Bottlenose dolphins engaging in more social affiliative behaviour judge ambiguous cues more optimistically

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**Table S2a** Data for calculation of repeatabilities of different return latency times of bottlenose dolphins from ambiguous cues across three repeated trials (one trial per day). ID refers to the eight dolphins, return.latency\_in s is the average individual return latency from ambiguous cues measured in seconds, and return.latency\_%.dev is the percentage deviation of this average from the average return latency from the conditioned (Positive and Less-positive) cues. Note that the return.latency\_%.dev was used for later analyses (see Table S2b)

|  |  |  |  |
| --- | --- | --- | --- |
| ID | day | return.latency\_in s | return.latency\_%.dev |
| 1 | 1 | 11.2 | 4.3 |
| 1 | 2 | 11.2 | 4.4 |
| 1 | 3 | 11.1 | 4.1 |
| 2 | 1 | 8.8 | -8.0 |
| 2 | 2 | 8.5 | -11.0 |
| 2 | 3 | 8.9 | -6.2 |
| 3 | 1 | 9.0 | -12.0 |
| 3 | 2 | 10.2 | -0.7 |
| 3 | 3 | 10.2 | -0.7 |
| 4 | 1 | 9.5 | 4.1 |
| 4 | 2 | 9.3 | 2.1 |
| 4 | 3 | 11.6 | 26.5 |
| 5 | 1 | 7.8 | -0.3 |
| 5 | 2 | 8.0 | 2.6 |
| 5 | 3 | 8.3 | 6.6 |
| 6 | 1 | 11.9 | 1.6 |
| 6 | 2 | 12.8 | 9.2 |
| 6 | 3 | 13.8 | 17.7 |
| 7 | 1 | 8.1 | 7.0 |
| 7 | 2 | 8.3 | 10.2 |
| 7 | 3 | 8.8 | 16.1 |
| 8 | 1 | 7.2 | -5.2 |
| 8 | 2 | 7.7 | 0.6 |
| 8 | 3 | 7.9 | 3.2 |

**Table S2b** Data for calculation of association between the average return latency (return\_lat: the percentage deviation of the average latency to return from ambiguous cues as related to the average latency to return from the conditioned cues) and different social behaviours shown by bottlenose dolphins around, up to 2 month prior to and up to 4 months prior to cognitive bias testing. ID refers to the eight dolphins. Sync.swim, Ago and Play represents the three social behaviours tested (see definitions in Table A1), and the numbers after them represent the three time periods of behavioural data collection: 1= around the time of cognitive bias testing; 2= 0-2 months before testing; 3= 2-4 months before testing. The units for these behaviours is the percentage of total visible scans per 5 min observation (scans taken every 15 s).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | Return.lat | Sync.swim.1 | Ago.1 | Play.1 | Sync.swim.2 | Ago.2 | Play.2 | Sync.swim.3 | Ago.3 | Play.3 |
| 1 | 4.3 | 36.9 | 4.1 | 0.0 | 40.1 | 1.8 | 6.3 | 36.5 | 4.3 | 9.2 |
| 2 | -8.4 | 42.0 | 3.9 | 2.3 | 30.7 | 7.4 | 1.2 | 31.5 | 4.0 | 6.6 |
| 3 | -4.4 | 42.6 | 1.3 | 0.0 | 47.3 | 0.7 | 5.1 | 37.0 | 1.0 | 2.3 |
| 4 | 10.9 | 1.9 | 4.2 | 0.0 | 16.3 | 2.3 | 2.3 | 35.7 | 6.0 | 11.0 |
| 5 | 3.0 | 22.3 | 2.2 | 12.4 | 16.8 | 20.7 | 8.9 | 44.0 | 17.0 | 5.1 |
| 6 | 9.5 | 22.5 | 1.5 | 1.5 | 10.7 | 2.7 | 0.6 | 50.5 | 5.5 | 3.1 |
| 7 | 11.1 | 13.2 | 10.3 | 0.0 | 8.8 | 1.3 | 5.3 | 28.2 | 2.1 | 15.5 |
| 8 | -0.5 | 23.1 | 6.2 | 4.0 | 33.8 | 27.4 | 3.4 | 53.2 | 12.9 | 1.7 |