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The Moral Reasoning of Believers in Animal Rights

ABSTRACT

This study evaluated the moral reasoning of 54 individuals who believed in the concept of nonhuman animal rights using a research tool based on Kohlberg's (1986) cognitive theory of moral development. Results for these primarily college and postgraduate-educated individuals suggest that people who believe in animal rights have equivalent or higher-level moral reasoning when compared to adult, education-matched, historical control groups.

Moral reasoning is defined as "the reflective inquiry about moral values regardless of what one's own particular set of moral values happens to be" (Self, 1995, p. 1550). Although Freud, Piaget, and others have contributed significantly to the psychological study of human moral development and behavior, the most influential figure in the field undoubtedly is Kohlberg. Kohlberg, on whose research and theories the Defining Issues Test (DIT) is based, is cited more than 100 times in Kurtines and Gerwitz (1991). In the PsycLit database under the descriptor, "moral development," more than 60% of the references refer to Kohlberg's work. Kohlberg's theory provides for three levels of moral development. These are referred to as preconventional morality, conventional morality, and postconventional or principled morality. Each

level is further divided into two distinct stages. Table 1 presents a simplified summary of Kohlberg’s theory.

Table 1. Summary of Kohlberg’s Theory

Level of Moral Development	Stage	Stage Description
Preconventional	1	Authority-punishment stage. Moral choices based on doing what authority figures say.
	2	Egoist exchange stage. Moral choices based on one’s own needs but with sense of fairness between parties.
Conventional	3	Interpersonal relations and expectations stage. What is “right” is what is considered “right” by those important and close to you.
	4	Concern for societal maintenance, welfare of whole groups and fulfilling duties to society
Postconventional	5	Emphasis on individual rights and liberty as well as a social contract for maximizing societal good.
	6	Commitment to universal ethical principles of justice, equality, respect and autonomy

According to Kohlberg and proponents of his work (Self, Shrader, Baldwin, Root, Wolinsky, & Shadduck, 1991), humans advance through these stages (from childhood to adulthood) in an ordered and systematic fashion, al-

though the rate and final stage at which people may stop can vary considerably.

The DIT incorporates Kohlberg's stages of moral development into a standardized, relatively easy to administer, paper and pencil test of moral reasoning. As a multiple choice, computer scored test, the DIT has the advantage of avoiding subjective experimenter scoring bias. The DIT has been used and validated in hundreds of studies across a wide range of social, economic, and ethnic groups (Self, 1991; Rest, 1979) but, to the author's knowledge, has never been used to assess the moral reasoning of people who profess to believe in nonhuman animal rights.

Occasionally, animal rights activists and those who believe in animal rights are characterized as lacking sufficient concern for humans. These individuals are suspected of having stunted, inconsistent, or irregular moral orientation with a skewed value system that leaves them incapable of acting in what most would consider an ethical manner (Locke, 1989; Herrick, 1990; Yanoff, 1997; Paul, 1995). In Paul's study examining the views animal researchers and animal rights activists had about each other, 41% of animal researchers used the terms "gullible" and "immature" when describing their impressions of a typical animal rights activist. Eighteen percent of these researchers felt that a "dislike or hatred of mankind" was at the root of animal rights activism. Identifying the type and level of moral reasoning used by believers in animal rights might facilitate more informed and constructive dialogue within the larger animal rights debate in society.

Method

Subjects were recruited via an animal rights newsletter (AVAR, 2000) by asking for volunteers "who believed in the philosophical concept of animal rights." Although many more than 75 respondents were identified, only the first 75 were recruited for the study. This decision was based on the need for a certain level of statistical power as well as financial considerations associated with administering the DIT. A copy of the survey tool with instructions and a self-addressed return envelope were mailed to each study volunteer. In addition, subjects were asked to note their highest level of education for

additional statistical analysis. Level of education was noted for each study participant using categories that closely matched the norm groups that were to be used for statistical comparisons. After 1 month, and then again after 2 months, subjects who had not yet returned their responses were contacted and reminded to return their tests.

The DIT consists of six short stories followed by a series of multiple-choice questions. The stories themselves do not pertain directly to animals but rather create scenarios whereby the individual taking the test is presented with a moral dilemma in which a particular course of action was taken. They are then asked to choose what *they* would have done in the dilemma from among 3 courses of action; rate the importance of 12 statements describing possible considerations in resolving the moral dilemma; and, finally, rank the 4 most important statements. The answers to these dilemmas represent various stages of moral reasoning based on Kohlberg's theory. Subsequently, these answers are used to identify the type and level of moral reasoning being used by the individual. The entire test takes between 20-40 minutes to complete.

The norm group used for comparison was a compilation of data from numerous studies that had been combined by the University of Minnesota Center for the Study of Ethical Development. This group consisted of more than 3500 individuals (Guide for using the DIT, 1993). The college group in this study had completed their undergraduate education, whereas the graduate group in this population was made up of students currently enrolled in graduate school who had not yet received their degrees.

Statistical analysis was performed by the University of Minnesota's Center for the Study of Ethical Development using a computerized statistics program (SPSS®). The scoring for this test is completely objective as all scoring is via a computerized program. Additional statistical analyses (unpaired *t*-tests comparing study group to norm group) were performed by the author using an internet web site statistics program (GraphPad.com).

The most important measure obtained from the DIT test is the P score.² This P value reflects the subject's level of moral reasoning. Each subject is given a P score, which is the sum of their scores from stages 5 and 6, converted to a percentage (See Table 1). P value means and standard deviations were calculated for the entire group, and an independent *t*-test was used to compare

subdivided test groups to the norm group. Internal consistency checks incorporated into the statistical analysis are used to identify individuals who are not following directions, appear to be giving contradictory answers to questions, leaving too many questions unanswered or who appear to be randomly marking answers. Statistical significance was set at $p \leq 0.05$.

Results

Of the 75 surveys mailed out, 61 were returned for an overall response rate of 81%. All respondents were over the age of 18. Of the 14 non-responders, reasons for their not participating in the study included: too much time required to complete test/too busy ($n = 3$), unable to fill out test because of concerns regarding perceived ambiguity in the questions ($n = 2$), lost test after receiving it ($n = 2$), personal illness ($n = 1$), and anger that none of the questions specifically dealt with animal related issues ($n = 1$). Multiple attempts to reach the remaining 5 non-responders were unsuccessful.

Of the 61 returned tests, 7 (11%) were purged from statistical evaluation because their responses failed internal consistency checks. Of the 54 subjects used for statistical evaluation, 46 returned the level of education form. For these 46 subjects, level of education was noted as high school ($n = 4$), college ($n = 11$) and post-graduate ($n = 31$). Not all the subjects in the college and graduate groups had earned their degrees. Forty-three (80%) of the 54 subjects were women and 11(20%) were men.

The mean P value for the 54 subjects who passed all internal validity checks was 52.50 ± 10.45 . Dividing this group by level of education resulted in a mean P value for the post-graduate group of 54 ± 9.5 and a P value for the college group of 51.0 ± 9.6 . Subjects who did not complete the level of education form were not included in these secondary calculations. Mean P value between the college and graduate groups was not significantly different ($p = 0.38$). Mean P score between men and women was also not significantly different ($p = 0.40$). The small number of subjects in the high school group precluded useful statistical comparisons. See Table 2 for comparisons between the study group and norm group.

The P score for the college educated study participants was significantly higher than the norm group ($p = 0.03$). The P value for post-graduate edu-

cated study participants was not significantly different when compared to the norm group ($p = 0.74$). The P score for the entire study group was significantly higher than the adult comparison norm group ($p < 0.001$).

Table 2. P values for Study Group and Norm Comparison Group

	Study Group	Norm Group
College	51+/-9.6 ($n = 11$)	42.3+/-13.2 ($n = 2,479$)
Graduate	54+/-9.5 ($n = 31$)	53.3+/-10.9 ($n = 183$)
All adults	52.50+/-10.45 ($n = 46$)	40.0+/-16.7 ($n = 3,811$)

All results listed as P score +/- standard deviation

Discussion

The response rate of 81% for a mail return study such as this is relatively high but not unexpected, given that participants were asked to contact the author before being enrolled in the study. The possibility of non-responder bias cannot be ruled out for the remaining 19% of subjects. However, given the reasons for their non-participation, the inability of subjects to know the relationship between their answers and their ultimate moral reasoning score—and the statistical significance of the differences noted above—it is unlikely that these non-responders would have dramatically affected the results or conclusions of the study. The loss of 11% of the respondents in this study due to invalidating from the internal consistency checks is within the expected 5-15% that DIT studies usually incur (Guide for using the DIT, 1993).

Although the DIT is not the only instrument for assessing and quantifying moral reasoning, it is one of the most widely used research tools for this purpose with more than 400 published papers and books utilizing the DIT (Rest, Narvaez, Bebeau, & Thoma, 1999). The DIT was chosen because of its ability to be administered via the mail, its quantitative data generation, its relatively limited time commitment to complete, its objective scoring methodology and the extensive historical database of comparison groups.

Although the norm group used for comparison in this study is from research, some of which is over 10 years old, the DIT appears to have internal reliability over time as well as with test-retest research on the same subjects (Rest

et al.). The DIT and most other tests of moral judgment are designed to elucidate the reasoning process people use to arrive at what they believe is the moral thing to do in a moral dilemma. The DIT helps us understand *why* certain people believe particular courses of action are right and wrong. Forsyth and Berger (1982) use the term “ethical ideology” to describe the assumptions individuals make about how ethical conflicts should be resolved. Kohlberg (1986), other cognitive psychologists, and proponents of the DIT believe that moral appraisals can be objectively identified as right or wrong.

For adults, level of education is considered the most important factor in determining moral reasoning, accounting for 30-50% of the variance of DIT scores between individuals (Guide for using the DIT, 1993; Rest et al. 1999). Prior demographic studies examining the relationship between level of education and support for animal rights have provided conflicting results. Rowan, Lowe, & Weer (1995) found that people involved in the animal rights movement were more likely to have college and graduate degrees than the public in general (Rowan et al., 1995). Peek, using the 1993 General Social Survey (a national probability survey of English speaking adults in the United States) found an inverse relationship between education and belief in animal rights (Peek, Dietz, & Dunham, 1997).

The Participants

The relationship between education and animal rights is clearly relevant for this study, as the participants were primarily college and post-graduate educated. Of the subjects who returned the level of education form, 78% had at least some college education. This figure is very similar to the 79% figure Jamison and Lunch (1992) found when surveying participants at a 1990 animal rights rally. Although the P values for the college groups were significantly different, the magnitude of this difference was likely blunted by the fact that the norm group included only college graduates, whereas the study participants included college graduates as well as some who may not have earned their college degrees (i.e. the norm group may have had somewhat more education than the study group). This study does not answer whether lesser-educated believers in animal rights also would score higher than their education matched norm groups.

The predominance of women participants in this study (73%) is also consistent with prior demographic research, which found the majority of those involved in the animal rights movement to be women (Jamison & Lunch, 1992; Rowan et al., 1995). One of the criticisms of Kohlberg's approach to assessing moral reasoning is that it does not acknowledge the potential differences between the moral reasoning between men and women. Gilligan (1982) has proposed an alternate theory that treats care as the "moral ideal." Gilligan's theory was bolstered by finding gender differences in moral reasoning skills between men and women. The gender-based criticism of Kohlberg's work and the DIT was examined by Rest (1979) and Thoma (1986). The former evaluated "22 studies assessing gender differences . . . and only two had a significant difference in P score between males and females . . . In both of these studies, females had higher scores." The latter used a meta-analysis of 56 DIT studies involving more than 6000 subjects and found that gender differences accounted for 0.2% of the variance of DIT scores. The lack of significant difference between the DIT scores of men and women in this study is consistent with the lack of gender influence inherent in the DIT.

By drawing the study participants from an organization purported to place a high premium on interest and concern for animals, one must question whether this interest and concern might confound conclusions regarding the moral reasoning of believers in animal rights. By administering the DIT to fourth year veterinary students (just prior to graduation), Self, Olivarez, Baldwin, and Shadduck (1996) provide useful historical comparison data on a population that presumably also places a premium on concern and compassion for animals but that does not necessarily believe in animal rights.³ These students had an equivalent or higher level of education when compared to the participants in the current study group. The mean P score for these fourth year veterinary students was significantly lower than the P score of the participants in the current study. This suggests that concern and compassion for animals in and of itself does not necessarily engender higher level moral reasoning.

The DIT and Other Approaches

The DIT is not without its limitations and criticisms. Where Kohlberg and noted philosophers such as Rawls (1971) identify justice as the pinnacle of

moral reasoning, even Kohlberg (1986) himself acknowledged that there were other approaches to studying moral development, stating “the moral domain is large and varied, and no one approach to its conceptualization and measurement will exhaust or explain the variance in it” (p. 500). The DIT is simply one instrument for assessing moral development. Some consider Kohlbergian stages of moral development too abstract and lacking in their ability to distinguish abstract principles of moral reasoning from day-to-day use of moral principles and actions (Strike, 1982). Others criticize the DIT and Kohlberg for ignoring possible cultural influences on moral reasoning and development (Shweder, Mahapatra, & Miller, 1990). Moon (1985) summarized 20 cross-cultural studies that had utilized (translated and modified versions of) the DIT and found that once again, education and (the linked variable) age were the most important determinants of DIT score. Both Western and Eastern cultures demonstrated a shift from conventional to post-conventional, and this occurred in a diverse group of countries studied. Others have taken issue with those who would take justice as a moral ideal. Recently, some psychologists have promoted theories that de-emphasize rule-based theories of moral development in favor of what has been referred to as “instance based learning,” described by Estes (1993) as follows:

Rather than generating abstract rules at an early stage of processing and retaining these for future use, the system simply retains a large array of information in a form that makes it accessible to computations when the test situations arise.

Other recently proposed theories of moral development emphasize social conformity or empathy (Darley, 1993; Shweder & Haidt, 1993). Another important criticism that is levied at many measures of moral reasoning is whether more advanced moral reasoning will result in more moral *behavior*. Although this criticism may have intuitive validity, one would be hard pressed to justify such “feigned morality” within any type of coherent ethical theory. In fact, numerous studies using the DIT have made a positive correlation between higher P scores and improved job performance and more “prosocial” behavior (Rest & Narvaez, 1994; Sheehan, Husted, Candee, Cook, & Bergen, 1980). One legitimate criticism of this study may be that only limited demographic data was obtained from study participants. Although

gender and level of education was asked of study participants, other demographic data such as age, political associations, religion, and household income was not obtained. This decision was based on the author's desire to minimize the amount of time required of participants to complete the study tool and to maximize the return rate. Although education appears to be the most important determinant of DIT results based on prior research, it theoretically is possible that additional demographic data and a multivariate analysis might have affected these results. As this must be considered a preliminary study, future studies should consider more comprehensive demographic data.

Terms and Definitions

Although the term "believing in the philosophical concept of animal rights" was used to recruit subjects for this study, a definition of "animal rights" was not provided to study participants. A universal definition of "animal rights" does not, to my knowledge, exist. This definition was specifically chosen to distinguish those individuals who believed in, and understood, animal rights ideology from those who might more likely, knowingly or unknowingly, classify themselves as animal "welfarists."

Moral reasoning, as defined previously, is "the reflective inquiry about moral values regardless of what one's own particular set of moral values happens to be" (Self, Pierce, & Shaddock, 1995, p. 1550). Such a definition clearly speaks to personal philosophy; as such, the use of the phrase "philosophical concept of animal rights" was used to recruit subjects. Regardless of the phrasing used to recruit subjects, it would be difficult to determine what, if any role, this had toward possible selection bias. Nonetheless, it may not be surprising that individuals who believe in "animal rights" would do well on a justice-based moral reasoning test. Believers in animal rights generally are thought to place a premium on individual rights and commitment to universal ethical principles. Believers in animal rights often favor the consistent administration of de-ontological ethical principles in lieu of utilitarian considerations (Regan, 1983).

This contrasts with the utilitarian ideology noted by Kellert and Westervelt (1983) as the dominant attitude toward animal use in this country. Even the more strict, and often misunderstood, utilitarianism of Singer (1975)—con-

sidered one of the founders of the animal rights movement—asks followers to take an equality-based approach when directly comparing animal life and sentience with that of humans. Justice and equality, in the view of many believers in animal rights, are principles that should be applied without regard to the species under consideration.

Using the term, “. . . believing in the philosophical concept of animal rights” to recruit subjects may have had the unintended, but ultimately advantageous result of discouraging animal activists who in fact subscribed to utilitarianism as opposed to a “rights based” philosophy regarding animals and morality. A study involving the ethical ideology of animal rights activists found them more likely to hold absolutist moral orientations which entail “a belief in universal moral principles and that adherence to such principles will lead to positive consequences” (Galvin & Herzog, 1992). This orientation closely parallels what Kohlberg and Westervelt (1983) describe as post-conventional morality. Jamison and Lunch (1992) note that the “intensity [of animal rights activists] suggests motives that reach beyond feelings for animals” (p. 452). Nibert’s (1995) study, which explored the relationship between support for animal rights and opinions on social issues, found “support for the assumption that the way people regard animals is related to the way they regard people” (p. 122). The data of this study would appear to support this conclusion. Believers in animal rights appear capable of utilizing higher-level moral reasoning for ethical dilemmas involving humans as well as animals. Such moral orientations not surprisingly might favor responses that result in higher scoring on the DIT test.

Conclusion

Believers in animal rights are sometimes characterized as having retarded moral orientation and defective moral reasoning skills at the root of their beliefs in animal rights. To the contrary, believers in animal rights appear to demonstrate equivalent or higher-level moral reasoning when compared to adult, education-matched members of the general public. The results of this study do not support the assumption that these individuals reserve their moral concern exclusively for animals. Concern for humans and concern for animals may not be mutually exclusive, as some critics of believers in animal rights have claimed. Further research is necessary to explore the moral

reasoning of believers in animal rights when faced with moral dilemmas that entail conflicting rights between animals and humans.

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Notes

- ¹ Correspondence should be addressed to Gary Block, Ocean State Veterinary Specialists, 3307 S. County Trail, E. Greenwich, RI 02818. E-mail: GBylc@AOL.com
- ² The reader is cautioned to distinguish between the upper case P, which is a measure of moral reasoning and the lower case *p* commonly used to represent probability in statistical calculations.
- ³ Although an exact figure is unavailable, it is unlikely that any more than 10% of these students were AVAR members based on the percentage of veterinary students who join this organization. (T. Barnato, 2000, personal communication).

References

- AVAR. (Winter 2000). *Directions*.
- Darley, J. M. (1993). Research on Morality. Possible approaches, actual approaches. *Psychological Science*, 4 (6), 353-357.
- Estes, W. K. (1993). Concepts, categories and psychological science. *Psychological Science*, 4, 143-153.
- Forsyth, D. & Berger, R. (1982). The effect of ethical ideology on maoral behavior. *Journal of Social Psychology*, 117, 53-56.
- Galvin, S. L., & Herzog, H. A., Jr. (1992). Ethical ideology, animal rights activism, and attitudes toward the treatment of animals. *Ethics and Behavior*, 2, 141-149.
- Gilligan, C. (1982). In a different voice: Women's conception of the self and morality. *Harvard Educational Review*, 47, 481-517.
- Guide for Using the Defining Issues Test*. (1993). Version 1.3. Minneapolis: Center for the Study of Ethical Development, University of Minnesota.
- Herrick, J. B. (1990). An open letter to animal rights activists: Let's get our priorities in perspective. *Journal of the American Veterinary Medical Association*, 197, 712-713.
- Jamison, W. V., & Lunch, W. M. (1992, Autumn). Rights of animals, perceptions of science, and political activism: Profile of American animal rights activists. *Science, Technology, & Human Values*, 438-458.

- Kellert, S. R., & Westervelt, M. O. (1983). Historical trends in American animal use and perception. *International Journal for the Study of Animal Problems*, 4 (2), 133-146.
- Kohlberg, L. (1986). A current statement on some theoretical issues. In Modgil and Modgil (Eds.), *Lawrence Kohlberg: Consensus and controversy*. Philadelphia: Farmer.
- Kurtines, W. M., & Gerwitz J. L. (1991). *Handbook of moral behavior and development*. Lawrence Erlbaum Associates Inc.: Mahwah, NJ.
- Locke, E. A. (1989, July/August). Animal Rights Advocates: Are they threatening human rights? *Lab Animal*, 15. Letter to the Editor.
- Moon, Y. L. (1982). A review of cross-cultural studies on moral judgment development using the Defining Issues Test. Paper presented at AERA annual meeting, Chicago.
- Nibert, D. A. (1995). Animal rights and human social issues. *Society and Animals*, 2 (2), 115-124.
- Paul, E. S. (1995). Us and them. Scientists' and animal rights campaigners views of the animal experimentation debate. *Society & Animals*, 3, 1-21.
- Peek, C. W., Dietz, B. E. & Dunham, C. C. (1997). Gender, relational role and affinity for animal rights. *Sex Roles*, 37 (11/12), 905-920.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Regan, T. (1983). *The case for animal rights*. University of California Press, Berkeley.
- Rest, J. (1979). *Development in judging moral Issues*. Minneapolis University of Minnesota Press:
- Rest, J., & Narvaez, D. (1994). *Moral development in the professions: Psychology and applied ethics*. New Jersey, Lawrence Erlbaum Associates: Mahwah, NJ.
- Rest, J., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Postconventional moral thinking: A Neo-Kohlbergian approach*. Lawrence Erlbaum Associates: Mahwah, NJ.
- Rowan, A. N., Loew, F., & Weer, J. C. (1995). *The Animal research controversy. Protest, process and public policy*. Tufts University: Boston.
- Self, D. J., Olivarez, M., Baldwin, D. C., & Shadduck, J. A. (1996). Clarifying the relationship of veterinary medical education and moral development. *Journal of the American Veterinary Medical Association*, 209 (12), 2002-2004.
- Self, D. J., Pierce, A. B., & Shadduck, J. A. (1995). Description and evaluation of a course in veterinary ethics. *Journal of the American Veterinary Medical Association*, 207, 1553-1553.

- Self, D. J., Schrader, D. E., Baldwin, D. C., Root, S. K., Wolinsky, F. D., & Shadduck, J. A. (1991). Study of the influence of veterinary medical education on the moral development of veterinary students. *Journal of the American Veterinary Medical Association*, 198 (5), 782-787.
- Sheehan, T. J., Husted, S., Candee, D., Cook, C. D., & Borgen, M. (1980). Moral judgment as a predictor of clinical performance. *Evaluation in the Health Professions*, 3 (4), 393-404.
- Shweder, R. A. & Haidt, J. (1993). The future of moral psychology: Truth, intuition and the pluralist way. *Psychological Science*, 4 (6), 360-365.
- Shweder, R. A., Mahapatra, M., & Miller, J. G. (1990). Culture and moral development. In Stigler, J., Shweder, R. A., & Herdt, G., *Cultural psychology: Essays on comparative human development* (pp. 73-112). New York, Cambridge University Press.
- Singer, P. (1975). *Animal Liberation*. New York, Avon Books.
- Strike, K. A. (1982). *Educational policy and the just society*. Chicago: University of Illinois Press.
- Thoma, S. J. (1986). Estimating gender differences in the comprehension and preference of moral issues. *Developmental Review*, 6, 165-180.
- Yanoff, S. (1997). Who is looking out for the rights of animals? *Journal of the American Veterinary Medical Association*, 210, 1098-1099.