

Discuss whether animal research typically performed by psychologists is unethical

by Eleanor Nightingale

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Discuss whether animal research typically performed by psychologists is unethical

Whether animal research is ethical or not is an important, on-going debate. It is suggested that at least 115 million animals are used in experiments worldwide every year with 4.14 million animal experiments being conducted in the United Kingdom (UK) in 2015. Of these experiments, 73% were conducted on mice and the other 27% included experiments on rats, birds, rabbits, monkeys, dogs, cats and fish (Cruelty Free International, n.d.). Some researchers have argued that animal research is not ethical because of a primate's relation to humans, the level of suffering caused to models and the lack of congruence on applying human diseases onto animal models. Others have argued that animal research is indeed ethical due to its importance to science, the true treatment of animals and its essentiality to furthering human life. This essay will finish with a reflection of the attitudes formed over the course of the first semester.

Institutions, such as The National Institutes of Health (N.I.H), believe animal research to be unethical; in 2011, the N.I.H suspended all new grants for biomedical and behavioural research on chimpanzees. The new guidelines concluded that experimenting on chimpanzees was "largely unnecessary" and required research to be essential for improving human health. The director of the N.I.H., Dr. Francis S. Collins, said that since chimpanzees are the closest human relatives, they deserve "special consideration and respect" (Gorman, 2011). At the time, these recommendations were considered a victory by animal welfare groups in the hopes of one-day banning chimp research completely. As of June 2015, the U.S. Fish and Wildlife Service stated that all chimpanzees in the United States would be classified as endangered under the Endangered Species Act (ESA) therefore preventing invasive chimpanzee research (Grimm, 2015).


On the other hand, Bennett (2012), a psychologist and member of the American Psychological Association's (APA) Committee on Animal Research and Ethics, believes that animal research plays an integral role in the scientific field as it furthers our basic


understanding, as well as informing clinical practice and public health policy. From using animals in research, we have developed general anaesthetics, insulin, asthma inhalers and vaccinations against tuberculosis and malaria (Understanding Animal Research, 2014a); thus, suggesting that animal research is crucial, especially those using chimpanzees and other primates which share a large amount of human relation. Another notable study which experimented on monkeys is Harry Harlow's research into attachment (Harlow & Zimmerman, 1959). This ground-breaking study has contributed greatly to the developmental, cognitive, biological, and social approaches to attachment. The longevity and profoundness of Harlow's monkeys have provided us with answers to relevant, essential theories that could not have been accomplished without animal research.

In addition, what many people do not realise is that almost all researchers approach animal testing compassionately and act in humane and ethical ways towards the treatment of animals. Where possible, researchers try to find a suitable non-animal model replacement/less complex species to experiment on. The Humane Society of the United States (HSUS) has declared that a complete elimination of all animal research is an achievable goal by 2050 (Rowan, 2011). In the meantime, some guiding principles called The Three R's (Understanding Animal Research, 2014b) can be used to ensure ethical use of animals in experiments. Described by W. M. S. Russell and R. L. Burch in 1959, all researchers testing upon animals must prove there is no alternative technique (Replace), must explain how they are planning to minimise the number of animals used (Reduce) and ensure that as little suffering as possible is inflicted upon the animals (Refine). These principles are helping ensure that all animal research is conducted in the most ethical way until we can legalise animal research altogether.

Conversely, of the 4.14 million animal experiments being conducted in the UK (in 2015), over 600,000 animals from these experiments were considered to have been subjected to moderate or severe suffering (Cruelty Free International, n.d.). This is further supported by

Speaking of Research, 2016) where they found that just 14% of animal research procedures were classified as 'moderate', 4.5% as 'severe' and 3% as 'non-recovery' – where the animal never awakes from anaesthesia. These studies highlight how animal research is unethical to animals as a result of the significant level of animals that are still being harmed during experimentation despite the supposed implemented provisions by researchers e.g. The Three R's.

Furthermore, there is a significant reliability problem with the lack of congruence between the application of human diseases onto animal models. In animal research, human diseases are often artificially induced into the animal models which does not produce a complex enough result consequently limiting its usefulness and efficacy (Akhtar, 2015). The inability to successfully reproduce human strokes in animals so there is congruence has contributed towards a high failure rate in new drug therapies. Over 114 potential treatments that were originally tested on animals failed in human drug trials (O'Collins et al., 2006). This failure to adequately replicate human diseases in animal models infers that animal research is unethical to both humans and animals due to the high clinical failure rates which then result in animal models unnecessary suffering.  10

Moreover, the view that animal research is unethical has been supported outside the field of Psychology. For example, epidemiologists such as Tsilidis et al. (2013), performed a meta-analysis of 4,445 tests of drugs and other treatments to confirm suspicions about publication bias. The analysis found it be "very common to have more significant results in the literature compared with what would be expected". This bias is said to have happened due to the publishing of positive results and the suppression of negative/neutral results. This creates a false impression of the effectiveness of the treatments, therefore resulting in the majority failing in human drug trials and making animal research unethical to base evidence on for human interventions.  11

Nevertheless, neonatal medics have also addressed the topic of how ethical animal research is. Animal research has produced three life-saving treatments in neonatal medicine which would not have received ethical approval for clinical trial if high quality animal research had not shown evidence of effectiveness. Both prenatal corticosteroid and postnatal surfactant replacement were dependant on animal experiments and the results from these has transformed and improved the survival of premature infants (Whitelaw & Thoresen, 2014). Without the use of animal models, a large number of premature infants would not have survived and subsequently shows that research on animals is highly ethical and important due to the knowledge gained towards furthering human health.

To summarise, certain aspects of animal research are not ethical such as the use of primates due to their close relation to humans, the level of suffering caused to models and the lack of congruence on applying human diseases onto animal models. But animal research can also be considered ethical since the principles of The Three R's have helped ensure experiments using animal models are conducted in the most ethical way. It has also furthered our knowledge into human diseases and has been vital in improving human life.

Finally, I will provide a reflection of my attitudes formed over the course of this semester. My overall opinion of the above debate topic is that as psychologists, we should take a relativist view on animal research where we agree and understand that overall, animal research is not 100% ethical but it is essential as it has furthered our knowledge, improved and preserved human life through the creation of treatments and therapies. Throughout this debate topic, I believed that animal research was not ethical.

My initial attitude towards animal research was that it was not ethical. I was somewhat sure of my answer as I already knew some general points, such as animal suffering, that suggested this. After completing the preparation ahead of the debate's seminar, I still believed that animal research was unethical despite my resource; Bedwell (2016), discussed the importance to the scientific field, how it would be unethical to experiment on humans and

how there are no current alternatives to experimenting on animals. Following the seminar and hearing the other resources, my opinion remained the same. I still believed that animal research was unethical but could see the many positives to it, for example, our widened understanding of human diseases, the development of new treatments and therapies and the preservation of human life.

As the semester has progressed, my initial decisions on debate topics have weakened; this is not due to me becoming less confident, but is the result of the debate topics becoming more challenging. I have been mostly persuaded by what I have heard in seminars as we were provided with studies which both supported and went against the debate topic - from this I could develop my own opinion. The resources I were given did not affect my opinions; if the preparation went against it, then I did not change my view. During the debate and after hearing other's resources, my opinions remained unchanged - I formed them independently and was not influenced by other people's views. This would class me as a non-conformist.

However, many people's opinions did change over the course of this semester. This could be due to informational and normative social influence. The former suggests that conformity occurs when people accept evidence about reality provided by others (Myers, 2009). The latter proposes that conformity is based on one's desire to gain acceptance and fulfil others' expectations (Myers, 2009). Conformity can be defined as "yielding to group pressures" (Crutchfield, 1955). If people were unsure with their own opinions or wanted to fit into the group, they could have gone with the group's belief.

Throughout this semester, my attitudes have remained unchanged by others' opinions and the resources provided in the debate. Normative and informational social influence explains why some people conform and change their opinions. The weekly seminars initiated my opinion on the debate topics but as due to them becoming more challenging, my conclusions weakened.

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Whitelaw, A., & Thoresen, M. (2014). Animal research has been essential to saving babies' lives. *BMJ*, *348*(jun24 5), g4174–g4174. doi:10.1136/bmj.g4174

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GRADEMARK REPORT

FINAL GRADE

72/100

GENERAL COMMENTS

Instructor

This is an excellent essay, focusing on key dilemmas in this controversial area, and including some pleasing levels of analysis and evaluation. Please see in-text comments and below for more detailed feedback.

Throughout the essay you demonstrate engagement with the topic, as well as a very good general understanding of the issues. While you make some very valid points in terms of the medical application of the ethical issue, more focus on psychology specifically would have strengthened the argument further. Nevertheless, there is an analytical strand that permeates the discussion, which permits a balanced presentation of differing viewpoints.

There is a good structure to the essay (although see the in-text comment about more signposting). The final reflective section goes into detail, and it is pleasing to note consideration of why you were not influenced by the others in your group, as well as how your opinions became less firmly held when the topics became more challenging.

You use an excellent range of independently researched sources in the essay, as well as some of the core ones used in the sessions. These are put to effective use, although there are some occasions where even more citation would have been justified.

Your written style is clear, academic and very academic - this is a real strength in the essay and permits a flow to develop. Referencing is also generally excellent, demonstrating attention to detail.

If you would like to discuss this feedback in more detail, please contact me to book a tutorial.

Judith Hebron



Comment 1

It would be good to include a couple of example references here to illustrate your point.



Comment 2

It would be good to include a couple of example references here to illustrate your point.



Comment 3

Another (e.g. reference) would be useful here to support your claim.



Comment 4

Good signposting, although it would also have been worth saying what you are going to do first.



Comment 5

Page reference also needed for the quote



Comment 6

Good point, well explained with an element of evaluation.



Comment 7

No apostrophe needed



Comment 8

Initials not needed



Comment 9

No need for parentheses when included in the main running text



Comment 10

Given the essay title, it would have been useful to have broad psychological experimentation more into this section.



Comment 11

Good point



Comment 12

Although it could be argued that this does not take account of the animals' lives - from an animal advocacy perspective.



Comment 13

Very good evaluative paragraph

PAGE 5



Comment 14

Was



Comment 15

Was



Comment 16

- 's



Comment 17

- 's



Comment 18

Others'

PAGE 6



Comment 19

There is an excellent range of literature here, and you demonstrate that you have research many of your sources independently.

Referencing has also been done to a very good and consistent level.



Comment 20

There is an excellent range of literature here, and you demonstrate that you have research many of your sources independently.

Referencing has also been done to a very good and consistent level.

PAGE 7

KNOWLEDGE

60-69

Knowledge and Understanding

90-100	Polished grasp of subject. Astute and authoritative approach to complexity.
80-89	Comprehensive and confident grasp with strong sense of subject complexity.
70-79	Thorough understanding evident and well applied to question or project.
60-69	Secure, general understanding and reasonable application to question or project.
50-59	Sound knowledge relevant to the question or project.
40-49	Limited knowledge shows basic understanding. Some awareness of the context of the question or project.
30-39	Faulty understanding of question or concepts. Irrelevant or mostly absent content.
0-29	No understanding of question or concepts. Irrelevant or absent content.

STRUCTURE

70-79

Structure, Argument

90-100	Effective and integrated over-arching argument or structure, clear, insightful synthesis. Highly creative understanding of topic.
80-89	Effective overall argument with clear and insightful connections between claims. Creative understanding of topic.
70-79	Clear and logical focus and direction with valuable connections made between claims. Good level of creativity.
60-69	Well-focused on the question with some clear connections made between claims and some overall direction. Some creativity.
50-59	Addresses the topic with some direction and makes some connections between claims or different parts of artefact/assignment.
40-49	Argument is weak and difficult to detect. Connections made between statements limited
30-39	Lack of argument. Faulty connection between statements.
0-29	No argument. Many faulty connection between statements.

ANALYSIS

70-79

Analysis and Conclusions

90-100	Original and searching analysis, critical appraisal of task and judicious conclusions.
80-89	Searching analysis with pertinent conclusions drawn.
70-79	Insightful analysis throughout with appropriate conclusions drawn.

60-69	Strong analysis of salient illustrative examples. Some general conclusions drawn.
50-59	Some conclusions drawn based on some reasonable comparisons and examples.
40-49	Basic analysis. Remains descriptive, little evaluation or comparison. Few clear conclusions.
30-39	Insufficient evaluation or attempt to make comparisons. Conclusions illogical insufficient.
0-29	No evaluation or attempt to make comparisons. Conclusions illogical or absent.

SOURCES

70-79

Sources & Evidence Adherence to Referencing Conventions, Technical Skills

90-100	Extensive and evaluative use of evidential support for argument. Flawless referencing or technical skills.
80-89	Extensive use of evidence with some evaluation. Flawless referencing or technical skills.
70-79	Clear support of argument with well selected evidence. Excellent referencing or technical skills.
60-69	Draws on relevant independent sources and evidence to support claims. Consistent and accurate referencing or technical skills.
50-59	Makes simple use of evidence from recommended sources. Largely consistent accurate referencing. or technical skills.
40-49	Relies on superficial statements with little supporting evidence. Limited referencing/adherence to convention or technical skills.
30-39	Lack of evidence or relevant sources. Inadequate referencing or technical skills.
0-29	No evidence or relevant sources. Inadequate or no referencing or technical skills.

CLARITY

70-79

Written/Visual/Oral Style & Clarity

90-100	Professional and sophisticated with exceptional clarity and coherence. Excellent, controlled, confident delivery, pace, and audience engagement.
80-89	Professional and fluent with great clarity and coherence. Confident delivery, pace and audience engagement.
70-79	Fluent and accurate with great clarity and coherence. Mostly confident delivery, pace and audience engagement.
60-69	Clear and coherent. Good delivery, pace and audience engagement
50-59	Some lapses of clarity. Some expression is ineffective. Satisfactory delivery, pace and audience engagement
40-49	Adequate, but awkward expression throughout with little clarity. Poor delivery, pace

and audience engagement

30-39

Inadequate and unclear presentation. Impaired communication. Error-strewn.

0-29

Grossly inadequate and unclear presentation. Severely impaired communication. Error-strewn.