**Table S2. Parameters for Part I of the Experiment Testing Ordering and IPS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | More Salient Box | | Less Salient Box | |
| Problem | Property | Red | Blue | Red | Blue |
| 1 | Ordering | 100 | 20 | 70 | 50 |
| 2 | Ordering | 100 | 20 | 95 | 25 |
| 3 | Ordering | 80 | 20 | 50 | 40 |
| 4 | Ordering | 80 | 20 | 70 | 25 |
| 5 | Ordering | 80 | 40 | 61 | 41 |
| 6 | Ordering | 80 | 40 | 51 | 41 |
| 7 | Ordering | 80 | 40 | 75 | 65 |
| 8 | Ordering | 80 | 40 | 75 | 55 |
| 9 | Ordering | 80 | 40 | 65 | 55 |
| 10 | Ordering | 40 | 20 | 30 | 25 |
| 11 | Ordering | 40 | 10 | 35 | 15 |
| 12 | Ordering | 40 | 10 | 38 | 13 |
| 13 | Ordering | 20 | 10 | 16 | 14 |
| 14 | Ordering | 10 | 5 | 8 | 6 |
| 15 | Ordering | 10 | 5 | 9 | 6 |
| 16 | Ordering | 10 | 2 | 5 | 4 |
| 17 | IPS | 80 | 40 | 60 | 30 |
| 18 | IPS | 80 | 40 | 20 | 10 |
| 19 | IPS | 60 | 30 | 40 | 20 |
| 20 | IPS | 40 | 20 | 20 | 10 |
| 21 | IPS | 20 | 10 | 18 | 9 |
| 22 | IPS | 20 | 10 | 10 | 5 |
| 23 | IPS | 60 | 15 | 40 | 10 |
| 24 | IPS | 60 | 15 | 16 | 4 |
| 25 | IPS | 100 | 20 | 50 | 10 |
| 26 | IPS | 100 | 20 | 80 | 16 |
| 27 | IPS | 10 | 2 | 5 | 1 |
| 28 | IPS | 75 | 10 | 60 | 8 |
| 29 | IPS | 75 | 10 | 45 | 6 |
| 30 | IPS | 75 | 10 | 30 | 4 |
| 31 | IPS | 75 | 10 | 15 | 2 |
| 32 | IPS | 80 | 10 | 64 | 8 |
| 33 | IPS | 64 | 8 | 40 | 5 |
| 34 | IPS | 80 | 10 | 32 | 4 |
| 35 | IPS | 40 | 5 | 16 | 2 |
| 36 | IPS | 40 | 5 | 32 | 4 |
| 37 | IPS | 36 | 4 | 18 | 2 |
| 38 | IPS | 18 | 2 | 10 | 1 |

**Table S3. Parameters for Part I of the Experiment Testing DAS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | More Salient Box | | Less Salient Box | |
| Problem No. | Property | Red | Blue | Red | Blue |
| 39 | DAS | 100 | 20 | 110 | 30 |
| 40 | DAS | 100 | 20 | 130 | 50 |
| 41 | DAS | 80 | 10 | 140 | 70 |
| 42 | DAS | 80 | 10 | 90 | 20 |
| 43 | DAS | 80 | 20 | 100 | 40 |
| 44 | DAS | 80 | 20 | 85 | 25 |
| 45 | DAS | 80 | 40 | 85 | 45 |
| 46 | DAS | 80 | 40 | 100 | 60 |
| 47 | DAS | 60 | 10 | 70 | 20 |
| 48 | DAS | 60 | 10 | 100 | 50 |
| 49 | DAS | 40 | 5 | 42 | 7 |
| 50 | DAS | 40 | 5 | 80 | 45 |
| 51 | DAS | 20 | 10 | 25 | 15 |
| 52 | DAS | 20 | 10 | 70 | 60 |
| 53 | DAS | 20 | 2 | 22 | 5 |
| 54 | DAS | 20 | 2 | 40 | 22 |
| 55 | DAS | 10 | 2 | 11 | 3 |
| 56 | DAS | 10 | 2 | 15 | 7 |
| 57 | DAS | 10 | 2 | 20 | 12 |
| 58 | DAS | 10 | 2 | 30 | 22 |
| 59 | DAS | 10 | 2 | 50 | 42 |
| 60 | DAS | 10 | 2 | 100 | 98 |

**Table S4. Lottery Choice Problems from Part II of the Experiment**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **Lottery A** | | | | | **Lottery B (Certainty)** | | | | |  |
|  |  | State 1 | | State 2 | |  | State 1 | | State 2 | |  |  |
|  | Problem | P1 | A1 | P2 | A2 | E | P1 | B1 | P2 | B2 | E |  |
|  | 1 | 0.01 | 100 | 0.99 | 0.01 | 1.01 | 0.01 | 1 | 0.99 | 1 | 1.00 |  |
|  | 2 | 0.01 | 100 | 0.99 | 1 | 1.99 | 0.01 | 2 | 0.99 | 2 | 2.00 |  |
|  | 3 | 0.01 | 200 | 0.99 | 0.02 | 2.02 | 0.01 | 2 | 0.99 | 2 | 2.00 |  |
|  | 4 | 0.02 | 100 | 0.98 | 1 | 2.98 | 0.02 | 3 | 0.98 | 3 | 3.00 |  |
|  | 5 | 0.02 | 250 | 0.98 | 0.1 | 5.10 | 0.02 | 5 | 0.98 | 5 | 5.00 |  |
|  | 6 | 0.03 | 100 | 0.97 | 0.09 | 3.09 | 0.03 | 3 | 0.97 | 3 | 3.00 |  |
|  | 7 | 0.05 | 100 | 0.95 | 5 | 9.75 | 0.05 | 10 | 0.95 | 10 | 10.00 |  |
|  | 8 | 0.05 | 80 | 0.95 | 0.05 | 4.05 | 0.05 | 4 | 0.95 | 4 | 4.00 |  |
|  | 9 | 0.10 | 50 | 0.90 | 11 | 14.90 | 0.10 | 15 | 0.90 | 15 | 15.00 |  |
|  | 10 | 0.20 | 45 | 0.80 | 5 | 13.00 | 0.20 | 15 | 0.80 | 15 | 15.00 |  |
|  | 11 | 0.25 | 40 | 0.75 | 12 | 19.00 | 0.25 | 20 | 0.75 | 20 | 20.00 |  |
|  | 12 | 0.30 | 45 | 0.70 | 5 | 17.00 | 0.30 | 15 | 0.70 | 15 | 15.00 |  |
|  | 13 | 0.50 | 20 | 0.50 | 10 | 15.00 | 0.50 | 15 | 0.50 | 15 | 15.00 |  |
|  | 14 | 0.50 | 70 | 0.50 | 1 | 35.50 | 0.50 | 35.5 | 0.50 | 35.5 | 35.50 |  |
|  | 15 | 0.50 | 50 | 0.50 | 2 | 26.00 | 0.50 | 26 | 0.50 | 26 | 26.00 |  |
|  | 16 | 0.50 | 50 | 0.50 | 2 | 26.00 | 0.50 | 27 | 0.50 | 27 | 27.00 |  |
|  | 17 | 0.60 | 50 | 0.40 | 1 | 30.40 | 0.60 | 30 | 0.40 | 30 | 30.00 |  |
|  | 18 | 0.75 | 55 | 0.25 | 0.5 | 41.38 | 0.75 | 50 | 0.25 | 50 | 50.00 |  |
|  | 19 | 0.75 | 48 | 0.25 | 1 | 36.25 | 0.75 | 36 | 0.25 | 36 | 36.00 |  |
|  | 20 | 0.80 | 75 | 0.20 | 0.1 | 60.02 | 0.80 | 60 | 0.20 | 60 | 60.00 |  |
|  | 21 | 0.85 | 80 | 0.15 | 1 | 68.15 | 0.85 | 68 | 0.15 | 68 | 68.00 |  |
|  | 22 | 0.90 | 85 | 0.10 | 0.05 | 76.51 | 0.90 | 80 | 0.10 | 80 | 80.00 |  |
|  | 23 | 0.95 | 90 | 0.05 | 1 | 85.55 | 0.95 | 85 | 0.05 | 85 | 85.00 |  |
|  | 24 | 0.95 | 100 | 0.05 | 0.01 | 95.00 | 0.95 | 95 | 0.05 | 95 | 95.00 |  |
|  | 25 | 0.99 | 95 | 0.01 | 1 | 94.06 | 0.99 | 94 | 0.01 | 94 | 94.00 |  |
|  | 26 | 0.99 | 100 | 0.01 | 0.01 | 99.00 | 0.99 | 99 | 0.01 | 99 | 99.00 |  |

**Table S5. Lottery Choice Problems from Part II (Continued)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
|  |  | **Lottery A** | | | | | **Lottery B** | | | | |  |  |
|  |  | State 1 | | State 2 | |  | State 1 | | State 2 | |  |  |  |
|  | Problem | P1 | A1 | P2 | A2 | E | P1 | B1 | P2 | B2 | E | Ratio |  | |
|  | 27 | 0.90 | 9 | 0.10 | 0 | 8.10 | 0.45 | 18 | 0.55 | 0 | 8.10 | 2 |  | |
|  | 28 | 0.80 | 9 | 0.20 | 0 | 7.20 | 0.40 | 18 | 0.60 | 0 | 7.20 | 2 |  | |
|  | 29 | 0.60 | 9 | 0.40 | 0 | 5.40 | 0.30 | 18 | 0.70 | 0 | 5.40 | 2 |  | |
|  | 30 | 0.40 | 9 | 0.60 | 0 | 3.60 | 0.20 | 18 | 0.80 | 0 | 3.60 | 2 |  | |
|  | 31 | 0.20 | 9 | 0.80 | 0 | 1.80 | 0.10 | 18 | 0.90 | 0 | 1.80 | 2 |  | |
|  | 32 | 0.02 | 9 | 0.98 | 0 | 0.18 | 0.01 | 18 | 0.99 | 0 | 0.18 | 2 |  | |
|  | 33 | 0.90 | 6 | 0.10 | 0 | 5.40 | 0.30 | 18 | 0.70 | 0 | 5.40 | 3 |  | |
|  | 34 | 0.60 | 6 | 0.40 | 0 | 3.60 | 0.20 | 18 | 0.80 | 0 | 3.60 | 3 |  | |
|  | 35 | 0.80 | 6 | 0.20 | 0 | 4.80 | 0.27 | 18 | 0.73 | 0 | 4.86 | 3 |  | |
|  | 36 | 0.40 | 6 | 0.60 | 0 | 2.40 | 0.13 | 18 | 0.87 | 0 | 2.34 | 3 |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | |

**Table S6. Percentage of subjects choosing each lottery in Part I of the experiment**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Problem | A | B |  | Problem | A | B |  | Problem | A | B |
| 1 | 0.5375 | 0.4625 |  | 13 | 0.6375 | 0.3625 |  | 25 | 0.2000 | 0.8000 |
| 2 | 0.7375 | 0.2625 |  | 14 | 0.2000 | 0.8000 |  | 26 | 0.2000 | 0.8000 |
| 3 | 0.4875 | 0.5125 |  | 15 | 0.2250 | 0.7750 |  | 27 | 0.7250 | 0.2750 |
| 4 | 0.6750 | 0.3250 |  | 16 | 0.2000 | 0.8000 |  | 28 | 0.6875 | 0.3125 |
| 5 | 0.5375 | 0.4625 |  | 17 | 0.2875 | 0.7125 |  | 29 | 0.7375 | 0.2625 |
| 6 | 0.5125 | 0.4875 |  | 18 | 0.0125 | 0.9875 |  | 30 | 0.7250 | 0.2750 |
| 7 | 0.5500 | 0.4500 |  | 19 | 0.2500 | 0.7500 |  | 31 | 0.6375 | 0.3625 |
| 8 | 0.3875 | 0.6125 |  | 20 | 0.2000 | 0.8000 |  | 25 | 0.2000 | 0.8000 |
| 9 | 0.7000 | 0.3000 |  | 21 | 0.2750 | 0.7250 |  | 26 | 0.2000 | 0.8000 |
| 10 | 0.3750 | 0.6250 |  | 22 | 0.1125 | 0.8875 |  | 34 | 0.6625 | 0.3375 |
| 11 | 0.5000 | 0.5000 |  | 23 | 0.2500 | 0.750 |  | 35 | 0.6500 | 0.3500 |
| 12 | 0.4750 | 0.5250 |  | 24 | 0.0750 | 0.9250 |  | 36 | 0.6875 | 0.3125 |