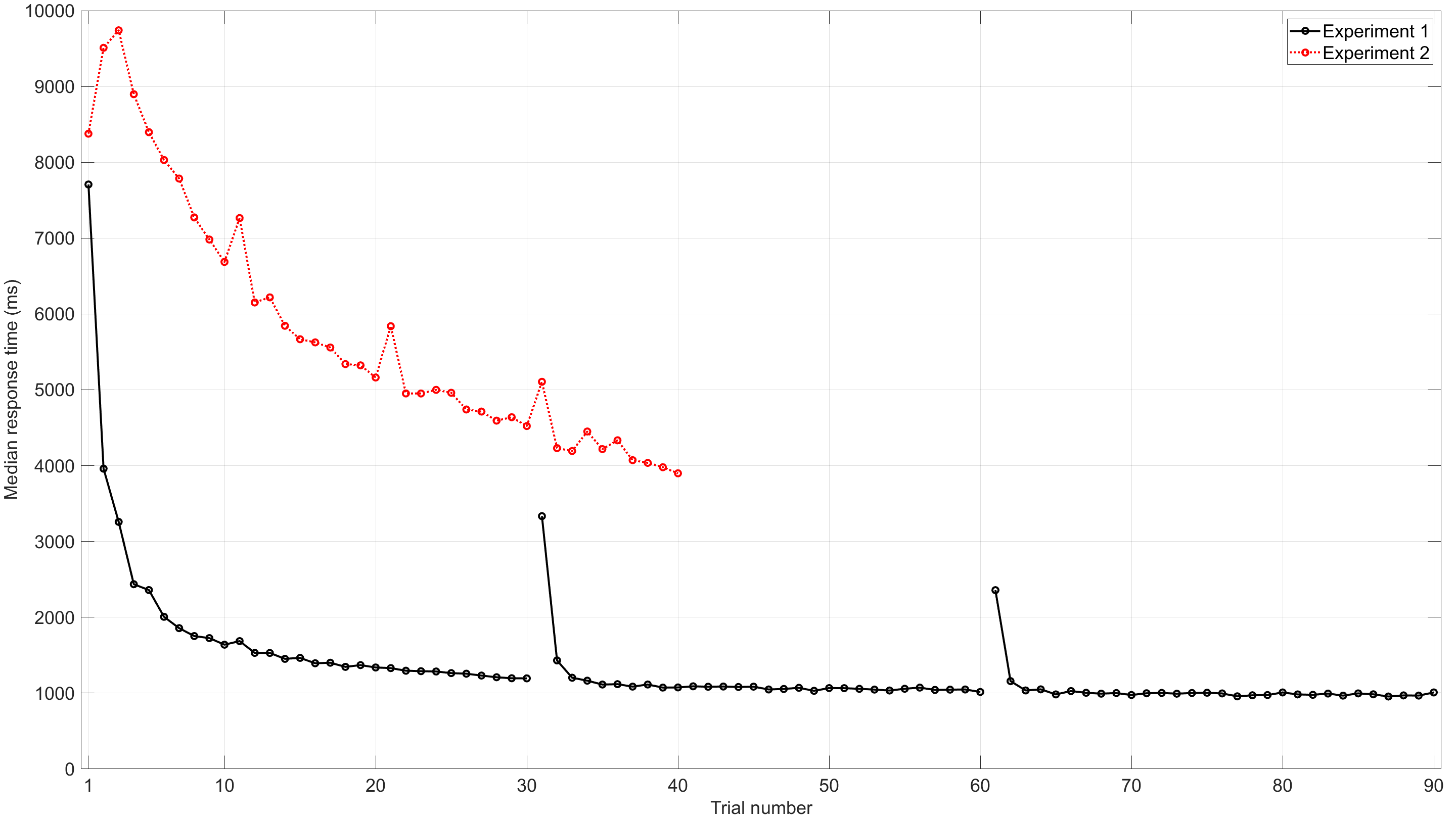
*Pavlo Bazilinskyy, Dimitra Dodou, Yke Bauke Eisma, Willem Vlakveld, Joost de Winter*



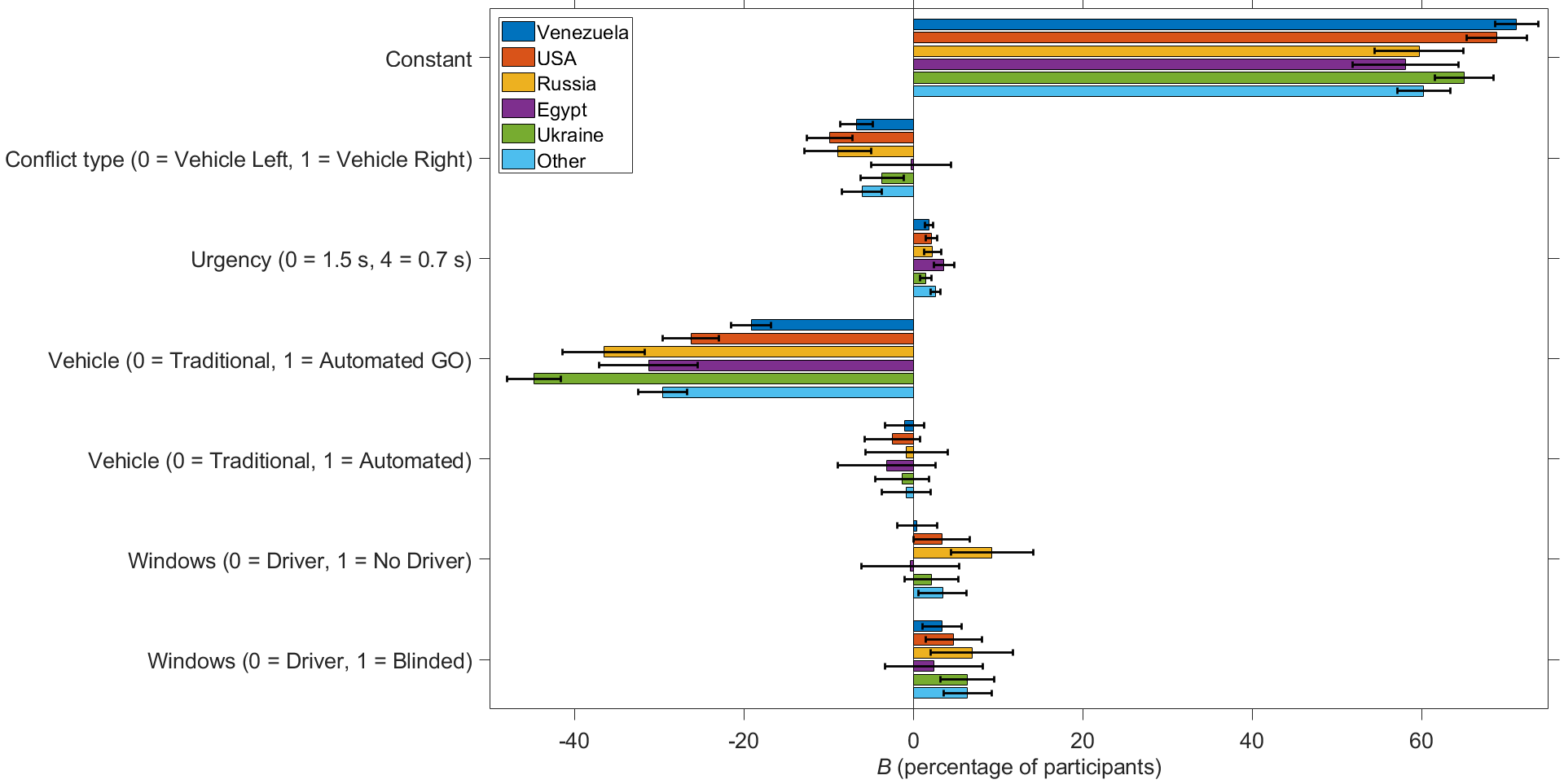
*Figure S1*. Experiment 1: Braking percentage, as a function of conflict type (Vehicle Left vs. Vehicle Right), urgency level (1.5 s = low urgency, 0.7 s = high urgency), and vehicle type (Automated GO, Automated, Traditional). A distinction is made between participants whose primary self-reported mode of transport was “Walking/Cycling” (*n* = 126) versus other participants (“Private vehicle”, “Public transportation”, “Motorcycle”, “Other”, or “I prefer not to respond”) (*n* = 1134).



*Figure S2.* Experiment 1: Regression coefficients for prediction of the braking percentage, at the level of images (*n* = 180), for the five countries with the largest number of participants, and for the remainder of the countries. Error bars represent 95% confidence intervals.



*Figure S3*. Median response times versus trial number for Experiment 1 and Experiment 2. The spikes in the graph for Experiment 1 correspond to trials that directly followed the breaks.



*Figure S4.* Experiment 2: Regression coefficients for prediction of the braking percentage, at the level of images (*n* = 36 images without eye contact), for the five countries with the largest number of participants in Experiment 1, and for the remainder of the countries. Error bars represent 95% confidence intervals.

Table S1*.*

*Experiment 2: Regression model statistics for prediction of the braking percentage (n = 36 images without eye contact).*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Predictor** | **B** | **β** | ***t*** | ***p*** |
| **Constant** | 65.533 |  |  |  |
| **Conflict (0 = Vehicle Left, 1 = Vehicle Right)** | -6.384 | -0.237 | -7.114 | <0.001 |
| **Urgency (0 = 1.5 s, 1 = 1.3 s, 2 = 1.1 s, 3 = 0.9 s, 4 = 0.7 s)** | 2.263 | 0.336 | 10.087 | <0.001 |
| **Visual complexity (0 = Rural, 1 = Urban)** | — | — | — | — |
| **Vehicle (0 = Traditional, 1 = Automated GO)** | -25.709 | -0.899 | -23.392 | <0.001 |
| **Vehicle (0 = Traditional, 1 = Automated)** | -1.042 | -0.036 | -0.948 | 0.351 |
| **Windows (0 = Driver, 1 = No Driver)** | 2.266 | 0.079 | 2.062 | 0.048 |
| **Windows (0 = Driver, 1 = Blinded)** | 4.978 | 0.174 | 4.530 | <0.001 |

*F*(6,29) = 145.7, *p* < 0.001, *r* = 0.984, *r*2 = 0.968. B: Unstandardised regression coefficient, β: standardised regression coefficient, *t*: *t*-statistic, *p*: *p*-value that describes whether the regression coefficient is statistically significantly different from 0.

Table S2*.*

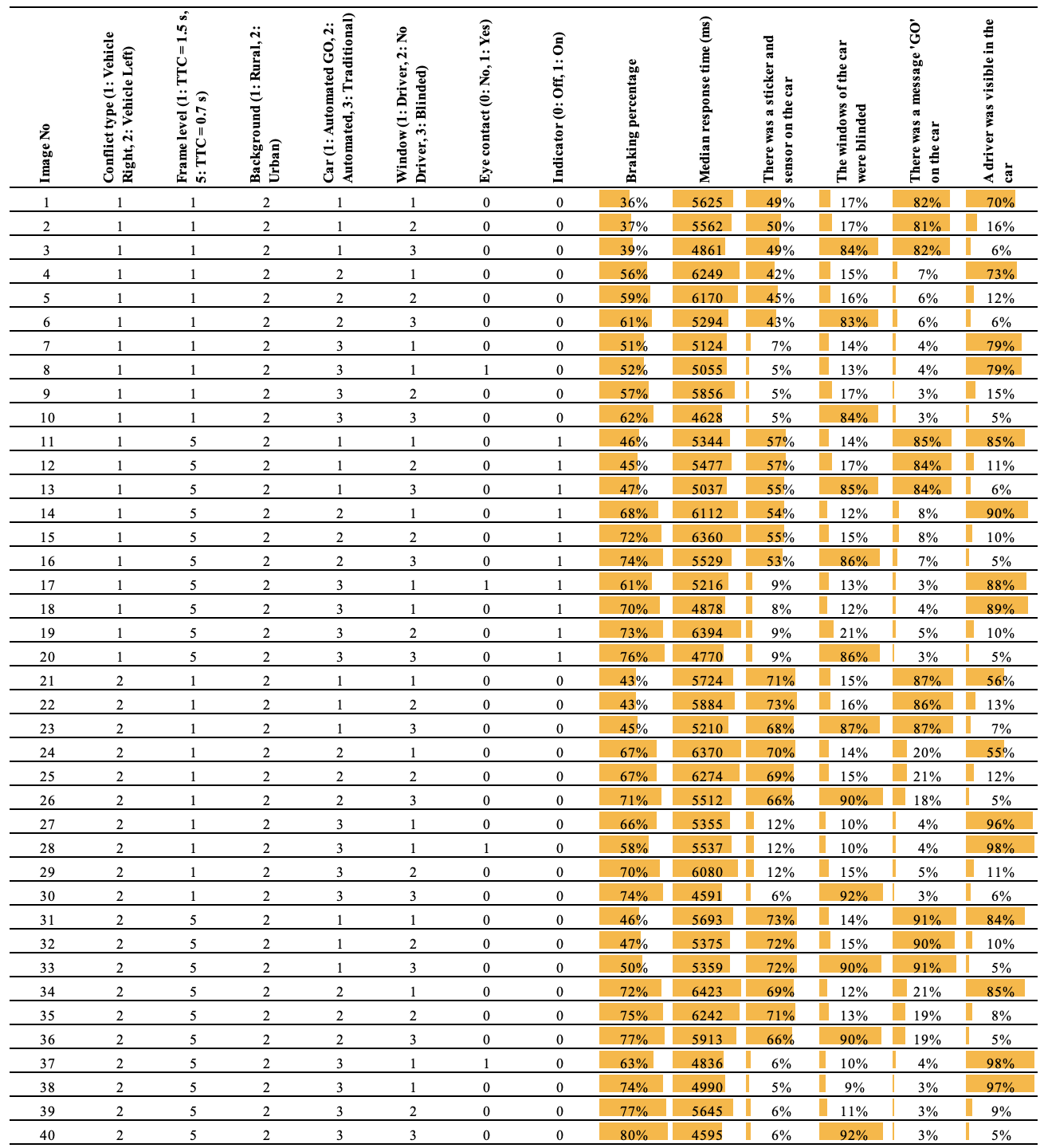
*Experiment 2: Regression model statistics for prediction of the median response time in milliseconds (n = 36 images without eye contact).*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Predictor** | ***B*** | **β** | ***t*** | ***p*** |
| **Constant** | 5381.2 |  |  |  |
| **Conflict (0 = Vehicle Left, 1 = Vehicle Right)** | -112.9 | -0.102 | -1.172 | 0.251 |
| **Urgency (0 = 1.5 s, 1 = 1.3 s, 2 = 1.1 s, 3 = 0.9 s, 4 = 0.7 s)** | -2.3 | -0.008 | -0.095 | 0.925 |
| **Visual complexity (0 = Rural, 1 = Urban)** | — | — | — | — |
| **Vehicle (0 = Traditional, 1 = Automated GO)** | 192.9 | 0.164 | 1.635 | 0.113 |
| **Vehicle (0 = Traditional, 1 = Automated)** | 800.9 | 0.682 | 6.788 | <0.001 |
| **Windows (0 = Driver, 1 = No Driver)** | 291.8 | 0.248 | 2.473 | 0.020 |
| **Windows (0 = Driver, 1 = Blinded)** | -543.2 | -0.462 | -4.604 | <0.001 |

*F*(6,29) = 17.20, *p* < 0.001, *r* = 0.884, *r*2 = 0.781. B: Unstandardised regression coefficient, β: standardised regression coefficient, *t*: *t*-statistic, *p*: *p*-value that describes whether the regression coefficient is statistically significantly different from 0.

Table S3.

*Experiment 2: Overview of the 40 images and results (braking percentage, median response time, and percentage of participants indicating ‘true’ for four image features).*



*Note.* The cells are linearly filled based on their value.