

6 Animals are sometimes used to conduct psychological research.

Assess the practical and ethical implications of using animals in psychological research.

(20)

Animals are often used in psychological research in place of human participants to measure the effect of altering an independent variable to see how the animal behaves, e.g. if an animal can be classically conditioned as measured by Pavlov in his study with dogs. The findings of animal studies are then generalised to human participants, e.g. being aware that animals can be classically conditioned to give desired behaviour can mean that humans can also be conditioned, as learning psychologists (radical behaviourists only) believe that human and animal participants learn in the same manner and thus any findings can be applied to either species categories. For example, based on classical conditioning the treatment of phobias, systematic desensitisation was developed, which is gradual exposure therapy involving a ^{therapist} ~~therapist~~ and client working through a fear hierarchy using relaxation techniques so that the phobic stimuli can be associated to relaxation rather than to fear. Human participants aren't often used for studies because it can be highly unethical to do so, although previously they had been used e.g. Watson and Rayner classically conditioned a phobia of white rats into a previously emotionally stable 9 month old, however due to the BPS guidelines being put into place after studies like this and Milgram's study of shocking other people, it became unethical to use humans and therefore animals had to be used.



There are legislations put into place regarding animal welfare, and there are some animals like endangered animals, or animals banned e.g. Swans are banned ^{to be used} by the Queen, which cannot be used as part of studies as we have to protect these animals. Therefore a species of animals that are as similar to humans as possible are often chosen which aren't banned. For example, rats and mice are often chosen because they share a large percentage of their DNA with humans, which is why studies like Edward's rat study where he injected neonatal female rats with testosterone to see the effect this had on aggressive behaviour, in order to test if there was a correlation between testosterone and aggression. However, animals aren't 100% anatomically similar to humans are therefore findings aren't always applicable, e.g. the hormone's effect in altering rat ~~behave~~ behaviour may be different to its effect in humans. Psychologists must consider the number of animals they would make use of as part of their study as it is advised to use as few animals as possible to minimise the amount of harm that the study causes. However, there are ~~practical~~ issues then with the generalisability of the research as often large samples are required to make a study have valid findings which can then be concluded from and conclusions implemented, as there may also be individual differences present in animals for example Skinner used rats and each rat may have different reactions to the rewards or punishment being given to them e.g. some may not be motivated by the food Skinner gave as a reward.

Animals used as part of the study have to be housed in a ~~major~~ place as similar to their natural environment as their own, e.g. animals that burrow should be able to do so as this may enable them to feel as comfortable as possible during times when they aren't being tested on. The animals should also be cared for as well as possible, e.g. fed properly as this ensures that animals are healthy and so ensures that results that are gathered are as valid as possible and can then be generalised to human participants. It is unethical not to feed the animals for long periods of time, and keeping them in cages for as this isn't their natural habitat. After the study has been conducted the animals have to be disposed of (if killed during the experiment e.g. if testing the effect of brain damage) in a respectful manner. Animals that are still alive at the end of the study can be released back into their natural habitat, however they may find it difficult to adapt after being kept in an artificial laboratory environment, and therefore it would be more ethical to keep them and breed them to create more animals participants for future animal studies. The animals that are used for the study must be brought from a licensed practitioner that is ~~was~~ reputable. Mice and rats are often brought from the home office as these are the normal, healthy animals which can be used as part of research like drug trials which have findings that are generalised to humans. E.g. Carlsson used animal studies as part of his meta-analysis. The animal studies could have included drug trials of antipsychotics of animals, or looking at levels of neurotransmitters that



are in the brains of animals after being given a drug.

The procedure chosen as part of the study must be as ethical as possible as it should minimise harm caused to the animals, however if the study has to be unethical e.g. brain damage to see the effect on aggression in mice, it has to be reported to the animal rights/animal ethics board so that the study can be monitored and they can also ~~also~~ ^{to} legitimate minimise the harm caused by animals if possible. ~~Butterson's~~ ^{Beutson's} cube is often used by psychologists who have to use animals as part of their research. The cube has blocked areas and open areas; the open areas are where there is a successful balance between quality of research, usefulness of study for human benefit and suffering caused to animals. This research if well balanced is good to be conducted as it can have implications, e.g. in finding a cure for cancer. However, if there is no balance and the cube is a blocked area, the study shouldn't be conducted as the balance of these factors isn't good.

Overall, animal participants are used by psychologists after replacement of humans due to the BPS guidelines which restrict human use. The use of animals is generalisable to an extent, but is much more ethical than using human participants. There are practical issues in the use of animals, which is why often smaller animals are chosen like mice and rats as they are quite similar to humans and there are fewer practical issues like the housing and care which is lower maintenance compared to use of larger animals.



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