

# **Quantity misperception by hymenopteran insects observing the Solitaire Illusion**

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This readme file describes the data files accompanying the above publication. For any further queries please contact [scarlett.howard@monash.edu](mailto:scarlett.howard@monash.edu)

The following files are included:

1) “Solitaire\_training\_data.csv”

This file contains the individual choices made by insects during the training. The columns are as follows:

ID: ID of individual insect

Bee\_wasp: A score of ‘1’ indicates the individual was a honeybee. A score of ‘2’ indicates the individual was a wasp.

Bee\_wasp\_text: The species of each individual in text format.

Trial: Trial number ranging from 1 – 70 during the appetitive-aversive differential conditioning training phase.

Block: Trials are grouped into blocks of 10.

Choice: Individual choices of each insect. A score of ‘1’ is a correct choice and a score of ‘0’ is an incorrect choice.

2) “Solitaire\_test\_data.csv”

This file contains the individual choices made by insects during the learning and illusion tests. The columns are as follows:

ID: ID of individual insect

Bee\_wasp: A score of ‘1’ indicates the individual was a honeybee. A score of ‘2’ indicates the individual was a wasp.

Bee\_wasp\_text: The species of each individual in text format.

Test\_type: A score of ‘1’ is Learning Test 1 (1 vs. 32). A score of ‘2’ is Learning Test 2 (3 vs. 6). A score of ‘3’ is Learning Test 3 (27 vs. 30). A score of ‘4’ is the Illusion Test (clustered vs. unclustered).

Test\_type\_text: The above column in text format. ‘LT1’ is Learning Test 1 (1 vs. 32). ‘LT2’ is Learning Test 2 (3 vs. 6). ‘LT3’ is Learning Test 3 (27 vs. 30). ‘Illusion’ is the Illusion Test (clustered vs. unclustered).

Trial: Trial number ranging from 1 – 20 during the tests.

Choice: Individual choices of each insect. A score of '1' is a correct choice during Learning Tests (or choice for clustered elements in the Illusion Test) and a score of '0' is an incorrect choice during Learning Tests (or a choice for unclustered elements in the Illusion Test).