

Learning paradigms exemplified by virtual experiments with honey bees

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Overview

- **Title:** Learning paradigms exemplified by virtual experiments with honey bees
- **Description:** Non-associative learning (habituation, sensitization) and principles of associative learning (contiguity, inhibitory learning, generalization, overshadowing, positive and negative patterning) are exemplified by virtual experiments with honeybees. Users can develop experimental designs, simulate and document the experiments and find

explanations and suggestions for the analysis of the learning experiments. The virtual experiments are based on film sequences and data from actual learning experiments. The bees' responses are determined by probability-based learning profiles.

- **Language:** English, German
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- **Creator:** Juliane Ulrich
- **Publisher:** Author
- **Source:** Author
- **Rights:** Author

Application

- **Application context:** advanced school, university first and second cycle
- **Application setting:** single-user, talk, course
- **Instructional use:** The program is self-contained.
- **Time:** approx 2 hours per unit (8 units)
- **Resource type:** tutorial, virtual experiment, glossary
- **Application objective:** Work with experimental designs in behavioural biology, simulate and document the experiments and find explanations and suggestions for the analysis of the learning experiments

Technical

- **Required applications:** JRE and JMF (included)
- **Required platform:** Windows 9X or higher
- **Requirements:** 1 GHz Processor, 256 MB RAM, 150MB free disk space (rec.)
- **Archive:** bmm-ullrich-beeexp-050704.exe
- **Target-type:** Executable Installer
- **Target:** bmm-ullrich-beeexp-050704.exe

Requirements and setup instructions

- Download program
- Start downloaded installation program
- Choose a directory
- When asked for installing JRE, press "Yes"
- When asked for installing JMF, press "Yes"
- Restart your computer

Application instructions

You will find all information necessary in the program.

- 1. Start Program
- 2. Click on the "Puzzle"-Icon in the middle of the screen
- 3. Choose unit "Habituation"
- 4. Read the text carefully
- 5. When the experiment is reached note the instructions and exercises
- 6. Repeat for all other units.

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