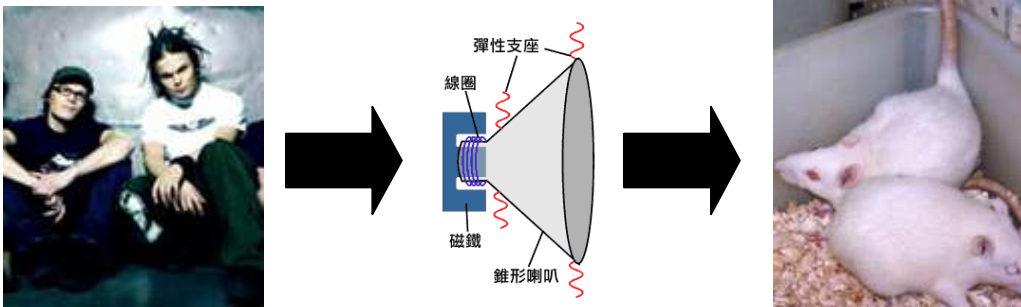


Interpreting Data

As part of an ongoing project on lifestyle choices amongst the species *Rattus Norvegicus*, Fakedata & Fraud (2004) conducted research into whether rats preferred The Red Hot Chili Peppers to The Rasmus. The rats were placed, individually, in glass boxes. In each box was a loudspeaker and a lever. Music was played at an average sound intensity of 100dB through the loudspeaker. The rat could turn off the music by pressing the lever. The lever was also attached to a timer, which recorded the interval in seconds between the music commencing and the rat pressing the lever.



The rats were randomly assigned to one of two conditions:

- Condition 1: the music played was 'In The Shadows' by The Rasmus
- Condition 2: the music played was 'Give It Away' by the RHCPs

They conducted their experiment twice, to check reliability.

Experiment 1: Results

	Mean duration	Range	S'd Deviation
Rasmus	17.6s	24s	5.3s
RHCPs	24.3	7s	3.8s

Experiment 2: Results

	Mean duration	Range	S'd Deviation
Rasmus	22.9s	8s	2.1s
RHCPs	25.7	5s	3.1s

1. Comment on the results of the experiments, referring to all the measures given.
2. Suggest some conclusions that the researchers may have drawn from the results of their experiment.

More rat-oriented hilarity overleaf...

Data Interpretation

Here are the results from the 'Rasmus' condition of experiment 1:

Rat Number	Duration of music (s)
1	18
2	26
3	16
4	17
5	2
6	15
7	12
8	18
9	13
10	14

Did the researchers use the right descriptive statistics to describe their data? Explain your answer.

Research Methods Revision

Referring to the experiment carried out by Fakedata & Fraud (2004):

1. Suggest a suitable hypothesis for the experiment.
2. What were the IV and DV in this experiment?
3. Suggest why the rats were randomly assigned to the two conditions.
4. Identify one variable controlled by the researchers and suggest why they needed to control it.
5. What is meant by 'reliability'? Were the researchers' findings reliable?
6. Does this experiment raise any ethical issues? Explain your answer.

Extension Activity



Earlier on in their research project, Fakedata & Fraud (1997) investigated whether exposure to Barry White records had an effect on reproduction in rats. Suggest how they could have carried out a **correlation study** to investigate this.