Animal Research: The Ethics of Animal Experimentation

Many medical research institutions make use of non-human animals as test subjects. Animals may be subject to experimentation or modified into conditions useful for gaining knowledge about human disease or for testing potential human treatments. Because animals as distant from humans as mice and rats share many physiological and genetic similarities with humans, animal experimentation can be tremendously helpful for furthering medical science.

However, there is an ongoing debate about the ethics of animal experimentation. Some people argue that all animal experimentation should end because it is wrong to treat animals merely as tools for furthering knowledge. According to this point of view, an animal should have as much right as a human being to live out a full life, free of pain and suffering. Others argue that while it is wrong to unnecessarily abuse animals, animal experimentation must continue because of the enormous scientific resource that animal models provide. Proponents of continued animal experimentation often also point out that progress can still be made to improve the conditions of laboratory animals and they fully support efforts to improve living conditions in laboratories, to use anesthesia appropriately, and to require trained personnel to handle animals.

On closer scrutiny, there exists a wide range of positions on the debate over the ethics of animal testing. The two views mentioned above represent two common positions at the opposing ends of the spectrum. Others endorse a view closer to the middle of the spectrum. Usually, this middle view accepts experimentation on some, but not all, animals and aims to avoid unnecessary use of animals in scientific research by pursuing alternatives to animal testing.

The following sections briefly outline a few of the arguments for and against animal experimentation. They do not represent every possible argument, or even necessarily the best arguments. They also do not necessarily reflect the views of the HOPES team. They are simply our effort to review and raise awareness of the underlying issues.

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The Case Against Animal Experimentation

An important part of the debate over animal rights centers on the question of the moral status of an animal. Most people agree that animals have at least some moral status – that is why it is wrong to abuse pets or needlessly hurt other animals. This alone represents a shift from a past view where animals had no moral status and treating an animal well was more about maintaining human standards of dignity than respecting any innate rights of the animal. In modern times, the question has shifted from whether animals have moral status to how much moral status they have and what rights come with that status.

The strongest pro animal rights answer to this question would be that non-human animals have exactly the same moral status as humans and are entitled to equal treatment. The ethicists who endorse this position do not mean that animals are entitled to the very same treatment as humans; arguing that animals should have the right to vote or hold office is clearly absurd. The claim is that animals should be afforded the same level of
respectful treatment as humans; in short, we should not have the right to kill animals, force them into our service, or otherwise treat them merely as means to further our own goals.

One common form of this argument claims that moral status comes from the capacity to suffer or to enjoy life. In respect to his capacity, many animals are no different than humans. They can feel pain and experience pleasure. Therefore, they should have the same moral status and deserve equal treatment.

Supporters of this type of argument frequently claim that granting animals less moral status than humans is just a form of prejudice called "speciesism." We have an innate tendency, they say, to consider the human species more morally relevant merely because it is the group to which we belong. However, we look upon past examples of this behavior as morally condemnable. Being of a particular race or gender does not give one any grounds for declaring outsiders to be of a lower moral status. Many animal rights advocates argue similarly—that just because we are human is not sufficient grounds to declare animals less morally significant.

The Case For Animal Experimentation

Defenders of animal experimentation usually argue that animals cannot be considered morally equal to humans. They generally use this claim as the cornerstone of an argument that the benefits to humans from animal experimentation outweigh or "make up for" the harm done to animals. The first step in making that argument is to show that humans are more important than animals. Below, I will outline one of the more common arguments used to reach this conclusion.

Some philosophers advocate the idea of a moral community. Roughly speaking, this is a group of individuals who all share certain traits in common. By sharing these traits, they belong to a particular moral community and thus take on certain responsibilities toward each other and assume specific rights. For example, in most human moral communities all individuals have the right to make independent decisions and live autonomous lives – and with that right comes the responsibility to respect others’ independence.

Although a moral community could theoretically include animals, it frequently does not. The human moral community, for instance, is often characterized by a capacity to manipulate abstract concepts and by personal autonomy. Since most animals do not have the cognitive capabilities of humans and also do not seem to possess full autonomy (animals do not rationally choose to pursue specific life goals), they are not included in the moral community. Once animals have been excluded from the moral community, humans have only a limited obligation towards them; on this argument, we certainly would not need to grant animals all normal human rights.

If animals do not have the same rights as humans, it becomes permissible to use them for research purposes. Under this view, the ways in which experimentation might harm the animal are less morally significant than the potential human benefits from the research.

One problem with this type of argument is that many humans themselves do not actually fulfill the criteria for belonging to the human moral community. Both infants and the mentally handicapped frequently lack complex cognitive capacities, full autonomy, or even both of these traits. Are those individuals outside the human moral community? Do they lack fundamental human rights and should we use them for experimentation? One philosophical position actually accepts those consequences and argues that those humans have the exact same rights (or lack of rights) as non-human animals. However, most people are uncomfortable with that scenario and some philosophers have put forth a variety of reasons to include all humans in the human moral community. A common way to “return” excluded individuals to the human moral community is to note how close these individuals come to meeting the criteria. In fact, some of them (the infants) will surely meet all of the criteria in the future. With that in mind, the argument runs, it is best practice to act charitably and treat all humans as part of the moral community.
In summary, defenders of animal experimentation argue that humans have higher moral status than animals and fundamental rights that animals lack. Accordingly, potential animal rights violations are outweighed by the greater human benefits of animal research.

A Middle Ground

There is a middle ground for those who feel uncomfortable with animal experimentation, but believe that in some circumstances the good arising out of experimentation does outweigh harm to the animal. Proponents of the middle ground position usually advocate a few basic principals that they believe should always be followed in animal research.

One principle calls for the preferential research use of less complex organisms whenever possible. For example bacteria, fruit flies, and plants would be preferred over mammals. This reflects a belief in a hierarchy of moral standing with more complex animals at the top and microorganisms and plants at the bottom. A philosophical grounding for this sort of hierarchy is the “moral worth as richness of life” model. This point of view suggests that more complicated organisms have richer, more fulfilling lives and that it is the richness of the life that actually correlates with moral worth.

Another principle is to reduce animal use as far as possible in any given study. Extensive literature searches, for instance, can ensure that experiments are not unnecessarily replicated and can ensure that animal models are only used to obtain information not already available in the scientific community. Another way to reduce animal use is to ensure that studies are conducted according to the highest standards and that all information collected will be usable. Providing high quality, disease-free environments for the animals will help ensure that every animal counts. Additionally, well designed studies and appropriate statistical analysis of data can minimize the number of animals required for statistically significant results.

A third principle is to ensure the best possible treatment of the animals used in a study. This means reducing pain and suffering as much as possible. When appropriate, anesthesia should be used; additionally, studies should have the earliest possible endpoints after which animals who will subsequently experience disease or suffering can be euthanized. Also, anyone who handles the animals should be properly trained.

The “bottom line” for the middle ground position is that animal experimentation should be avoided whenever possible in favor of alternative research strategies.

For further reading:

  *Peter Singer is one of the best publicly known advocates of animal rights and animal equality. This philosophical essay briefly presents his views.*

  *This essay defends animal experimentation.*

  *In this essay Frey puts forth a view where animals do matter, but human welfare is considered more important.*

  *This essay supports animal rights.*

  *Ethics and Alternatives for Animal Use in Research and Teaching. A great resource describing some ways to minimize the use of animals in research and to practice the best standards when using animals.*