

Experiment 7: Latent Inhibition and Immunisation

Children were randomly assigned to one of three conditions: Immunisation, Latent Inhibition, or Control. Children in the Immunisation group were presented with one animal (e.g., a quokka) shown with 10 faces expressing happiness. Children in the Latent Inhibition group were presented with one animal (e.g., a quokka) alone on the screen 10 times. Children in the control group did not see anything in this phase. All children were then presented with a computer-based vicarious learning presentation showing the previously fear-paired animal (e.g., a quokka) with 10 faces expressing fear ('fear-paired') and the other animal (e.g., a cuscus) alone on the screen 10 times ('unpaired'). Changes in children's fear beliefs and avoidance preferences for the animals were measured via questionnaire and nature reserve task.

The aim of the experiment was to determine if latent inhibition or immunisation would prevent vicarious fear learning.

Procedure and measures:

1. Nature Reserve Task (NRT)

Children were first asked to imagine that the board was a nature reserve containing one of the animal CSs. One of the animals, depicted by a photograph, was at one end of the reserve. Children are asked to place a Lego model representing themselves on the board where they would most like to be. The distance between the animal and the Lego figure was measured and indicated children's avoidance preferences for the animals. The same procedure was then repeated for the second animal. The order that animals were presented in was counterbalanced across children.

2. Fear Beliefs Questionnaire1 (FBQ1)

Children filled in a computer-based fear beliefs questionnaire to measure fear-related beliefs for the two animals. The questionnaire contained seven questions for each animal; for example, "Would you be scared if you saw a quokka?" and "Would you be happy to have a cuscus for a pet?" Children responded on a 5-point Likert scale: 0 (*No, not at all*), 1 (*No, not really*), 2 (*Don't know/Neither*), 3 (*Yes, probably*), and 4 (*Yes, definitely*). There were a total of 14 questions. Mean fear beliefs scores for each animal was calculated for each child.

3. Prevention manipulation.

Immunization group. Immunization group children saw positive modelling for the animal they would later see in vicarious fear learning trials. This consisted of 10 trials in which the fear-paired animal was seen together with happy faces. The unpaired animal was not seen.

Latent inhibition group. Children in the latent inhibition group saw unpaired presentations of the animal they would later see in fear-paired vicarious learning. This consisted of 10 trials of the animal seen alone. The unpaired animal was not seen at all.

Control group. Control group children saw no prevention trials.

4. Vicarious learning (VL)

Each child was shown one Australian marsupial (e.g., a quokka) with 10 faces expressing fear ('fear-paired'), and one Australian marsupial (e.g. quoll) alone on the screen 10 times ('unpaired'). Each of the 20 trials began with a randomly chosen animal picture appearing alone on the screen for 1 s. The marsupial picture remained displayed for a further 1 s while, depending on the counterbalancing order, a scared face was simultaneously presented on the opposite side of the screen, or no face appeared and the animal remained alone. Accordingly, the total length of a single trial from start to finish was 2 s. The interval between each pairing was a random interval that varied between 2 and 4 s. The procedure was counterbalanced across children so that the animals were each paired with scared or no faces.

5. NRT2

Children completed the NRT a second time to determine whether avoidance preferences had increased or decreased as a result of the procedures.

6. FBQ2

Children completed the FBQ a second time to ascertain if fear-related beliefs for animals changed due to the procedures.