

WellBeing International  
**WBI Studies Repository**

4-13-2016

## **Annotated Bibliography: Attitudes Toward Animal Research (2014-2015)**

Erich Yahner  
*Humane Society Institute for Science and Policy*

Follow this and additional works at: [https://www.wellbeingintludiesrepository.org/hum\\_ed\\_bibs](https://www.wellbeingintludiesrepository.org/hum_ed_bibs)



Part of the [Animal Experimentation and Research Commons](#), [Animal Studies Commons](#), and the [Other Anthropology Commons](#)

---

### **Recommended Citation**

Yahner, Erich, "Annotated Bibliography: Attitudes Toward Animal Research (2014-2015)" (2016).  
*BIBLIOGRAPHIES*. 11.

[https://www.wellbeingintludiesrepository.org/hum\\_ed\\_bibs/11](https://www.wellbeingintludiesrepository.org/hum_ed_bibs/11)

This material is brought to you for free and open access by WellBeing International. It has been accepted for inclusion by an authorized administrator of the WBI Studies Repository. For more information, please contact [wbisr-info@wellbeingintl.org](mailto:wbisr-info@wellbeingintl.org).



**An Annotated Bibliography of Research Relevant to  
Attitudes Toward Animal Research  
2014-2015**

**The Humane Society Institute for Science and Policy**

**Compiled by Erich Yahner  
(All Abstracts and Summaries from Authors or Publishers)**

---

JOURNAL ARTICLES

**Agell, L., Soria, V., & Carrió, M. (2015). Using role play to debate animal testing. *Journal of Biological Education*, 49(3), 309-321.**

The use of animals in biomedical research is a socio-scientific issue in which decision-making is complicated. In this article, we describe an experience involving a role play activity performed during school visits to the Barcelona Biomedical Research Park (PRBB) to debate animal testing. Role playing games require students to defend different positions and permit participants to debate and reflect on their personal opinions. A total of 262 students from 15- to 30-years-old participated in the activity. The article presents an analysis of the students' opinions on this topic before and after performing the activity. Our results show that students actively took part in debate and made use of the new information provided by the game, especially the legal aspects. In conclusion, the role play activity helped participants to create a more informed opinion, stimulated critical thinking and argumentation skills. We encourage science teachers to use role playing games to discuss socio-scientific issues.

**Dignon, A. (2014). 'I think it will eventually be done away with': Attitudes among healthcare professionals towards the current system of animal experimentation. *Journal of health psychology*, 1359105314559862.**

This article describes a study of attitudes to the current system of animal experimentation (for the production of health interventions) among 52 UK healthcare professionals. These healthcare professionals participated in three separate focus groups (of 18, 17 and 17 participants) and were invited to respond to the question 'what is your opinion about the current system of animal testing?' The study focused specifically on their views of the current system (rather than their views of animal testing in general). The healthcare professionals were critical of the current system, particularly with regard to regulation, secrecy, validity, unnecessary suffering and welfare.

**France, B., & Birdsall, S. (2015). Secondary students' attitudes to animal research: examining the potential of a resource to communicate the scientist's perspective. *European Journal of Science and Mathematics Education*, 3(3), 233-249.**

A DVD resource that provided a scientist's perspective on the use of animals in research and teaching was evaluated with a questionnaire that asked students' views pre and post their access to the resource. Thirty-nine secondary students (Y10-Y13) took part in three different teaching programmes that provided information about animal research and allowed them to explore the issues. Students' opinions about the use of animals for research and teaching were measured by matched pre and post questionnaires and open responses they made to justify their positions. The findings showed that students' views on animal research are strongly held and they express their views with emotion. The resource helped students to realise the complexity of the issue and provided them with knowledge to write more nuanced justifications. This resource was focused on providing students with cognitive input and this evaluation indicated that equal attention should be provided to the affect component of attitude formation.

**Franco, N. H., & Olsson, I. A. S. (2014). Scientists and the 3Rs: attitudes to animal use in biomedical research and the effect of mandatory training in laboratory animal science. *Laboratory Animals*, 48(1), 50-60.**

The 3Rs principle of replacement, reduction, and refinement has increasingly been endorsed by legislators and regulatory bodies as the best approach to tackle the ethical dilemma presented by animal experimentation in which the potential benefits for humans stand against the costs borne by the animals. Even when animal use is tightly regulated and supervised, the individual researcher's responsibility is still decisive in the implementation of the 3Rs. Training in laboratory animal science (LAS) aims to raise researchers' awareness and increase their knowledge, but its effect on scientists' attitudes and practice has not so far been systematically assessed. Participants ( $n=206$ ) in eight LAS courses (following the Federation of European Laboratory Animal Science Associations category C recommendations) in Portugal were surveyed in a self-administered questionnaire during the course. Questions were related mainly to the 3Rs and their application, attitudes to animal use and the ethical review of animal experiments. One year later, all the respondents were asked to answer a similar questionnaire (57% response rate) with added self-evaluation questions on the impact of training. Our results suggest that the course is effective in promoting awareness and increasing knowledge of the 3Rs, particularly with regard to refinement. However, participation in the course did not change perceptions on the current and future needs for animal use in research.

**Lairmore, M. D., & Ilkiw, J. (2015). Animals used in research and education, 1966-2016: Evolving attitudes, policies, and relationships. *Journal of Veterinary Medical Education*, 42(5), 425-440.**

Since the inception of the Association of American Veterinary Medical Colleges (AAVMC), the use of animals in research and education has been a central element of the programs of member institutions. As veterinary education and research programs have evolved over the past 50 years, so too have societal views and regulatory policies. AAVMC member institutions have continually responded to these events by exchanging best practices in training their students in the framework of comparative medicine and the needs of society. Animals provide students and faculty with the tools to learn the fundamental knowledge and skills of veterinary medicine and scientific discovery. The study of animal models has contributed extensively to medicine, veterinary medicine, and basic sciences as these disciplines seek to understand life processes. Changing societal views over the past 50 years have provided active examination and continued refinement of the use of animals in veterinary medical education and research. The future use of animals to educate and train veterinarians will likely continue to evolve as technological advances are applied to experimental design and educational systems. Natural animal models of both human and animal health will undoubtedly continue to serve a significant role in the education of veterinarians and in the development of new treatments of animal and human disease. As it looks to the future, the AAVMC as an organization will need to continue to support and promote best practices in the humane care and appropriate use of animals in both education and research.

**Masterton, M., Renberg, T., & Källemark Sporrang, S. (2014). Patients' attitudes towards animal testing: 'To conduct research on animals is, I suppose, a necessary evil'. *Biosocieties*, 9(1), 24-41.**

A strong argument for the practice of animal testing in medical research is the potential benefit to patients in getting improved pain relief, minimising morbidity and mortality. However, patients' opinions on the ethics of animal testing are seldom sought, despite their role as principal stakeholders. This study compared the attitudes of patients and researchers on animal testing. Focus-group interviews were held with patients suffering from chronic inflammatory diseases, resulting in a questionnaire that was distributed January-May 2011. The questionnaire was posted to patient members of the Swedish Rheumatism Association ( $n=1195$ ) and to all scientific experts serving on Ethical Review Boards in Sweden ( $n=364$ ), with response rates of 65 per cent and 60 per cent, respectively. Results show that patients hold a positive stance towards animal testing, but with many caveats, and the level of support is comparable to those held by the general public found in national surveys. A clear majority of researchers were positive towards animal testing, and large statistical differences between patients and researchers were found regarding their attitudes towards testing animals commonly held as pets ( $P<0.001$ ). Women were more critical than men regarding which species are used for what purposes ( $P<0.001$ ). Researchers need to be aware that their more positive attitude towards animal testing is not shared to an equal degree with patients, who are the intended end-users and beneficiaries of medical research. The moral basis for using animals in research needs to be further discussed by all stakeholders.

**Metzger, M. M. (2014). Attitudes toward animal research: Revisiting. *Journal of Undergraduate Neuroscience Education, 12*(2), A154.**

Gallup and Beckstead's (1988) commentary in the American Psychologist reported an assessment of college student's attitudes toward animal research. Among many findings, one main conclusion reached by the authors was that the participants in their study were generally concerned about the welfare of animals used in research, but that they also appreciated and valued the need for animal experimentation. Given the declining support for animal research from the general population over the past few decades, the present study administered the same questionnaire to a contemporary sample of university students to determine whether any patterns would emerge in a current sample's responses to these items. While the results suggest that respondents still demonstrate significant concern for animal welfare, importantly, the present sample of participants showed significantly less agreement with items that stressed the importance and value of conducting animal research. Educating college students about the importance of animal research and its valuable contributions to science as an enduring component of instructional practice in neuroscience and other courses may be an important step toward reversing these trends.

**Metzger, M. M. (2015). Knowledge of the Animal Welfare Act and animal welfare regulations influences attitudes toward animal research. *Journal of the American Association for Laboratory Animal Science: JAALAS, 54*(1), 70.**

Recent public-opinion polls indicate that Americans have shown a decline in support for animal experimentation, and several reports suggest a relationship between people's knowledge of animal welfare regulations and their attitudes toward animal research. Therefore, this study was designed to assess respondent's knowledge of several provisions in the Animal Welfare Act (AWA) and Animal Welfare Regulations (AWR), and determine whether exposure to elements of this legislation would influence an individual's attitudes toward the use of animals in research. A survey was used to assess knowledge of animal research regulations and attitudes toward animal research from a sample of individuals recruited through Amazon's Mechanical Turk crowdsourcing marketplace. Results from study 1 confirmed the hypothesis that respondents had little knowledge of various federal regulations that govern animal research activities. Data from study 2 revealed that exposure to elements of the AWA and AWR influenced participants' attitudes toward the use of animals in research. These results suggest that providing information to the general public about the AWA and AWR that protect laboratory animals from abuse and neglect may help alleviate concerns about using animals in research settings.

**Mohamed Azahar, F. A., Mohd Fakri, N. M. R., & Mat Pa, M. N. (2014). Associations between gender, year of study and empathy level with attitudes towards animal welfare among undergraduate Doctor of Veterinary Medicine students in Universiti Putra Malaysia. *Education in Medicine Journal, 6*(4).**

Attitudes towards animal welfare are important in influencing how animals are treated. Studies of attitudes towards animal welfare in veterinary students are scarce. It is hope that the findings will enhance a diverse research in the future in order to explore variety of factors in relation to animal welfare since such study is currently limited. Objective: The study is to determine the associations of gender, year of study and empathy level of undergraduate DVM students in UPM into their attitude towards animal welfare. Method: Questionnaires were given to 440 Doctor of Veterinary Medicine undergraduate students in UPM to study the associations between gender, year of study and empathy level with attitudes towards animal welfare. Data were collected from respondents through two sets of self-guided questionnaires. Interpersonal Reactivity Index (IRI) which assessed empathy level where only two sub-scales from the IRI were used. Empathic Concern (EC) and Perspective Taking (PT). Animal Attitude Scales (AAS) were used to assess attitudes towards animal welfare. Data collected were analysed using Statistical Package for Social Science (SPSS) version 20. Result: 367 (83.4%) out of 440 students participated in this study. Anti-animal welfare attitude (74.9%) was the highest compared to the pro-animal welfare attitude (25.1%). Analysis showed a significant difference ( $p < 0.005$ ) between year of study and attitudes towards animal welfare ( $p = 0.001$ ), however, there were no significant difference ( $p > 0.005$ ) between gender and attitudes towards animal welfare ( $p = 0.057$ ) as well as between empathy level and attitudes towards animal welfare for empathic concern sub-scale ( $p = 0.194$ ) and perspective taking sub-scale ( $p = 0.320$ ). Conclusion: Majority of students were categorized as anti-animal welfare and the attitudes were significantly different among years of study. Female and male students have nonsignificant differences in their

attitudes towards animal welfare. Students with good and poor empathy level also have no significant difference in their attitudes towards animal welfare.

**Ormandy, E. H., & Schuppli, C. A. (2014). Public attitudes toward animal research: a review. *Animals*, 4(3), 391-408.**

The exploration of public attitudes toward animal research is important given recent developments in animal research (e.g., increasing creation and use of genetically modified animals, and plans for progress in areas such as personalized medicine), and the shifting relationship between science and society (i.e., a move toward the democratization of science). As such, public engagement on issues related to animal research, including exploration of public attitudes, provides a means of achieving socially acceptable scientific practice and oversight through an understanding of societal values and concerns. Numerous studies have been conducted to explore public attitudes toward animal use, and more specifically the use of animals in research. This paper reviews relevant literature using three categories of influential factors: personal and cultural characteristics, animal characteristics, and research characteristics. A critique is given of survey style methods used to collect data on public attitudes, and recommendations are given on how best to address current gaps in public attitudes literature.

**Pervin, S., Ranchhod, A., & Wilman, M. (2014). Trends in cosmetics purchase: Ethical perceptions of consumers in different cultures. A cross country comparative study between South Asian and Western consumers. *Journal of Customer Behaviour*, 13(1), 57-72.**

The focus of this paper is to investigate the differences between the decision making processes that take place in a cross-cultural environment, with particular interest in exploring ethical concerns in cosmetics retailing. Research shows that the cultural differences between the East and West vary distinctly. This study has quantitatively tested the influence of ethical and animal welfare issues, assessing consumer buying behaviour processes for cosmetics, in the context of Europe (UK) and Asia (Bangladesh). The results show interesting findings; it has become evident that ethical purchasing attitudes and concern for animal welfare seem to be predominant in both countries.

**Pervin, S., & Ranchhod, A. (2014). Ethical concerns in cosmetics retailing: a comparative study of consumer attitudes towards cosmetics purchase between Europe and Asia with particular reference to Bangladesh and the UK. *World Review of Entrepreneurship, Management and Sustainable Development* 5, 10(2-3), 230-246.**

The purpose of this paper is to explore the ethical concerns in cosmetics retailing and its implications on comparative consumers' purchase decisions of cosmetics in the UK and Bangladesh. Consumer response to ethical and green issues in the recent years appears to vary considerably between developed and developing economies. In particular, this paper also intends to identify how and to what extent, in a developing country like Bangladesh, consumers' purchase decisions are influenced by the concept of ethical, green and animal welfare issues. Results show that ethical purchasing attitudes have some similarities between the UK and Bangladesh. However, there could be differing reasons for the adoption of ethical stances. Young consumers, however, have similar attitudes in both countries.

**Popa, V. I., Lascar, I., Valcu, M., Sebe, I. T., Caraban, B., & Margina, A. C. (2015). Bioethics in animal experimentation. *ARS Medica Tomitana*, 21(4), 169-177.**

Animal experiments are used on a large scale worldwide in order to develop or to refine new medicines, medicinal products or surgical procedures. It is morally wrong to cause animals to suffer, this is why animal experimentation causes serious moral problems. We must realize that we have moral and legal obligations when dealing with animals in our care, and this should become our high priority before any experiment. We have to take responsibility for the life of the animals and we have to act honorably regarding this issue because we have been given a trust by society in general which is not to be taken lightly. There is an ongoing societal debate about ethical issues of animal use in science. This paper is addressed to current and future researchers and is an appeal for them to (re)consider their personal views concerning the issue under scrutiny and their responsibility in ensuring that results would make the sacrifice worthwhile.

## BOOK CHAPTERS

**Grimm, H. (2014). Ethics in laboratory animal science. In *Comparative Medicine* (pp. 281-300). Springer Vienna.**

In the following article, I discuss some core aspects of moral responsibility in the field of laboratory animal science. After a short introduction, I briefly deal with the entanglement of normative and empirical knowledge in animal testing. The argument will be put forward that both kinds of knowledge are needed for a complete account of animal ethics and taking on moral responsibility in the field. This section is followed by an overview of the central theories and approaches in ethics and animal ethics and their relevance for the debate on animal experiments. In the closing chapter, I address some methods and problems of weighing human against animal interests in a plausible and ethically informed way.

**Sandøe, P., Franco, N. H., Lund, T. B., Weary, D. M., & Olsson, I. A. S. (2015). Harms to animals—can we agree on how best to limit them?. *Methods to carry out the harm-benefit analysis according to the EU Directive 2010/6/EU*, 28-32.**

The harm benefit framework seems to have wide public support as a basis for making decisions about the use of animals in biomedical research. The present paper, which is the first of two papers that deal with the conceptual underpinning of the harm-benefit analysis, focuses on the assessment of harms to animals. The goals of the 3Rs have gained wide acceptance over the 50 years since they were first proposed. However, there are controversial ethical issues hidden within the 3Rs principle. Five such hidden value conflicts are highlighted and it is argued that these conflicts challenge the idea that adherence to the 3Rs is bound to generate a wide public consensus. It is argued that underlying value differences will lead to conflicting interpretations of how to apply the 3Rs and thereby decide when and how to limit the harm imposed on animals.

**Van Norman, G. A. (2015). Ethics and evidence regarding animal subjects research: Splitting hares—or swallowing camels?. In *Ethical Issues in Anesthesiology and Surgery* (pp. 215-229). Springer International Publishing.**

Nonhuman animals are the subject of medical research, industrial testing and educational projects in human efforts. Modern biological research has produced information that challenges assumptions that animals lack characteristics that make them deserving of moral standing, and the success of modern animal subjects research in medicine is commonly overstated. Public opinion in favor of animal research is conditional and waning. This chapter will discuss the ethical principles surrounding use of nonhuman animal subjects, research that challenges basic assumptions about the utility of nonhuman animal subjects research, and ethical obligations of researchers, editors and reviewers with regard to nonhuman animal subjects research.

## BOOKS

**Bayne, K. A. L., Turner, P. V., & American College of Laboratory Animal Medicine. (2014). *Laboratory animal welfare*. London: Academic Press. ISBN: 9780123851031.**

Provides a comprehensive look into the science of animal welfare within laboratory research. This book examines the impact of experiment design and environment on animal welfare, as well as emergency situations and euthanasia practices.

**Hubrecht, R. (2014). *The welfare of animals used in research: Practice and ethics*. ISBN: 9781119967071.**

A complete and balanced overview of the issues surrounding the use of animals in scientific research, with a focus on animal welfare implications and ethics of animals in research.

**Irving, D. (2014). *The cruel science: Animal research from Aristotle to the 21st century*. ISBN: 9781500436063.**

The Cruel Science tells the story of animal research from ancient times to the present. It discusses Aristotle influence in its evolution and the major role Christianity has unwittingly played in creating the attitudes upon which animal research depends. The book exposes the probable responsibility of animal research for the AIDS epidemic and many forms of cancer and how the industry has invented a perpetual money producing machine that bilks the public out of billions of dollars every year for needless, senseless experiments that are often exceptionally cruel.

**Nocella, A. J. (2014). *Defining critical animal studies: An intersectional social justice approach for liberation*. ISBN: 9781433121371.**

Helps you define the philosophical and practical parameters of critical animal studies (CAS). With apolitical animal studies and exploitative animal research dominating higher education, this book offers a timely counter-narrative that demands the liberation of all oppressed beings and the environment.