

## SCIENTISTS AND STUDENTS'— ATTITUDE TOWARD ANIMAL RIGHTS

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## ABSTRACT

The study was conducted in Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana to assess the attitude favorableness toward animal rights among scientists and students. A sample of fifty faculty members was drawn randomly by simple lottery method. Similarly, a sample of one hundred and twenty students (one hundred undergraduates and twenty postgraduate) was drawn. The attitude of veterinary students and scientists toward animal rights was assessed. The attitude was measured using Animal rights subscale developed by Wuensch *et al.* (2002). Mean score of respondents indicated neutral to favourable attitude toward animal rights. Age, gender, level of education was found significantly associated with the attitude formation. It is further argued that the respondents' belief about the animal rights stems from the cultural roots given the degree of uniformity. Further, the veterinary education seemingly affects the attitude of respondents.

**Keywords:** Animal right, Attitude, Veterinary education.

Animal rights is the idea in which some, or all, non-human animals are entitled to the possession of their own lives and that their most basic interests such as need to avoid suffering-should be afforded the same consideration as similar interests of human beings. Nowadays, the problems arising from the animal rights have become one of the most debated agenda items in various countries and most of them put into force many legal limitations regarding the animal rights and animals use in research (Zutphen *et al.*, 1993). This is greater in harsh climates than in more benign situations where agricultural crops provide most food and clothing (Phillips *et al.*, 2012). Such differences have been perpetuated through regional cultures, even though trade now makes many animal products available internationally. Despite culture maintaining regional differences in attitudes to animals, in recent decades a growing concern for animal rights has been apparent in some parts of the world. This may derive from increased economic development (EC, 2007), the industrialization of animal farming and experimentation practices, increased relative importance of companion animals compared to farm animals, and/or the extension of a social movement that has, to-date, focused on humans' rights (Fraser *et al.*, 2013).

A better understanding of cultural attitudes towards animals and how they are used by humans can promote understanding and tolerance if there are clear differences between trading nations (Turner and D'Silva, 2006). The purpose of this study was to determine the attitudes, and factors affecting these attitudes, of veterinary student as well as scientists concerning animal rights.

## MATERIALS AND METHODS

The study was conducted at Lala Lajpat Rai University

of Veterinary and Animal Sciences (LUVAS), Hisar. All the animal scientists at LUVAS, Hisar were considered as universe for the sample. A sample of 50 members was drawn randomly by simple lottery method. Similarly, a sample of 120 students; 100 undergraduates (20 from each class) and 20 postgraduate was drawn using simple lottery method after preparing lists of students. Thus, the total number of respondents was 170. The antecedent variables likely to affect students' and scientists' perception about bioethical issues were selected after thorough review of available literature and consultation with the faculty members. These were age, gender, educational qualification, history of pets, belief in animal mind, religiousness, extraversion, conscientiousness, agreeableness, neuroticism and openness. They were operationalized as presented in Table 1.

**Table 1**  
**Operationalisation of independent variables**

Variables	Operationalisation
Gender	Dichotomous
Age	Chronological age of respondents
Experience of pet animals	Schedule will be developed
Belief in animal mind	Scale developed by Hills (1995)
Religiousness	Scale developed by Hernandez (2011)
Level of education	Scale developed in this study
Extraversion	Scale developed by John and Srivastava (1999)
Conscientiousness	
Agreeableness	
Neuroticism	
Openness	

Attitude in this study was conceptualized as the positive or negative disposition of an individual associated with the psychological object of Animal rights. The

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attitude was measured using Animal rights subscale developed by Wuensch *et al.* (2002). The scale contained 28 items. The respondents were categorized in three groups i.e. less favorable (28-65), favorable (66-102) and strongly favorable (103-140) based on the score obtained. The respondent was requested to give responses on five-point continuum scale, i.e. Strongly disagree, disagree, neutral, agree, strongly agree and the scores 1, 2, 3, 4 and 5, were assigned for positive statements and the scores 5, 4, 3, 2 and 1 were assigned for negative statements, respectively. Thus, the minimum and maximum possible obtainable overall scores were 28 and 140, respectively. The total score of each individual on this variable was worked out by adding the scores of individual statements.

## RESULTS AND DISCUSSION

**Background profile of the respondents:** The observed range of age of the respondents was 18-58 years indicating

that respondents of all age groups were represented in the study (Table 2). A majority of the respondents were male with nearly one third being females. This is perhaps because of the fact that the veterinary profession is perceived in the society as masculine. Further, a large percentage of the respondents were having experience of keeping pets. They were having varying degrees of extraversion, conscientiousness, agreeableness, neuroticism, and openness. Further, the respondents were having moderate belief in animal mind (BAM). This BAM is the term used for how we attribute to animals mental capacities such as intellect, the ability to reason, and feelings of emotion (Hills, 1995). Similarly, the respondents were having varying degree of religiousness.

### Attitude of respondents toward animal rights

The minimum score obtained was 52 while the maximum was 120 indicating a high degree of variability

Table 2

Background profile of respondents

Variable	Possible Range	Scientists		Students		Overall	
		Observed Range	Mean± SD	Observed Range	Mean± SD	Observed Range	Mean± SD
Age (years)	-	26-58	40.10±10.62	18-34	22.06±2.32	18-58	27.36±10.22
Gender	0-1	0-1	0.32±0.47	0-1	0.40±0.49	0-1	0.38±0.49
Educational qualification	1-7	6-7	6.80±0.40	1-6	3.50±1.71	1-7	4.76±2.45
History of pets	1-4	1-4	1.72±0.88	1-4	2.34±1.29	1-4	2.16±1.22
Belief in animal mind	4-28	15-28	22.80±3.58	15-28	21.36±3.58	15-28	21.78±3.63
Religiousness	0-111	0-85	52.18±19.26	0-86	47.78±20.92	0-86	49.07±20.49
Extraversion	8-40	19-38	27.38±4.38	19-39	26.84±3.89	19-39	27.00±4.03
Agreeableness	9-45	29-44	35.64±3.72	20-44	32.49±4.47	20-44	33.42±4.49
Conscientiousness	9-45	24-42	34.46±4.45	21-43	31.12±4.21	21-43	32.10±4.53
Neuroticism	8-40	13-33	22.16±4.91	11-38	22.11±4.83	11-38	22.12±4.84
Openness	10-50	28-43	36.12±3.75	27-45	35.27±3.81	27-45	35.52±3.80

(Fig. 1). The average score of all the 170 respondents was  $86.94 \pm 13.54$  (mean  $\pm$  SD). Mean score obtained by students was 88.72 whereas mean score obtained by scientists was 82.06 (Table 3). Further, It can be seen that a large majority of respondents were having favorable attitude toward animal right. Moreover, the difference between the students and scientist score was negligible. This indicates that the scientists and students perceive the idea of animal right in a similar way.

**Effect of respondents' antecedents on attitude towards animal rights:** The age of the respondents was significantly having an impact on the attitude towards animal rights (Table 4). Similar findings were reported by Kellert (1984), who reported that younger respondents

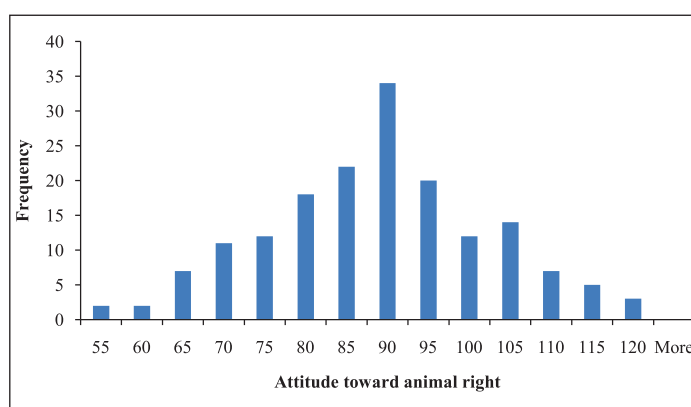


Fig. 1. Histogram depicting frequency distribution of animal right score of respondents

**Table 3**  
**Classification of respondents on the basis of attitude towards animal rights**

S.No.	Animal right score	Students (n=120)		Scientists (n=50)		Total (n=170)	
		Frequency (%)	Mean Score	Frequenc (%)	Mean Score	Frequency (%)	Mean Score
1	Less favorable (28-65)	5 (4.17)	63.00	6 (12.00)	58.67	11 (6.47)	60.64
2	Favorable (66-102)	97 (80.83)	86.87	39 (78.00)	81.62	136 (80.00)	85.36
3	Strongly favorable (103-140)	18 (15.00)	107.50	5 (10.00)	113.60	23 (13.53)	108.83
4	Mean Animal right score		88.72		82.06		86.94

n= number of respondents

were more likely to have pro-animal rights attitudes. Hazel *et al.* (2011) also reported positive and highly significant relationship of age and level of education with attitude toward animal right. However, gender was also significantly associated with attitude toward animal rights (Table 4). Female respondents showed significantly more concern about animal rights and animal cloning. A number of studies support the claim of the present study (Paul and Podberscek, 2000; Hagelin, 2004; Ozen *et al.*, 2004; Serpell, 2005; Heleski *et al.*, 2006; Phillips *et al.*, 2012). The probable reason for significant difference in male and female respondents' attitude may be men and women have somewhat different conceptions of the nature of morality. Gilligan (1997) suggests that for women moral problems arise from conflicting responsibilities, whereas for men such problems result from competing rights. Thus, women who respond to the moral rights query may concentrate on the first word of the pair while men may focus on the last. As a result, an ethic of connection may lead to women's greater willingness to expand the circle of responsibility in the form of granting other creatures moral rights. There was strong association between age of the respondents and the score obtained. Perhaps, the respondents are taking this into consideration from a cultural point of view. Level of education was having significant impact on formation of attitude toward animal right, results indicated that students were having more favorable attitude than scientist and the difference among scores was statistically significant. Similar findings were reported by Paul and Poderscek (2000), who conducted a study on veterinary students at two British universities and concluded that the year of study is significantly related to the perceived sentience of dogs, cats and cows, with students in their later years of study rating them as having lower levels of sentience.

Animal rights is based on the idea that animals, or non -humans, at least the superior mammals, are entitled to receive moral consideration from humans; cannot serve as means to an end; and must not be exploited for the benefit of humans. They can't be used as economic resources.

They deserve our moral consideration and our ethical treatment, and they can't be inflicted pain. Rightists believe that animal use in general must be abolished, that animals have inherent values in themselves, and that people should never use animals for their interests regardless of the benefits obtained, their main goal is precisely the elimination of the property status of animals so they can have their own rights (Jasper and Nelkin, 1992). On the opposite side, the animals are thought as just machines and this view rejects the animals' capacity of suffering. Critics of animal rights argue that animals are unable to enter into a, and thus can't be possessors of rights, a view summed up by the philosopher, who writes that only humans have duties, and therefore only humans have rights. A parallel argument, known as the utilitarian position, is that animals may be used as resources so long as there is no unnecessary suffering; they may have some moral standing, but they are inferior in status to human beings, and insofar as they have interests, those interests may be overridden, though what counts as necessary suffering or a legitimate sacrifice of interests varies considerably. The debate still rages on. But the anticipations that animals be given humane treatment are rising. Veterinary professionals are being increasingly expected to respond accordingly.

Earlier, Ozen *et al.* (2004) examined the attitudes of Veterinary practitioners in Turkey towards animals' right to life. The respect for right to life was valued slightly over neutral. There was considerable level of concern present among veterinary practitioners. Some workers suggest that the favourable attitude of veterinary scientist and students can be explained that this field offers them better knowledge and experience with animals. For example, many believe that current engagement in non-consumptive, affectionate interactions with animals is generally associated with greater concern for their welfare (Hills, 1995; Kellert and Berry, 1980). Contrarily, others argue that involvement in any kind of animal -related activity (including consumptive ones) was associated with

higher knowledge scores, especially if these activities were recreational (e.g. bird-watching, hunting, fishing, etc.) rather than occupational (e.g. farming) (Ericsson and Heberlein, 2003). Accepting the variability in opinions and reports, workers like Kellert and Berry (1980) concluded that the relationship between knowledge of animals, and peoples attitudes and behavior towards them is complex. Perhaps the respondents see animal right to be no different from the values that they hold. This, in part, may be the

probable reason that many of the respondents were having neutral to favorable attitude toward animal right.

The results indicate that the veterinary education contribute in shaping of attitude toward animal right. Moreover, the respondents' opinions do not vary greatly indicating the influence of cultural and traditional values. It requires further research to understand the factors underlying their perception about emerging bioethical issues.

**Table 4**  
**Relationship of dependent and independent variables**

Variable	Category (No. of respondent)	Attitude towards animal right				F value
		Less favorable	Favorable	Strongly favorable	Mean $\pm$ SD	
		(28-65)	(66-102)	(103-140)		
		Mean $\pm$ SD (No. of respondent)	Mean $\pm$ SD (No. of respondent)	Mean $\pm$ SD (No. of respondent)		
Age (years)	Young (upto 30) (132)	63.00 $\pm$ 2.00 (5)	86.13 $\pm$ 8.84 (109)	107.50 $\pm$ 4.19 (18)	88.17 $\pm$ 12.08	4.05*
	Middle (31-45) (22)	54.00 $\pm$ 0.00 (1)	83.33 $\pm$ 10.62 (18)	111.67 $\pm$ 5.51 (3)	85.86 $\pm$ 15.59	
	Old (Above 45) (16)	59.60 $\pm$ 4.51 (5)	80.11 $\pm$ 8.15 (9)	116.50 $\pm$ 4.95 (2)	78.25 $\pm$ 18.86	
Gender	Male (106)	59.89 $\pm$ 4.28 (9)	84.35 $\pm$ 9.54 (85)	107.50 $\pm$ 4.72 (12)	84.90 $\pm$ 13.74	2.625**
	Female (64)	64.00 $\pm$ 0.00 (2)	87.04 $\pm$ 8.24 (51)	110.27 $\pm$ 5.18 (11)	90.31 $\pm$ 12.59	
Educational qualification	B.V.Sc. 1 yr (20)	-	82.75 $\pm$ 6.26 (16)	106.50 $\pm$ 4.73 (4)	87.50 $\pm$ 11.38	2.74*
	B.V.Sc. 2 yr (20)	-	90.47 $\pm$ 6.65 (17)	109 $\pm$ 3.46 (3)	93.25 $\pm$ 9.20	
	B.V.Sc. 3 yr (20)	64.00 $\pm$ 0.00 (1)	89.82 $\pm$ 7.95 (17)	106.50 $\pm$ 4.95 (2)	90.20 $\pm$ 10.90	
	B.V.Sc. 4 yr (20)	62.50 $\pm$ 3.54 (2)	87.00 $\pm$ 10.17 (13)	104.80 $\pm$ 1.48 (5)	89.00 $\pm$ 14.45	
	B.V.Sc. 5 yr (20)	63.00 $\pm$ 1.41 (2)	89.80 $\pm$ 9.53 (15)	111.33 $\pm$ 5.86 (3)	90.35 $\pm$ 14.80	
	M.V.Sc. (30)	-	81.04 $\pm$ 9.04 (27)	109.67 $\pm$ 3.21 (3)	83.90 $\pm$ 12.26	
	Ph.D (40)	58.67 $\pm$ 4.63 (6)	82.39 $\pm$ 8.82 (31)	116.67 $\pm$ 3.51 (3)	81.40 $\pm$ 15.47	
History of pets	No pets (73)	57.80 $\pm$ 4.49 (4)	85.69 $\pm$ 8.83 (59)	108.00 $\pm$ 4.40 (10)	87.16 $\pm$ 13.40	0.14
	In childhood (38)	61.67 $\pm$ 2.08 (3)	83.65 $\pm$ 9.50 (26)	107.33 $\pm$ 4.47 (9)	87.53 $\pm$ 15.02	
	In recent past (18)	-	84.44 $\pm$ 9.71 (16)	118.50 $\pm$ 2.12 (2)	88.22 $\pm$ 14.31	
	At present (41)	64.33 $\pm$ 0.58 (4)	86.49 $\pm$ 9.31 (35)	110.00 $\pm$ 1.41 (2)	85.41 $\pm$ 12.33	
Belief in animal mind	Low (d''20) (64)	62.50 $\pm$ 1.95 (5)	86.85 $\pm$ 9.80 (46)	107.23 $\pm$ 3.75 (13)	89.09 $\pm$ 14.10	1.593
	High (20) (106)	59.00 $\pm$ 4.98 (6)	84.60 $\pm$ 8.74 (90)	110.90 $\pm$ 5.90 (10)	85.63 $\pm$ 13.09	
Religiousness	Low (0-37) (45)	60.40 $\pm$ 4.04 (5)	84.12 $\pm$ 9.45 (32)	109.12 $\pm$ 6.75 (8)	85.93 $\pm$ 15.68	1.63
	Medium (38-74) (109)	60.83 $\pm$ 4.67 (6)	85.36 $\pm$ 8.94 (91)	108.00 $\pm$ 3.79 (12)	86.50 $\pm$ 12.57	
	High (75-111) (16)	-	88.38 $\pm$ 9.79 (13)	111.33 $\pm$ 5.13 (3)	92.69 $\pm$ 12.87	
Extraversion	Low (8-24) (47)	58.33 $\pm$ 3.79 (3)	85.33 $\pm$ 9.68 (39)	107.20 $\pm$ 4.38 (5)	85.94 $\pm$ 13.37	0.599
	High (25-40) (123)	61.50 $\pm$ 4.21 (8)	85.37 $\pm$ 8.97 (97)	109.28 $\pm$ 5.22 (18)	87.32 $\pm$ 13.64	
Agreeableness	Low (9-27) (21)	65.00 $\pm$ 0.00 (1)	87.50 $\pm$ 12.05 (16)	105.00 $\pm$ 2.31 (4)	89.76 $\pm$ 13.82	1.004
	High (28-45) (149)	60.20 $\pm$ 4.13 (10)	85.07 $\pm$ 8.70 (120)	109.63 $\pm$ 5.11 (19)	86.54 $\pm$ 13.50	
Conscientiousness	Low (9-27) (24)	56.50 $\pm$ 6.36 (2)	88.88 $\pm$ 11.08 (17)	109.00 $\pm$ 5.61 (5)	90.37 $\pm$ 16.42	
	High (28-45) (146)	61.56 $\pm$ 3.40 (9)	84.86 $\pm$ 8.77 (119)	108.78 $\pm$ 5.04 (18)	86.37 $\pm$ 12.98	
Neuroticism	Low (8-24) (119)	62.57 $\pm$ 2.15 (7)	85.12 $\pm$ 9.41 (98)	108.57 $\pm$ 5.33 (14)	86.55 $\pm$ 13.02	0.531
	High (25-40) (51)	57.25 $\pm$ 4.99 (4)	85.97 $\pm$ 8.49 (38)	109.22 $\pm$ 4.82 (9)	87.82 $\pm$ 14.78	
Openness	Low (10-30) (18)	61.00 $\pm$ 0.00 (1)	82.07 $\pm$ 9.26 (14)	108.33 $\pm$ 2.31 (3)	85.28 $\pm$ 14.25	0.525
	High (31-50) (152)	60.60 $\pm$ 4.40 (10)	85.74 $\pm$ 9.09 (122)	108.90 $\pm$ 5.36 (20)	87.13 $\pm$ 13.49	

\*\* Significant at 1% level, \* Significant at 5% level

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