**SUPPLEMENTARY MATERIAL FOR**

**Can video playback provide social information for foraging blue tits?**

Liisa Hämäläinen, Hannah M. Rowland, Johanna Mappes and Rose Thorogood

 **Results of the GLM models**

**Table 1.** GLMM explaining the time focal birds faced a screen during video playback. Intercept gives the estimate for the time birds faced a screen when they were shown a cup before a demonstrator in the first test, and video playback of aversive prey. Bird ID (variance = 0.674) and demonstrator video (variance = 1.417) were included as random effects.

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| **Source** |   |   |  **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  |  1.2901 |  |  0.5902 |  |  2.186 |  |  0.0288 |
| Cup after |  |  |  - 0.3916 |  |  0.1807 |  |  -2.167 |  |  0.0302 |
| Demonstrator |  |  0.3664 |  |  0.1694 |  |  2.162 |  |  0.0306 |
| Palatable prey |  |  0.3175 |  |  0.7203 |  |  0.441 |  |  0.6594 |
| Second test |  |  0.3856 |  |  0.1440 |  |  2.679 |  |  0.0074 |
| Association score  |  |  -28.0998 |   |  12. 2961 |  |  -2.285 |  |  0.0223 |
| Cup after: palatable prey |  -0.5696 |  |  0.2689 |  |  -2.118 |  |  0.0342 |
| Demonstrator: palatable prey |  -0.8356 |   |  0.2517 |   |  -3.320 |   | <0.001 |
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**Table 2.** GLMM explaining the time focal birds were flying in a cage during video playback. Intercept gives the estimate for the time birds were flying when they were shown a cup before a demonstrator in a first test. Bird ID (variance = 0.9081) and demonstrator video (variance = 0.9873) were included as random effects.

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| **Source** |  |  | **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  |  -2.3551 |  |  0.4794 |  | -4.913 |  | < 0.0001 |
| Cup after |  |  |  -0.0318 |  |  0.1537 |  | -0.207 |  |  0.836 |
| Demonstrator |   |  -0.2484 |   |  0.1436 |   | -1.729 |   |  0.157 |
| Second test |  |  0.1135 |  |  0.1580 |  |  0.718 |  |  0.473 |
| Association score |  | 14. 9130 |  | 13.9566 |  |  1.069 |  |  0.2853 |
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**Table 3.** GLMM explaining the number of head turns focal birds performed during video playback. Intercept gives the estimate for the number of head turns when birds were shown a cup before a demonstrator in a first test, and video playback of aversive prey. Bird ID (variance = 0.0812) and demonstrator video (variance = 0.1577) were included as random effects.

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| **Source** |  |  | **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  |  1.9046 |  | 0.2325 |  |  8.192 |  | < 0.0001 |
| Cup after |  |  |  0.3060 |  | 0.1455 |  |  2.103 |  |  0.0355 |
| Demonstrator |  |  0.2877 |  | 0.1461 |  |  1.969 |  |  0.0489 |
| Palatable prey |  |  0.0153 |  | 0.2776 |  |  0.055 |  |  0.9561 |
| Second test |  |  0.1880 |  | 0.1406 |  |  1.337 |  |  0.1811 |
| Association score |  | -8.1419 |  | 5.0620 |  |  -1.608 |  |  0.1077 |
| Cup after x positive video | -0.5427 |  | 0.1991 |  |  -2.726 |   |  0.0064 |
| Demonstrator x positive video | -0.3933 |   | 0.1964 |   |  -2.002 |   |  0.0452 |
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**Table 4.** GLMM explaining the number of hops focal birds performed during video playback. Intercept gives the estimate for the number of hops when birds were shown a cup before a demonstrator in a first test. Bird ID (variance < 0.001) and demonstrator video (variance < 0.001) were included as random effects.

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| **Source** |  |  | **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  | -1.8701 |  |  0.6185 |  | -3.023 |  | 0.0025 |
| Cup after |  |  |  1.0146 |  |  0.5859 |  |  1.732 |  | 0.0833 |
| Demonstrator |   |  1.9673 |   |  0.5650 |   |  3.482 |   | 0.0005 |
| Second test |  |  0.1345 |  |  0.4524 |  |  0.297 |  | 0.7662 |
| Association score |  |  6.2373 |  | 10.1306 |  |  0.616 |  | 0.5381 |
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**Table 5.** GLMM explaining focal birds’ first cup choice (same/different cup that a demonstrator fed from) after video playback. Explanatory variables include information type and test order (baseline level includes video of aversive prey and first test). Bird ID (variance = 0.0310) and demonstrator video (variance = 0.4419) were included as random effects.

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| **Source** |  |  |  **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  |  -0.3426 |  |  0.6968 |  | -0.492 |  | 0.623 |
| Palatable prey video |  |  |  0.3719 |  |  0.8135 |  |  0.457 |  | 0.648 |
| Second test |  |  0.8294 |  |  0.7454 |  |  1.113 |  | 0.266 |
| Association score |  |  -17.1373 |  | 14.7398 |  | -1.163 |  | 0.245 |
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**Table 6.** GLMM explaining the latency to choose a cup after video playback. Intercept gives the estimate for the time (in seconds) that it took for focal birds to choose a cup when their choice did not match a demonstrator’s behaviour, and when they saw video playback of aversive prey in the first test. Bird ID (variance = 0.1668) and demonstrator video (variance = 0.0616) were included as random effects.

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| **Source** |  |  | **Estimate** |  |  **SE** |  |  **Z** |  |  **P** |
| Intercept |  |  |  4.6607 |  |  0.2729 |  | 17.075 |  | < 0.001 |
| Palatable prey video |  |  | -0.0241 |  |  0.2620 |  | -0.092 |  | 0.9266 |
| Second test |  |  0.0098 |  |  0.2258 |  |  0.043 |  | 0.9655 |
| Matching demonstrator |  | -0.8368 |  |  0.2653 |  | -3.154 |  | 0.0016 |
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