

# **Public perceptions of animal pain and animal welfare**

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## **Abstract**

The aim in this paper is to provide a review of current attitudes to animal welfare in general and, more specifically to pain in animals. In general, the Australian community considers animal welfare to be an important issue and this is associated with a willingness to engage in a range of community behaviours. Generally the community believes that animals should not be exposed to unnecessary pain but there is limited information on community beliefs about the experience of pain in animals. Nevertheless, the data indicate that Australian stockpeople generally believe that farm animals do experience pain as do humans. In New Zealand, veterinarians show a relatively high use of peri-operative analgesia in cats and dogs, but there is some disparity between the perception of how painful a procedure is and the consequent use of pain relief. US data show similar patterns. The majority of New Zealanders are neither interested nor concerned about the use of animals in research. It is concluded that there is a need for more research into community attitudes to animal pain to determine both knowledge and specificity of community concerns.

## **Introduction**

Animal welfare is variously defined in terms of the physical and mental state of the animal. Duncan and Fraser (1997), for example, view welfare in terms of the emotional state of the animal. Thus pain would give rise to a negative emotion which, if experienced by the animal, would indicate compromised welfare. Duncan (2004) has argued that animal welfare ultimately concerns animal feelings or emotions. Welfare has also been described as the opportunity for an animal to express its natural behaviour. Thorpe (1965), for example, argued that animals need to perform all the behavioural patterns that are displayed by free-living members of their species and that they suffer if they cannot display all of these behaviours. In general, the various perspectives of animal welfare are captured in the Five Freedoms (UK Farm Animal Welfare Council, 1993). Although Broom (1991) pointed out that animal welfare encompasses a much broader range of issues than pain and suffering, this paper focuses on the particular freedom that is relevant to animal pain, the freedom from pain, injury and disease.

Given that suffering is a key term used to describe poor welfare, it is useful to consider it in a little detail because of its relevance to welfare assessment and, therefore, to judgments about animal pain. Suffering is a subjective term that relies heavily on anthropomorphic attribution based on observations of behaviour on the one hand and awareness of concomitant injury or some other chronic aversive state on the other. It is inferred rather than directly observed and the challenge for science is to establish the link between

somatic and behavioural symptoms and suffering. However, notwithstanding any scientific or epistemological difficulties that researchers may have with the term, the general community would regard pain as an unacceptable state for animals. Surprisingly, while there is some literature on animal pain management, there is a lack of published data on how people regard animal pain compared to human pain nor is there much data on attitudes to pain, as distinct from welfare more generally, in animals.

To place this discussion of public perceptions of animal pain in perspective, the aim in this paper is to provide a review of current Australian attitudes to animal welfare in general and then, more specifically, to pain in animals.

### Public perceptions of animal welfare

In general, the Australian community considers animal welfare to be an important issue and, although it does not strongly influence the purchasing of animal products, it is associated with a willingness to engage in community behaviours such as donating to animal welfare groups, writing to newspapers, etc (Coleman and Hay, 2004). Data obtained from a sample of 1061 random respondents from Victoria, Australia indicated that 16% disagreed with the statement “Welfare of animals is a major concern” while 60% agreed (Coleman, Hay and Toukhsati, 2005). In response to the more moderate statement “Farm animal welfare is an important consideration”, only 6.4% disagreed while 71% agreed (Table 1.). A similar pattern of results occurred for the importance of welfare of domestic pets and native animals while only 17% of respondents agreed that “Demand for food is more important than humane treatment” while 62% disagreed.

	Demand for food is more important than humane treatment	Welfare of animals is a major concern	Farm animal welfare is an important consideration	Welfare of domestic pets is important	Welfare of native animals is important
Strongly Disagree	37.8%	6.4%	1.2%	1.5%	2.2%
	12.2%	4.7%	2.3%	1.9%	1.9%
	12.0%	5.2%	2.9%	1.4%	2.3%
Neither Agree nor Disagree	21.1%	24.2%	21.2%	13.9%	17.8%
	7.2%	18.4%	23.0%	16.4%	19.2%
	4.1%	16.8%	20.9%	24.2%	24.1%
Strongly Agree	5.8%	24.3%	28.4%	40.8%	32.5%

Table 1. Distributions of responses to animal welfare questions based on a random sample of 1061 Victorians (Coleman, Hay and Toukhsati, 2005).

The aims of the study by Coleman et al. (2005) was to assess the extent to which attitudes toward animal welfare were related to purchasing of animal products and to community behaviours such as activist behaviour, writing to newspapers, donating to animal welfare groups, etc. These latter behaviours have the potential to influence retailers, regulators and legislators thereby impacting on the economics and even the sustainability of the livestock industries. One of the key findings in this study was that, while a small number of demographic and industry specific variables were related to consumer and community behaviour, welfare-related variables were the main predictors of community behaviour. While attitudes to animal pain were not addressed in this research, it would be likely that such attitudes would predict those community behaviours that were relevant to livestock practices that involved pain. One such example of relevant community behaviour comes from a letter to Adelaide Advertiser. Plavkalns (2004) said “Well, (the) sheep, horses and chooks ..... are not particularly bright animals, but it is childish to imagine that they are incapable of physical pain and mental distress. Pigs are about as intelligent as dogs and scream in horror and despair when they realise that humans intend to slaughter them”.

The fact that community behaviours may be determined principally by concerns about welfare, suggests that animal welfare is the principal driver for community responses to the intensive animal industries. Industry and government responses to community concerns need to take this into account. In part, this may mean ensuring that there is reliable and accurate information on industry practices available to the community and in part, it may mean that government and industry should monitor both attitudes towards welfare issues and their relation to community responses on an ongoing basis.

Williams, Dacre, and Elliott (2007) surveyed 750 New Zealanders over the age of 16 and found that approximately 70% agreed that teaching and research using animals was acceptable provided that it caused no unnecessary suffering. However, only 50% of respondents agreed that animals used in medical research should be for life-threatening diseases only.

In summary, in both the general community and amongst professionals working with animals there is a majority view that animal welfare is a significant issue but that use of animals is acceptable provided that it does not lead to unnecessary suffering. It is significant that a majority of people did not agree that demand for food was more important than humane treatment of animals. This raises the more specific question of what are the community attitudes to pain and suffering in animals.

### **Public perceptions regarding animal pain**

The Australian code of practice for the care and use of animals for scientific purposes (2004) defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage” (p 4). The Code also states that “pain and distress cannot be evaluated easily in animals and therefore investigators and teachers must assume that animals experience

these in a manner similar to humans unless there is evidence to the contrary” (p14).

In the past, practitioners and researchers had held the view, largely based on belief rather than empirical evidence, that animals do not feel pain in the way that humans do. Warbasse (1910), in the preface to his book, said “in simple forcible language the author shows that pain is mental, that it depends largely on the intelligence of the subject, and that probably animals do not feel pain as we do. Many of the reactions of animals, which sensitive people imagine indicate great pain, are only unconscious reflexes” (Warbasse, 1910, p xiii).

Generally the community believes that animals should not be exposed to unnecessary pain but there is limited information on community beliefs about the experience of pain in animals. Coleman (2004) reviewed trends in public attitudes to animal research and concluded, in part, that there is “evidence that community attitudes towards animals has been to attribute them with an emotional capacity that is similar to, if simpler than, that of humans” (p 84). Data from a variety of sources suggest that people who work with animals believe that animals experience pain but a significant number perhaps believe that the sensation of pain is not as strong in animals as it is in humans (Table 2).

	Layer hens don't feel pain like humans n=45*	Pigs don't feel pain like humans n=246**	Calves don't experience pain as strong as humans do n=94***
Strongly disagree	15.6%	48.3%	26.8%
	57.8%	36.0%	19.6%
	20.0%	10.7%	11.3%
	4.4%	4.5%	21.7%
Strongly agree	2.2%	.4%	17.5%

\*Lauren Edwards 2007 unpublished data; \*\* G Coleman (2007) unpublished data; \*\*\* Vonne Lund 2007 unpublished data.

Table 2 Attitudes towards animal pain expressed by Australian (\*,\*\*) and Norwegian (\*\*\*) stockpeople

Specifically, the data presented in Table 2 indicate that, when the attitude item is that farm animals (pigs or layer hens) “don't feel pain like humans”, over 70% of stockpeople disagree while less than 7% agree. By way of comparison, Heleski and Zanella (2006) found that around 60% of animal science students agreed that “yes, they (farm animals) feel the sensation of pain in a way very similar to humans” (p10).

However, when the attitude item is “Calves don't experience pain as strong as humans do”, 39% agree! There are two key differences between the two sets of statistics. First, in the first attitude item, the stockpeople were Australian

while in the second, they were Norwegian. Second, the first attitude item could have been interpreted to mean that animals don't feel pain *whereas* humans do. The second attitude item explicitly addresses the issue of whether animals feel pain *as strongly* as do humans. Clearly, surveys that address the issue of attitudes to pain in animals need to be carefully constructed to ensure that the meaning is unambiguous and that attitude items explore all of the relevant dimensions of animal pain. Consistent with the view that animals may not experience pain as strongly as do humans, Anil, Anil, and Deen, (2005) found that, in the US, one of the reasons for low use of analgesics in farmed animals was the lack of anthropomorphically identifiable behavioural changes. Treatment cost/benefits was another factor.

Another professional group that has been researched is veterinarians. Williams, Lascelles and Robson (2005) surveyed 1,200 veterinarians in New Zealand and obtained data on the use of analgesia in cats and dogs. While the majority of respondents regarded relief as the pre-eminent consideration, approximately 10% of respondents did not. For example, 11% disagreed with the statement "Animals should be given the same considerations in pain relief as humans" and also the statement "I only give pain relief to those animals whose owners are willing to pay for it". For the statement "A degree of post-operative pain is good because it keeps the animal inactive" 16% agreed. There was substantial variability in the use of analgesia amongst veterinarians for some procedures. For example, while 98% prescribed analgesics for fractures in dogs, only 65% prescribed them following castration. In general, there was some disparity between the assessment of how painful a procedure was and the use of analgesia for that procedure. While similar data are not available for Australian veterinary practice, these data are consistent with the patterns of pain ratings associated with various surgical procedures that are reported by Canadian animal health workers (Dohoo and Dohoo, 1998).

Given the apparent consistency of the US data with the New Zealand data, the New Zealand veterinary data may have some generality and may be taken as indicative of Australian practice. One of the guidelines in the Australian code of practice for the care and use of animals for scientific purposes (2004) states that "the use of local anaesthetic, analgesic or tranquillising agents must be appropriate to the species, and should at least parallel their use in current medical or veterinary practice" (p 7). Clearly there needs to be a process to facilitate uniformity in pain management for surgical procedures in veterinary practice and animal research.

Heleski, Mertig and Zanella (2004) reported that only 34% of US animal science faculty members agreed with the statement "acute interventions that cause pain (eg castration) should be performed under local anaesthesia (or general, if the animals' age suggests that)". Consistent with the findings by Anil, Anil, and Deen, (2005) discussed above, Heleski, Mertig and Zanella (2004) reported that the academics gave justifications such as "how do we know that the animal is experiencing pain?", "it is too time consuming to administer anaesthetic or analgesic on any sort of routine basis" and "the consuming public will never support the costs of these procedures" (p2812)

Attitude data from the general Australian community relevant to animal pain is limited, but a recent survey to obtain community reactions to proposed changes to the Australian pig code of practice (Toukhsati and Coleman, 2007) included the item "Important attributes with regards to well-being of pigs bred on Farms - Physical handling in a manner that minimises the likelihood of pain or distress". Only two percent of the sample disagreed with this, the vast majority either being undecided (5%) or agreeing (93%).

## **Conclusions**

From the limited data available, there appears to be broad community concern about animal welfare in general and about animal pain in particular. However, there is some uncertainty about the community understanding of animal pain relative to the human experience of pain. There is a clear need for ongoing, coordinated, scientific information on *specific* public attitudes, priorities and knowledge, relevant to animal pain. While data are limited, even where data are available, the attitude questions asked tend to be too general and do not provide insights into the specific concerns or understanding that the general community has about animal pain. Equally, amongst animal workers, there may be limited understanding of, let alone a *shared* understanding about, the nature of animal pain and the imperatives in managing it. Equally, there may be a lack of well validated behavioural indicators of pain that animal workers can use in practice. In the case of veterinarians and other animal workers there may be a lack of shared understanding about the risks and benefits of post operative analgesia.

There has been a substantial amount of research into such things as price-welfare tradeoffs in consumer research, and in the ranked list of importance of various food attributes, animal welfare usually lies in about the middle of around 14 attributes. Currently we do not have any data on the tradeoffs between animal pain and such factors as species, size of animal facility (intensive or extensive, herd size, etc) and nature and cost of husbandry procedures. There is a need to obtain such data so that the appropriate response in terms of codes of practice, regulation, training or education can be made.

More generally, legislators and regulators need to be able to obtain accessible advice on current scientific knowledge, industry perspectives and community perceptions. In part this entails a greater and more coordinated research effort and in part a forum that includes all stakeholders to develop a shared view on animal pain that is based on the best available scientific knowledge about best practice in pain assessment and management and current trends in community attitudes. This can then lead to strategies to improve the research base, professional training and community education.

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