Worksheet 5.2
How we react to animals

Bennett–Levy and Marteau (1984) conducted a correlational study to investigate the relationship between visual characteristics of animals and people’s reactions to them. The underlying hypothesis is that humans are biologically prepared to fear particular characteristics of animals, not the animals themselves. This would mean that we are more likely to develop a phobia for animals which have specific combinations of characteristics.

Participants (aged on average in their mid-thirties, and an even spread of males and females) were asked to fill out one of two questionnaires. The first was to determine reactions to 29 harmless animals (including grass snake, frog, jellyfish and slug) in terms of fear and willingness to move near to them (high scores indicated preference for a greater distance). The second questionnaire was to determine how ugly, slimy and speedy the animals are and how suddenly they move. Ratings from the two questionnaires were correlated with each other.

Significant correlations were found between ugly and slimy (0.75), ugly and fear (0.82), ugly and nearness (0.87), slimy and fear (0.61), slimy and nearness (0.77) and fear and nearness (0.90).

The ugliest animals were slug, cockroach, spider and rat. The slimiest were slug, jellyfish, worm and frog. The animals given the highest fear ratings were rat, jellyfish, spider and cockroach. Animals least likely to be picked up or approached were rat, cockroach, jellyfish and spider.

The researchers concluded that characteristics that make an animal different from human form are those that are most likely to elicit fear responses, so that we may be biologically prepared to have a much more positive reaction to people than to, for example, a jellyfish.

Reference

1 This is a correlational study. Consider the typical limitations of correlational studies and highlight any specific limitations you can identify in this study. Focus particularly on problems in isolating cause and effect.

2 If the worm and frog had high slimy ratings, why were their fear ratings not so high (they were approximately in the middle)? What alternative explanations can you think of?

3 Fear was rated on a three-point scale: 1 = not afraid, 2 = quite afraid, 3 = very afraid. How valid do you think measurement like this is?