

Animal Abuse, Cruelty, and Welfare: An Australian Perspective

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Introduction

Our major aim in writing this chapter is to provide a current review of the Australian environment in relation to animal cruelty and welfare attitudes, beliefs, and legislation. We begin with a general historical and current description of the Australian continent, followed by a historical account of the formation of Australia's Society for the Prevention of Cruelty to Animals. Several important issues need to be considered in order to provide a comprehensive account that enables the Australian situation to be examined within the context of important research in the area emanating mostly from the United States and Canada, and to a lesser extent from Great Britain. These issues include consideration of animal cruelty laws and their administration. We also review research relating to mandatory reporting of animal abuse. This is followed by a discussion of the important benefits of mandatory reporting of animal abuse, as well as welfare issues that arise, largely as a consequence of companion animal ownership. One of the major welfare issues for humans related to companion animal ownership is the dog bite issue. This is one particular area where Australia has led the way. Another important area of research concerns the co-occurrence of abuse, violence, and criminality. As with research in other countries, Australian research has provided clear support for the documented links between animal abuse, family violence, and criminal behavior. This Australian research will be reviewed within the context of past research from other countries. While it is acknowledged that animal farming also has significant welfare issues, discussion of this latter area is beyond the scope of this chapter.

The Continent of Australia

Australia was once known as New Holland. This land is one of the world's most ancient land masses,

containing rocks that are over 4.5 million years old. The continent has a history of human occupation extending back at least 60,000 years. This history reveals a highly specialized people. It was not until 1788 that Europeans settled in Australia. In 1993, Australia's population was 18 million people, of whom only 265,000 could claim Australoid descent (i.e., have indigenous ancestry). It is predicted that by 2060, the population of Australia will have risen to 30 million, the vast majority of whom will live in cities of around 6 million people (Flannery, 1994).

Australia is a very large continent, a federation comprising six sovereign states and two self-governing territories. Several of its states are considered to be wholly dependent on agriculture, including the Northern Territory, Queensland, and Western Australia. Australia's vast size can be elucidated by the fact that it takes 6 hours to fly from east to west or north to south (RSCPA, 2000).

The Australian Royal Society for the Prevention of Cruelty to Animals

Australia's first Society for the Prevention of Cruelty to Animals was formed in 1871 in Victoria. People's concern regarding the welfare of horses was the main impetus driving its formation. By 1892, there were societies for the prevention of cruelty to animals in Tasmania, New South Wales, Queensland, and Western Australia. The establishment of societies in the Australian Capital Territory and in the Northern Territory occurred much later—in 1955 and 1965, respectively. The societies received the Royal Warrant in 1956 and formed a national organization in 1980. The two major stated objectives of the Royal Society for the Prevention of Cruelty to Animals are firstly to give the movement a national presence and secondly to promote a commonality of purpose

and unity among the state and territory societies (RSCPA, 2000).

Australia's Animal Abuse and Cruelty Legislation

Each of the six states and two territories has jurisdiction over animal welfare through its own Prevention of Cruelty to Animals Act (POCTAA). With the exception of New South Wales (NSW) these acts control all aspects of animal use including experimentation. In NSW animal experimentation is controlled through a separate act.

Definition of "Animal"

Most of the acts define "animal" as a live member of the vertebrate species, which includes amphibians, reptiles, birds, and mammals. The Queensland, Western Australian, and Victorian acts include fish and crustaceans in their definition of "animal" but the remaining states and territories do not. Some definitions also include varied categories of animals depending on their use. For example, the Victorian POCTAA (1986) includes domesticated farm animals, animals used for recreational purposes, and animals used in research and educational institutions, in its definition of "animal."

Definition of Animal Cruelty

Animal cruelty is described through a list of acts of omission or commission rather than through a specific definition of cruelty (RSCPA, 2000). For example, the South Australian POCTAA (1985) defines cruelty as:

- deliberately or unreasonably causes the animal unnecessary pain;
- fails to provide it appropriate and adequate, food, water, shelter, or exercise;
- fails to take reasonable steps to alleviate any pain suffered by the animal;
- abandons the animal;
- neglects the animal so as to cause it pain;
- releases the animal from captivity for the purpose of it then being hunted or killed by another animal;
- causes the animal to be killed or injured by another animal;
- organizes, participates in, or is present at an event at which the animal is encouraged to fight with another animal;
- having injured the animal, fails to take reasonable steps to alleviate any pain suffered by the animal;

- kills the animal in a manner that causes the animal unnecessary pain;
- unless the animal is unconscious, kills the animal by a method that does not cause death to occur as rapidly as possible.

Enforcement of the Acts

The responsibility for the administration of the POCTAAs rests with the ministers for Agriculture in all states and territories with the exceptions of South Australia and Western Australia (WA POCTAA, 2002). Full-time officers of RSPCA, members of the police force, and designated officers of the Department of Agriculture have been vested with the legal authority to enforce the acts (RSPCA, 2000). In Western Australia, general inspectors have been appointed from the RSPCA, local governments, the Department of Agriculture, and the Conservation and Land Management Department. In South Australia, the Minister may appoint a person nominated by the South Australian branch of the RSPCA to be an inspector.

Penalties

Penalties that can be imposed under the POCTAAs vary quite substantially. For example, in South Australia, the maximum penalty is \$10,000 (at the current Australian dollar exchange rate of .76, this would equal 7,600.00 USD) or imprisonment for 1 year. In NSW (POCTAA, 1979), the maximum penalty is \$11,000 (8,360.00 USD) or up to 2 years imprisonment, and in Western Australia, which has the most recently revised act, there is a higher maximum penalty of \$50,000 (38,000 USD) or up to 5 years imprisonment. However, maximum penalties under the law are rarely enforced.

Sharman (2002) has raised concern about the leniency with which anti-cruelty statutes are applied. In illustrating her position, Sharman gives examples of two particular cases of aggravated cruelty. The first occurred in October 2001 when Luke Park appeared in a New South Wales court for "allegedly putting his sister's kitten in a freezer for 40 minutes, attempting to set fire to its whiskers, spraying it with an aerosol can and throwing steak knives at it before stoning it to death" (p. 333). The second case described by Sharman is that of Trevor Duffy who was charged with beating his dog to death with an iron bar. Sharman describes "Duffy allegedly attacked his dog, 'Tess,' after he found her carrying a kitten in her mouth. Tess' skull was cracked with the force of the initial blow from the iron bar and her eye was knocked out

of its socket but the beating continued until she died from massive head injuries” (p. 333). Although both Park and Duffy pleaded guilty to the charges, both men were released on good behavior bonds. Even if the maximum possible penalty had been imposed under the NSW POCTAA, as previously noted, this would only have amounted to \$11,000 Australian dollars or 2 years imprisonment.

Such lenient sentencing is not unusual. Between January 1996 and December 2000, prison terms were handed down to only 3% of offenders who committed acts of animal cruelty. Further, for as many as 80% of these offenders, the prison terms were for 4 months or less. A total of 75% of offenders were fined, most (98%) \$1,000 or less. A further 20% were dismissed and a further 2% received community service orders. Moreover, the differences in the harshness of sentencing did not adequately reflect the crime, with the bulk of aggravated cruelty cases being handed down a fine of \$1,000 or less or a bond (Sharman, 2002).

Sharman concludes by arguing that the maximum penalty must be imposed for the most serious cases if the anti-cruelty legislation is not to be rendered futile. However, she also acknowledges that imprisonment is not the only way forward in ending animal cruelty. In particular, Sharman calls for the introduction of **cross-reporting** requirements in legislation. Acknowledging the documented links between human violence, criminal behavior, and animal abuse, Sharman argues that such cross-reporting would require such law enforcers as child protection agencies, firefighters, police officers, and animal cruelty inspectors, as well as ambulance officers, to report cases of suspected animal cruelty to relevant authority bodies. Such a position is consistent with that taken by many others (e.g., **Green & Gullone, in press**; Gullone, Johnson, & Volant, 2004; Lawrie, 2001). Also of relevance is the inconsistency of legislative requirements whereby, for example, professionals, including general practitioners and teachers, are required to report cases of child abuse but veterinarians are not legally required to report cases of animal abuse.

Animal Welfare and Mandatory Reporting

In his review, Lawrie (2002) has called for greater awareness of animal abuse by veterinarians and the general public. Lawrie argues that veterinarians are well placed to both identify and deal with animal abuse. One of the primary rationales provided by

Lawrie to support such a stance is the increasing evidence that there is a link between animal abuse and human violence. Thus, he argues that mandatory reporting of animal abuse has the potential to prevent both human and animal suffering and to save lives. Moreover, Lawrie has argued that veterinarians are seen as role models of humane treatment of animals. As such, they are in an ideal position to set standards of behavior that the general public will be in a position to emulate.

In a recently completed Australian study, Green and Gullone (2005) investigated Australian veterinarians' exposure to animal abuse and human violence, as well as their beliefs about the link between the two, in addition to their perceived role in relation to both. A total of 185 veterinarians (with a response rate of 29%) participated in the study by completing a questionnaire that was either mailed out or hand delivered. The majority of respondents were male (58.8%) and there were about twice as many small animal veterinarians (66.3%) compared to mixed practice veterinarians (30.4%), with only a few (3.3%) large animal practitioners. The age of respondents ranged between 20 and 65 years with the majority of respondents being aged between 30 and 50 years.

As many as 86% of respondents believed animal abuse to involve physical maltreatment and 58% believed that passive neglect also constitutes abuse. However, questionnaire responses were based upon a definition of abuse provided by the authors, which was based on previous studies, and was as follows: “deliberate, physical maltreatment or neglect resulting in symptoms requiring veterinary treatment.”

The results revealed that 0.12 cases of animal abuse were seen per veterinarian per 100 patients seen. The majority of veterinarians (76%) reported diagnosing animal abuse infrequently (i.e., less than one case per year) or occasionally (i.e., one to three cases per year). Fifteen percent reported diagnosing cases of animal abuse regularly (between 4 and 11 cases per year) or frequently (i.e., more than 12 cases per year). Only 8.3% of respondents reported that they had not diagnosed animal abuse. With regard to species, dogs (89.8%) were by far the most commonly reported species where abuse was seen, followed by cats (65.9%), horses (29.3%), and birds (25.1%). The remainder related mostly to cattle.

Providing support for the co-occurrence between human abuse and animal violence, as many as 24% reported known (6%) or suspected (18%) human abuse occurring in cases of animal abuse. As many

as 62% believed that co-morbidity between child abuse and animal abuse exists and 57% believed that such co-morbidity exists with spouse abuse. The level of perceived co-morbidity between animal and human abuse in the Australian study was found to be lower than that reported in Sharpe and Wittum's (1999) U.S. study (86% agreement for child abuse and 77% for spouse abuse). The reason for this discrepancy may be the level of exposure of the two groups to the literature on the subject. Most of the data to date on the link between animal and human abuse have come from the United States, and both the U.S. and the Canadian Veterinary Medical Associations have held seminars and released position papers on the subject (Green & Gullone, in press). In contrast, at the time that the Australian study was conducted, the only reference in the veterinary literature in Australia concerning the link between animal and human abuse was one article in one of the state Veterinary Board newsletters (Lawrie, 2002).

On the whole, the Australian data provide support for previous investigations with British and U.S. veterinarians. However, several differences were also found. In particular, Green and Gullone's finding that 91.7% of respondents reported diagnosing animal abuse is a much higher percentage than the 48.3% reported by Munro and Thrusfield (2001) in their survey of British veterinarians. This difference may be explained by the fact that the British data did not include neglect. Also, the actual reported incidence of animal abuse of 0.12% estimated in the Australian study was lower than that reported in Sharp and Wittum's (1999) U.S. study of 0.56%. Collectively, these findings refute comments made by some Australian as well as British (Munro & Thrusfield, 2001) veterinary respondents that abused animals are unlikely to be taken to veterinarians.

Regarding their believed moral responsibility to act in cases of suspected abuse, as many as 96% of respondents reported that they should intervene in cases of suspected animal abuse compared to 44.7% who believed they had such responsibility in relation to suspected family violence. Importantly, veterinarians' volunteered reasons for not reporting animal abuse included concerns about confidentiality, fear of loss of business, and distrust of the relevant authorities to handle the cases effectively. Also of interest was the finding that female veterinarians were more likely to recognize the co-morbidity of animal and human abuse and, along with younger

respondents, felt less well equipped to deal with abuse if confronted with it in practice.

These findings have implications for the training of Australian veterinarians with regard to increasing awareness of co-occurrence of human violence and animal cruelty. They also indicate that veterinarians need to be trained in relation to appropriate avenues of responding to suspected or known animal abuse.

Given the findings of Green and Gullone's study, it is somewhat reassuring that in March 2004, the Australian Veterinary Association (AVA), as part of its annual conference, assigned a full day to papers discussing the co-occurrence of animal abuse and human violence as well as holding an afternoon forum to discuss mandatory reporting. This is reflective of the marked shift in veterinarians' attitudes to animal welfare in Australia over the past 3 years. Such a shift can be further seen in the AVA's strong proactive role in campaigning taken against tail docking in dogs for cosmetic reasons (Bennett & Perini, 2003).

Bennett and Perini (2003) have provided a comprehensive review of the arguments for and against canine tail docking. At around the same time of the publication of this paper, which clearly detailed the animal welfare implications of tail docking, the Primary Industries Ministerial Council of Australia agreed to implement a nationally coordinated ban on routine tail docking for purely cosmetic reasons. The ban came into force nationally in April 2004. In addition to reflecting the stronger stance taken in relation to animal welfare by veterinarians, such legislation reflects a stronger acceptance by the wider population to changes in previously unquestioned attitudes.

Such changes in beliefs and behaviors are reassuring given predicted increased rates of pet ownership in the 21st century, which will undoubtedly coincide with increased potential for animal cruelty (Wirth, 2000). Given such movements in thinking, the present seems to be an optimal time to call for mandatory reporting of animal abuse by veterinarians. Further, legislating for mandatory reporting would bring Australia in line with several states in the United States and with Canada.

Companion Animal Ownership in Australia

As with other countries in the western world, the prevalence of pet or companion animal ownership in Australia is high. This is particularly true in relation

to cats and dogs. A national survey involving 1,011 people aged 16 years and above (McHarg, Baldock, Headey, & Robinson, 1995) found that 68% of Australian households cared for one or more dogs, 45% of Australian households cared for one or more cats, and 25% owned birds. The survey also found that pets were part of the family during childhood for more than four out of five Australians. The main reasons identified for not owning pets included living in accommodations that were not suited to owning a pet (e.g., rental accommodation with no provision for pets) and the absence of someone at home who could care for the pet (McHarg et al., 1995). It was also found that more families than non-partnered individuals owned dogs and that about one in three dog owners also owned a cat. The survey results revealed that cat ownership was evenly spread across families and non-partnered individuals.

Reflecting increased consideration of pet welfare amongst pet owners, a total of 61% of dogs were reported to be de-sexed, with a lower percentage in lower income households. In relation to cats, it was found that 90% were de-sexed.

In a study examining attitudes toward cat and dog ownership, Mackay (1992) concluded that the emerging pattern in the Australian community was one favoring increased pet ownership and a stronger commitment to the care of pets. According to Mackay, this trend can be explained by changes in lifestyle over the last 20 or so years including increased rates of divorce and family breakups as well as a trend toward smaller households, with 50% of Australian households now containing only one or two people. Also, Australia's population is aging and the aged comprise a large portion of Australian adults living alone. With this increasing trend toward individuals rather than families becoming the most prevalent social unit, there is a growing sense of isolation and loneliness. Under such conditions, pet ownership is increasingly becoming recognized as a positive strategy to alleviate the pain of loneliness (Siegel, 1990).

Dog Attacks and Dog Bites

In addition to the documented positive aspects of pet ownership for both adults and children (Fawcett & Gullone, 2001), there are potential risks. This is particularly true with regard to dog attacks and dog bites, which constitute a major cause of injury, particularly for children (Chapman, Cornwall, Righetti, & Sung, 2000; Thompson, 1997). Ashby (2003) reported that, in Australia, up to 2 deaths and approximately

1,400 hospital admissions per year are recorded for dog bite. Children are more than twice as likely to be admitted to hospital for dog bite injuries compared to adults. Approximately 50% of dog bites to children are to the head and/or face, whereas for adults around 50% are to the upper limbs. A steady frequency of 0.004 per 100,000 cases or between 0 and 2 deaths from dog bite has been documented. This compares to a Canadian reported rate of 0.03 per 100,000 cases and a higher rate in the United States of 0.069 per 100,000 cases (Sacks, Sattin, & Bonzo, 1989).

Ashby (2003) has reported that a detailed examination of the distribution of dog bites by age clearly indicates that there is a marked peak in the 1–4 year age group, which decreases to a relatively level distribution by 15 to 19 years. The data reported by Thompson (1997) for Adelaide in South Australia support the finding that children in the 0–4 year age range are at greatest risk and that the injuries sustained by children were more likely to require hospitalization compared to those sustained by adults. Of note, Thompson also reported that males of all ages were more at risk of dog bite compared to females. Furthermore, over 50% of dog bites occur at a residential location as opposed to public places (Ashby, 2003).

In an innovative attempt to address this significant problem, Chapman et al. (2000) conducted a randomized controlled trial to evaluate the efficacy of an educational intervention program designed to teach people how to avoid being attacked by a dog. Their program was particularly targeted at children. A total of 346 children aged between 7 and 8 years from eight primary schools in metropolitan Sydney were cluster randomized into intervention schools and non-intervention control schools. The “Dog Safe” intervention consisted of one 30-minute lesson and was conducted by an accredited dog handler. The lesson involved the demonstration of a variety of interactions, classified as either do's or don'ts, with dogs. For example, children were told how to approach owners and their dogs when they wanted to pat a dog. Children were also given the opportunity to practice the instructed interactions. For example, in patting a dog, children were instructed to ask permission, approach slowly, extend their hand palm down, and to pat the dog under the chin and on the chest while avoiding eye contact, and then to walk away slowly and quietly. Children were also instructed in the recognition of friendly, angry, or frightened dogs. In addition to the 30-minute lesson, a resource kit, including activities to be undertaken

before and after the demonstration, was provided for teachers.

Evaluation of the program took place between 7 and 10 days post-intervention. A docile Labrador dog was tethered 5 meters away from its owner in the school yard and the intervention group children were let out to play without any supervision. The owner was disguised as a tradesperson and the children were not told that they were being videotaped. This procedure was also implemented for children in the control group. The results, which involved a comparison of the numbers of children who breached the proscribed behaviors across groups, clearly showed that the children who had received the intervention displayed significantly fewer breaches. The majority of the children in the control group patted the dog without hesitation, whereas the majority of the children in the intervention group did so only after a period of careful assessment. While the authors recommended a **follow-up study** to determine the long-term efficacy of the intervention, the findings of this study are encouraging in addressing what perhaps constitutes the most serious human well-being problem related to companion animal ownership. Given Wirth's (2000) prediction of increased companion animal ownership in the future, the need to educate people about companion animal ownership and interactions will only become more pressing.

Wirth (2000) has also argued that, given a predicted acceleration in the pace of change associated with modern living, the keeping of companion animals as an antidote to loneliness will undoubtedly become more popular in the 21st century. Increased rates of pet ownership are likely to result in many people new to pet ownership acquiring pets. Given the increased prevalence of single adult households, generally longer working hours, and living space restrictions, what will the impact on animal welfare be?

At present, community attitudes and beliefs are that pet ownership is a right that individuals are entitled to exercise with very little accountability. However, according to Wirth (2000), in order to prevent possible increases in animal cruelty and suffering that are likely to coincide with increased rates of pet ownership in the future, animal welfare movements must demand restrictions on the breeding of animals so that only sufficient numbers and species are bred to meet community requirements. Wirth has also argued that control laws need to address all of the principles of responsible pet ownership and that rehoming programs should be given maximum priority for dealing with relinquished or abandoned pets to minimize euthanasia rates.

Australian Animal Abandonment, Relinquishment, and Abuse Statistics

In the period covering 2001 to 2002, the RSPCA received a total of 132,702 animals across Australia. This included 61,692 dogs and 49,754 cats. Among the other animals received were horses and livestock as well as wildlife including bandicoots, echidnas, blue-tongue lizards, sea lions, ferrets, and a large variety of native birds. In addition to the animals received by the RSPCA, there are a large number of welfare shelters in Australia that receive animals, including dog pounds, wildlife shelters, and cat shelters. Numbers of animals are therefore significantly greater than those reported by the RSPCA alone. As an example of the numbers received by a large dog shelter, for the 2003 calendar year the Lost Dog's Home received a total of 10,708 dogs and 8,876 cats in Victoria alone. A total of 4,648 (43.4%) dogs were reclaimed and 1,299 (12%) were re-homed. In relation to cats, 329 (3.7%) were reclaimed and 407 (4.6%) were re-homed.

In contrast to the Lost Dog's Home figures (Lost Dog's Home Newsletter, 2004), the RSPCA percentage for dogs reclaimed is substantially lower but that for cats is comparable (see Table 1,

Table 1 Total animals received by the RSPCA Australia-wide during 2001 to 2002, by outcome

Animal Species	Received		Reclaimed		Re-homed		Euthanized	
	No.	%	No.	%	No.	%	No.	%
Dogs	61,692	46.5	15,019	24.0	20,696	34.0	23,608	38.0
Cats	49,754	7.7	1,423	3.0	15,413	31.0	31,009	62.0
Other Species	20,608	6.0						

Notes: 1. The percent of animals received is a proportion of the total number. For all other categories, the percentage is calculated from the total for the particular animal species.

2. No statistics regarding outcomes are provided by the RSPCA for species other than cats and dogs.

which provides a breakdown of the numbers and percentages of dogs and cats received, reclaimed, re-homed, and euthanized during the 2001 to 2002 period) (RSPCA, 2004). The re-homing rates for the Lost Dog's Home, for both cats and dogs, are substantially lower than those reported by the RSPCA.

When compared to RSPCA statistics provided for the previous 5 years, the statistics reported in Table 1 indicate that there has been a small but steady decrease in the numbers of animals received from 160,128 in the 1997–1998 period to 132,054 in the 2001–2002 period. While reclaiming and re-homing rates appear to have fluctuated somewhat over the 5-year period, most particularly for dogs, the euthanasia rates have shown a steady trend downwards for both cats (from 43,375 in 1997–1998 to 31,009 in 2001–2002) and dogs (from 36,037 in 1997–1998 to 23,608 in 2001–2002).

Given that other organizations apart from the RSPCA receive and re-home animals, the RSPCA statistics are limited with regard to comprehensiveness. Nevertheless, they provide a relatively good indication of the scope of the problem. This is particularly true regarding the number of successful prosecutions relative to the number of cruelty complaints.

During the 2001 to 2002 period, the RSPCA received a total of 51,216 cruelty complaints, of which 51,205 were investigated. A total of 925 charges were laid (1.81% of all complaints) and a total of 339 prosecutions were instigated (36.7% of charges laid), eventuating in 290 successful convictions (85.5% of prosecutions) (RSPCA, 2004).

The greatest number of complaints related to dogs (49%), followed by livestock (15%), horses or donkeys (11%), and cats (10%). The remainder of complaints related to birds, wildlife, or animals not otherwise specified (RSPCA, 2004).

The number of recorded prosecutions compared to the number of charges laid is disappointingly low (36.7%). This low prosecution rate is largely due to RSPCA's reluctance to follow through with cases unless there is a very high degree of certainty that the charges laid will be upheld. Given that the RSPCA is primarily funded as a charity organization, the prudence shown in this regard is defensible. However, this remains a cause of serious concern, particularly given the increased evidence for a link between animal abuse, human violence, and criminal behavior as will be discussed in the following section.

Co-occurrence of Human Violence, Criminal Behavior, and Animal Abuse

Over the last decade professionals have become increasingly aware of a link between violence toward humans and animal cruelty (e.g., Ascione, 1998; Flynn, 2000a, 2000b). Although existent data do not constitute empirical evidence that animal abuse *leads to or causes* interpersonal violence (Beirne, 2004), there is sufficient evidence to suggest that the two types of violence are strongly associated.

That the presence of one type of violence may predict the increased likelihood of another type is supported by Pelcovitz, Kaplan, DeRosa, Mandel, and Salzinger (2000), who have noted that as the frequency of marital violence in the family increases, the likelihood that child abuse will also be present increases dramatically. The statistics they provide indicate that one incident of marital violence predicts a 5% probability of child abuse while 50 or more such incidents predict almost certainly that child abuse will occur.

Given the co-morbidity across different types of violence, it may be that identification of the presence of animal abuse and determination of its severity may play a role in making predictions about other types of violent behavior. There have been several proposals put forth in an attempt to better explain and understand the link. In particular, an effort has been made to better understand the factors that underlie the abuse of animals.

Proposed Explanatory Factors for the Abuse of Animals

A significant amount of anecdotal and some empirical data show that animals are killed or harmed in an effort to intimidate, frighten, or control others including battered women or abused children (Arkow, 1996; Ascione, 2001a; Ascione & Arkow, 1999; Boat, 1995). As reported by battered women themselves, in an effort to assert their control or continue their campaign of terror, perpetrators have stabbed, shot, hanged, and otherwise mutilated the family pets. In some cases, the animals disappear or die mysteriously.

It has also been proposed that a central common explanatory factor for animal abuse may be an underdeveloped or compromised level of empathy. As argued by Ascione (1999), abusing animals may represent the perpetrator's reduced capacity to empathize with a potential victim (human or animal). Such

a claim is supported by the demonstrated inverse relationship between *callousness* and empathy, with high callousness and low empathy revealing low levels of concern for others (Lahey, Waldman, & McBurnett, 1999).

Family Violence and Animal Abuse

A particular focus on research examining the co-occurrence of animal abuse and human-directed violence has been in the area of family violence. Indeed, over the past decade there has been an increase in the number of studies that have demonstrated a co-occurrence of animal abuse and family violence. One of the earliest was a study conducted by Arkow (1994) in which 24% of 122 women seeking refuge from domestic violence and 11% of 1,175 women seeking restraining orders or support services reported observing animal cruelty by the perpetrator. In 1997, Ascione, Weber, and Wood (1997) published a study reporting the findings of a U.S. national survey of shelters. One shelter from nearly every U.S. state was selected for participation. All shelter staff were surveyed about the coexistence of animal abuse and domestic violence and children's cruelty toward animals. The results showed that as many as 85% of staff who were interviewed reported that they were aware of incidents of pet abuse. A total of 63% of the staff also reported hearing children talk about animal abuse. Eighty-three percent of workers answered "yes" to the question "have you observed the coexistence of domestic violence and pet abuse?"

In a subsequent study, 38 women who sought shelter for domestic violence were directly interviewed (Ascione, 1998). The author reported that 74% (68% owned more than one pet) owned a pet. Of these women, 71% reported that threats of harming, actual harming, or killing of pets by the perpetrators had occurred. Also, approximately 30% of children exposed to violence were themselves reported to be abusive toward animals. Ascione also found that a significant proportion (18%) of women delayed seeking shelter for themselves and their children for fear of their companion animal being harmed.

Quinlisk (1999) reported the findings of another survey conducted as part of the Domestic Violence Intervention Project. The study involved 72 female victims of domestic violence of whom 58 had pets. Of these women, 68% reported violence directed toward their companion animals. In other cases, women reported experiencing threats to kill or to give away their pets. In 88% of cases the abuse was

committed in their presence and in 76% of cases, children had been witness to the abuse. The study found that 54% of child witnesses copied the behaviors they had observed. Of particular note is the fact that Quinlisk (1999) reported almost identical results for an additional survey involving 32 women.

In another similar investigation, Daniell (2001) reported the findings of a survey conducted by the Ontario Society for the Prevention of Cruelty to Animals (Ontario SPCA). More than 100 women's shelters throughout Ontario were contacted and a total of 21 agreed to participate. This resulted in 130 women being surveyed, 80 of whom owned pets at the time of entering the women's refuge and a further 31 had owned a pet some time in the past 12 months. The results were largely consistent with past studies. Of the 111 women owning pets, 44% stated that their partner had previously abused or killed one or more of their pets and 42% stated that their partner had threatened to hurt or kill one of their pets. Finally, as many as 43% of respondents indicated that concern over their pet's welfare had caused them not to leave their abusive situation sooner.

Flynn's (2000b) study attempted to replicate and also extend upon previous research examining the human-animal violence link. Specifically, four questions were asked. These related to the nature and extent of pet abuse suffered by physically abused women, the importance of the pets as sources of emotional support for the women, whether they worried about their pet's welfare after seeking shelter, and whether their concern for the pet's welfare delayed their seeking refuge. One hundred and seven women from a South Carolina shelter were involved in the study, of whom 43 had pets. Of the pet owners, 47% reported that they had experienced threat of harm or actual harm to their pet(s) by the perpetrator of the domestic violence. In contrast to previous research, only two instances of pet abuse by children were reported. Regarding emotional importance, almost half (46%) of the women reported their pet to be a very important source of emotional support. Not surprisingly, almost as many (40%) reported being worried about their pet's safety and 19% of the women reported delaying seeking shelter.

In a more recently reported investigation, Ascione et al. (2005) included a comparison community sample. The study involved a convenience sample of 101 women recruited through five different domestic violence programs. The community sample included 120 women who were recruited through newspaper advertisements and flyers in

local businesses. A recruitment requirement of the comparison sample included the criterion that the women did not **self report** experiencing intimate partner abuse. All women currently owned pets or had owned pets in the past year. This study constitutes one of very few incorporating a comparison community sample of women. The findings included that shelter women were more likely to report that their partners had threatened to hurt or kill their pets (52.5%) and that their partners had actually hurt or killed their pet (54%). This compared with 12.5% and 5%, respectively, in the community sample of women.

The shelter women's reports included multiple incidents of killing or hurting pets. This contrasts with the reports of community sample for whom incidents were typically isolated and were more likely to occur within the context of disciplining the animal for bad behavior (e.g., biting). The most horrific incidents of animal abuse were reported by the shelter women who reported, among other acts of violence, nailing a pet to the woman's bedroom door, drowning a pet, and poisoning a pet.

Overall, 22.8% of the shelter women reported that concern for the welfare of their pet had kept them from seeking refuge sooner. This percentage was markedly higher for those women whose pets had already been hurt (34.3%). There was also a difference between women who delayed leaving and had children (19.5%) and those without children (33.3%).

Ascione et al. (2005) also assessed the experiences and behaviors of children and found that over 61.5% of the shelter women reported that their children had witnessed pet abuse. This contrasted with only 2.9% for the community sample. A total of 38 shelter group children were also directly interviewed. Nearly two-thirds of these children (61.5%) reported that they had witnessed pet abuse incidents as perpetrated by their father, stepfather, or women's boyfriend. As many as 51% of the children said that they had protected one of their pets to save it from being hurt.

In the only Australian investigation carried out to date to determine the extent of co-occurrence between animal abuse and human-directed violence, Gullone et al. (2004) surveyed 102 women recruited through family violence refuge or outreach services and a comparison community sample of 102 women from neighborhood houses and community centers. The inclusion criterion for participating women was that they owned at least one pet during their current or most recent relationship. For the community

sample, an additional criterion required that there be no current or past experience of family violence. The findings were highly comparable to those of past similar studies as reported above. Specifically, it was found that 46% of women in the family violence sample reported that their partner had threatened to hurt or kill their pet compared with 6% of women in the community sample. Similarly, a markedly larger percentage of family violence group women (53%) reported that their partner had hurt or killed their pet compared to 0% of women in the community sample. Out of the 102 family violence cases, 17.3% reported that their pet(s) had been killed.

A total of 33 women in the family violence sample were living in a refuge, crisis accommodation, or transitional housing (as opposed to outreach services). Of these 33 women, a total of 33% reported that they had delayed leaving: 3% reported that they delayed leaving for one week, 3% delayed leaving for between 3 and 4 weeks, 21% delayed leaving for 8 weeks, and a further 6% were unable to quantify their period of delayed leaving.

Also, consistent with past similar studies, Gullone et al. (2004) asked the women in the family violence sample about their children's experiences. The comparison sample percentages are given in parentheses. In 29% (1%) of cases, children were reported to witness threats of abuse and 29% (0%) were reported to witness actual abuse. A total of 19% (1%) of the women reported that their child had abused their pet. Further, a total of 5% (1%) of the children were reported to have threatened to hurt or kill their pet(s). The differences were all found to be statistically significant.

The outcomes of the research reviewed above leave little room for doubt that a relationship between human violence and animal cruelty exists. At the very least, this research suggests that the detection of animal abuse should be of significant concern to professionals and researchers. The research outcomes also suggest that when children are found to be abusing animals, there is a significant probability that they have witnessed and/or experienced abuse. Ideally, children's abuse of animals should be taken very seriously as it may well be a marker of other sinister crimes. Also of importance are research outcomes suggesting that animal abuse is predictive of other types of criminal behaviors.

Criminal Behavior and Animal Abuse

Arluke, Levin, Luke, and Ascione (1999) conducted an investigation into the relationship between animal abuse and other forms of anti-social behavior

including violence. To overcome many of the limitations of past research (e.g., retrospective reports, potentially biased self-reports from incarcerated adults), they obtained their data from official records of criminality rather than through self-disclosure of criminals. They also included a comparison group. Specifically, they identified people who had been prosecuted for at least one form of animal cruelty from the records of the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) between 1975 and 1986.

They operationalized cruelty as cases “where an animal has been intentionally harmed physically (e.g., beaten, stabbed, shot, hanged, drowned, stoned, burned, strangled, driven over, or **thrown**.)” (Arluke et al., 1999, p. 966). This resulted in a group of 153 participants of whom 146 were male. The sample had a mean age of 31 years, 58% of whom were aged younger than 21. The largest proportion of abused animals was dogs (69%) compared with cats (22%) and the remaining were birds, wildlife, horses, or farm animals. The control group was constituted from individuals matched to the abuse group on gender, socioeconomic status, age, and street of residence in the same year as the cruelty incident. The assumption for including this last variable was that people who reside in the same neighbourhood tend to form homogenous groups on variables such as socioeconomic status and related characteristics. The control group details were obtained from municipal voting lists.

Following this, computerized criminal records were used to track criminal cases from the state’s criminal justice records system. This was done for both the control and abuse group. Criminal offenses were classified into five groups as violent, property-related, drug-related, public disorder, and other.

The study results indicated that animal abusers were significantly more likely than control participants to be involved in some form of criminal behavior, including violent offenses. Specifically, 70% of those who abused animals also committed at least one other offense compared with 22% of the control group participants. The differences ranged from 11% for the control group and 44% for the abusive group on property-related crimes to 12% for the control group and 37% for the abusive group on public disorder-related crimes. For violent crimes, the two groups differed substantially (7% and 37% for the control and abusive groups, respectively).

Based on their findings, the authors concluded that animal abuse appears to be one of many antisocial

behaviors displayed by individuals in society ranging from property to personal crimes. Of significance is the fact that Arluke et al.’s (1999) research included a non-institutionalized sample of people who were cruel to animals. Thus, their finding that a single known act of animal abuse was significantly predictive of increased participation in other criminal offenses when compared to a matched sample of adults who did not abuse animals is particularly compelling. This is further reinforced by the fact that, in many cases, the animal abuse identified was far less torturous and sadistic than has been the case in past related studies (e.g., Kellert & Felthous, 1985).

Providing strong support for Arluke et al.’s conclusion that animal abuse may provide an important marker for antisocial behaviors are the findings of a recent investigation carried out by Gleyzer, Felthous, and Holzer (2002) in which 48 criminal defendants with a history of substantial animal cruelty were matched with a sample of defendants who did not have a history of animal cruelty in order to investigate whether a history of animal abuse was associated with a diagnosis of Antisocial Personality Disorder (APD) in adulthood. Support for the proposal was found with a statistically significant correlation between a history of cruelty to animals in childhood and a diagnosis of APD in adulthood. Specifically, a diagnosis of APD and also antisocial personality traits were significantly more frequent in the animal cruelty group.

The aforementioned research findings indicate that animal cruelty can constitute an important marker of antisocial or criminal behavior. Therefore, it appears that the same underlying factors that predict or increase the likelihood an individual engaging in animal abuse may also increase the likelihood that the same individual will engage in other types of criminal behavior. Providing further support for this proposition are Australian Victoria Police data. These data are considered next.

Criminal Offenses and Animal Abuse Offenses: Victorian Data

Data were obtained from the Statistical Services Division of Victoria Police for all recorded offenses in Victoria, Australia, for the years 1994 to 2001 (inclusive). Out of four categories of offense (see Tables 2 and 3) for all alleged offenders, the data clearly show that the largest proportion of offenses was consistently that against property, ranging between 79.52% (number = 344,905) of total

Table 4 Numbers of offenses recorded per year between 1994 to 2001 for alleged animal offenders only

	1994	1995	1996	1997	1998	1999	2000	2001	All years 1994–2001
Offenses against the person	176	214	251	611	320	358	203	353	2,486
Offenses against property	423	434	549	610	627	686	758	556	4,643
Drug offenses	57	60	94	87	103	100	93	46	640
Other offenses	113	165	216	317	321	342	272	226	1,972
Total	769	873	1,110	1,625	1,371	1,486	1,326	1,181	9,741

Note: Animal abuse offenses are not counted in this table.

Table 5 Offense as percentage of all offenses recorded per year between 1994 to 2001 for alleged animal abuse offenders only

	1994	1995	1996	1997	1998	1999	2000	2001	All years 1994–2001
Offenses against the person	22.89	24.51	22.61	37.60	23.34	24.09	15.31	29.89	25.03
Offenses against property	55.01	49.71	49.46	37.54	45.73	46.16	57.16	47.08	48.48
Drug offenses	7.41	6.87	8.47	5.35	7.51	6.73	7.01	3.90	6.66
Other offenses	14.69	18.90	19.46	19.51	23.41	23.01	20.51	19.14	19.83
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: Animal abuse offenses are not counted in this table.

with an average percentage difference across age categories of 7.55% in favor of males. From years 26 to 35 onward, there is a steady decrease in the overrepresentation of males compared to females so that by 66 years and over, the male to female ratio is almost 2 to 1. In general, for the Victorian population, the prevalence of alleged offenses appears to be highest between the ages of 12 and 35 years for both males and females but particularly for males, with a peak for both males and females between the ages of 18 and 25 years.

When examining age and sex trends for alleged animal abuse offenders and animal abuse offenses only (see Tables 8 and 9), there again appears to be a peak in frequency between the ages of 18 and 25 years for both males and females. There are also comparatively high frequencies of alleged offenses for age groups 12 to 17 years, 26 to 35 years, and to less extent for age categories 36 to 45 years and 46 to 55 years. Again, males are overrep-

resented across all age categories. Of the various categories of animal abuse, by far the most frequently occurring offense type is “inflict physical pain/suffering.”

Thus, as depicted in Tables 7 and 9, males are overrepresented for both general alleged offenses and alleged animal abuse offenses. Males are also overrepresented across all age categories for both general alleged offenses and for specifically animal abuse offenses, with very few exceptions. Further, there appears to be a peak of offending between the ages of 18 to 25 years that decreases steadily beyond these years.

The particular importance of these statistics lies in their indication that there are clear sex differences in the frequency of criminal behaviors and that there are identifiable age trends. Thus, it appears that people most at risk of offending are male and aged between the ages of 12 and 35, but particularly between 18 and 25 years. Ideally,

Table 6 Number of offenses recorded by offender age and sex for all offenses recorded per year between 1994 to 2001

	1-11 years		12-17 years		18-25 years		26-35 years		36-45 years		46-55 years		56-65 years		66+ years	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Offenses against the person	87	750	7,290	26,628	20,650	76,389	18,046	68,600	8,109	33,069	2,240	13,710	515	4,094	130	1,654
Offenses against property	1,184	6,760	36,971	158,668	35,617	172,018	26,798	87,897	12,613	30,859	5,498	9,780	2,818	3,884	2,372	3,119
Drug offenses	4	31	2,315	12,017	8,010	45,342	6,161	27,783	2,366	10,056	504	2,680	90	641	14	109
Other offenses	70	557	6,381	33,119	9,323	54,509	7,773	37,673	3,413	17,251	1,096	7,316	217	2,252	81	818
Total	1,345	8,098	52,957	230,432	73,600	348,258	58,778	221,953	26,501	91,235	9,338	33,486	3,640	10,871	2,597	5,700

Note: Animal abuse offenses are not counted in this table.

Table 7 Percentages of offenses by offender age and sex for all offenses recorded per year, 1994 to 2001

	1-11 years		12-17 years		18-25 years		26-35 years		36-45 years		46-55 years		56-65 years		66+ years	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Offenses against the person	0.03	0.26	2.55	9.31	7.22	26.70	6.31	23.98	2.83	11.56	0.78	4.79	0.18	1.43	0.05	0.58
Offenses against property	0.20	1.12	6.12	26.26	5.89	28.47	4.43	14.55	2.09	5.11	0.91	1.62	0.47	0.64	0.39	0.52
Drug offenses	0.00	0.03	1.93	10.03	6.68	37.84	5.14	23.19	1.97	8.39	0.42	2.24	0.08	0.53	0.01	0.09
Other offenses	0.04	0.30	3.46	17.93	5.05	29.52	4.21	20.40	1.85	9.34	0.59	3.96	0.12	1.22	0.04	0.44
Total	0.27	1.71	14.06	63.53	24.84	122.53	20.09	82.12	8.74	34.40	2.70	12.61	0.85	3.82	0.49	1.63

Table 8 Numbers of alleged animal abuse offenders by age, sex, and category of animal abuse offense, 1994 to 2001

	1-11 years		12-17 years		18-25 years		26-35 years		36-45 years		46-55 years		56-65 years		66+ years	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Inflict physical pain/suffering	0	3	4	104	13	128	7	78	10	64	5	47	1	14	3	18
Neglect (Failure to provide food and water)	0	0	0	1	2	1	0	1	0	1	0	3	0	0	0	1
Abandon animal kept for domestic purpose	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0
Fail to provide necessary medical care	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
Poison animal/lay bait	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Worry/Terrify/Abuse/Torment	0	1	1	3	0	2	0	4	1	2	0	1	0	0	0	1
Total	0	4	5	108	16	133	8	84	12	67	5	51	1	15	3	20

Table 9 Percentages of alleged animal abuse offenders by age, sex, and category of animal abuse offense, 1994 to 2001

	1-11 years		12-17 years		18-25 years		26-35 years		36-45 years		46-55 years		56-65 years		66+ years	
	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male	Fem	Male
Inflict physical pain/suffering	0.00	0.59	0.78	20.35	2.54	25.05	1.37	15.26	1.96	12.52	0.98	9.20	0.20	2.74	0.59	3.52
Neglect (Failure to provide food and water)	0.00	0.00	0.00	9.09	18.18	9.09	0.00	9.09	0.00	9.09	0.00	27.27	0.00	0.00	0.00	9.09
Abandon animal kept for domestic purpose	0.00	0.00	0.00	0.00	33.33	66.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fail to provide necessary medical care	0.00	0.00	0.00	0.00	0.00	0.00	25.00	25.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poison animal/lay bait	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00
Worry/Terrify/Abuse/Torment	0.00	5.88	5.88	17.65	0.00	11.76	0.00	23.53	5.88	11.76	0.00	5.88	0.00	0.00	0.00	5.88
Total	0.00	6.47	6.66	47.09	54.05	112.57	26.37	72.88	32.84	33.37	0.98	42.35	0.20	52.74	0.59	18.49

prevention and interventions efforts should focus on individuals that meet these criteria. Also of particular importance are the data suggesting that people who abuse animals are more likely than alleged offenders who do not abuse animals to engage in offenses classified as being those against the person. That this category of offenses includes violent crimes such as homicide and rape further supports the claim made by other researchers that animal abuse is an important marker of violent criminal behavior (Arluke et al., 1999; Dadds, Turner, & McAloon, 2002; Felthous & Kellert, 1986; 1987).

Criminal Offenses and Animal Abuse: New South Wales Data

In 2002 the New South Wales Police Service Forensic Services Group commissioned research to investigate the links between animal cruelty and other criminal offenses in an Australian context (Clarke, 2002). While the research did investigate links between animal cruelty and other criminal behaviors, it differed from previous studies because some aims were directly related to how effectively law enforcement agencies can use animal cruelty information in the investigation of crime.

More specifically, the research had three main aims: (1) to investigate whether the link reported between animal cruelty and other criminal behaviors by international researchers would be observed in an Australian context, (2) to investigate whether incidents of animal cruelty investigated by bodies such as the Australian RSPCA and Australian Animal Welfare League were recorded on the NSW Police Computerized Operational Policing System (COPS), and (3) to identify any benefits to investigations looking at major serial and violent crime that could result from the NSW police capturing and/or taking action on information relating to animal cruelty incidents.

The methodology used in the following three studies, comprising the NSW Police Service Animal Cruelty Research Project, involved both qualitative case study and quantitative techniques. Study 1 reported five cases of animal cruelty that demonstrated different motivations underlying a variety of animal cruelty offenses. Study 2 examined frequency and type of criminal behaviors performed by 200 persons convicted of animal cruelty in New South Wales. Participants in study two were randomly selected from a total of 947 cases recorded

on the COPS database. Study 3 examined links between animal cruelty offenses (both convictions for and self-reported animal cruelty) in a randomly selected sample of homicide and sexual homicide offenders.

Study 1: Case Study Analyses. Five case studies were reported in Study 1. Each case study was reviewed with the aim of identifying different motivations underlying acts of animal cruelty. The case studies were also used to explore potential links between animal cruelty and other types of criminal behaviors for the subsequent quantitative studies. These are reported below.

Case Study 1: The victim Ms. X and the defendant Mr. Y met in 2000 and commenced a domestic relationship. They have lived together for the past month with the victim's 15-year-old daughter. About 7.00 PM on Thursday the victim and defendant went to a local club with friends. While at the club all parties consumed full-strength beer with the defendant consuming almost double that of the victim. The victim and defendant returned home by taxi when the club closed. They both resumed drinking full-strength beer in the lounge room of the home, then started to argue about a Doberman dog that the victim was minding for her friend only known as Ms. Z. The defendant stood up and walked out of the lounge only to return a short time later. He sat near the victim and said, "The dog's dead, I cut its throat. It's fuckin dead." The victim ran outside to the rear yard where she found the dog in the shed. The dog was lying on its side gasping for air. The victim tried to stop the bleeding coming from the dog's neck. Realizing the dog was dead she returned to the house where an argument escalated between the victim and the defendant.

The victim attempted to make a phone call, when the defendant grabbed the phone and threw the victim against the wall. The victim landed on a chair nearby. The defendant then started to punch the wall, causing his fist to smash through the gyprock lining. The victim ran out of the house to alert a neighbor who contacted the police. Police arrived a short time later and spoke with the victim. The victim was concerned for her safety and that of her daughter who had run off for help when the incident started. The victim returned to the premises while police accompanied her. She started to cry as she discovered the amount of damage that had occurred whilst she was at her neighbors asking for help. The lounge room had been completely overturned with a smashed

coffee table in the middle of the room. Broken glass could be seen all over the floor of the lounge room. The kitchen had holes in the gyprock-lined walls and the telephone was on the floor. A 30-cm knife was discovered sticking into the architrave of the kitchen window.

Case Study 1 represents a “typical” description of animal cruelty in the context of domestic violence as recorded on the NSW Police COPS database. The offender described in the event had an extensive list of prior criminal charges, including resisting arrest (7 times), assault (12 times), breach of apprehended violence order (14 times), malicious damaging (4 times), placing child/young person at risk (6 times), animal cruelty (3 times); assaulting a police officer (2x), street offenses (2x), breach of bail (7 times), stalking (1 time), sexual assault (domestic violence related) (1 time), and stealing (4 times).

It is also of interest that the female victim was more upset about the property damage caused by the defendant than the suffering and death of the animal described in the event. It is plausible that the victim, a repeat victim of domestic violence, had become habituated to acts of animal cruelty as a result of other incidents recorded in the defendant’s criminal record history.

Case Study 2: *Mr. A repeatedly shot a dog for no reason other than that it was “annoying him.” When police searched his premises (after being notified by the RSPCA) he was found to be in possession of a number of illegal firearms (in NSW it is illegal to possess any firearm unless a firearms licence is held), in addition to drug-growing equipment and a large amount of marijuana. This individual expressed no remorse for his behavior and was a known marijuana dealer with a prior criminal history for drug dealing, possessing/cultivating prohibited plants, assault, domestic violence, motor vehicle theft, theft from motor vehicle, and armed robbery. The offender was also known to associate with violent criminal gangs.*

Case Study 2 illustrates that drug, firearm, robbery, and other violent and property offenses may also be present in the criminal histories of individuals who perform acts of animal cruelty. Previous research has largely focused upon the link between violent behaviors and animal cruelty. Case Study 2 suggests it may be valid to examine the extent to which individuals who are cruel to animals also display nonviolent criminal behaviors.

Moreover, anecdotal evidence provided by RSPCA inspectors and NSW police investigators suggests that individuals who are involved in organized animal cruelty (e.g., dog fighting, cock fighting rings) may be involved in large-scale fraud offenses, firearms trafficking, and drug manufacture. Anecdotal evidence also suggests that offenders who are involved with organized animal cruelty are not infrequently members of organized criminal gangs.

Case Study 3: *An offender who was convicted of two sexual homicides reported that as a child he was exposed to animal cruelty by parental figures. The offender reported that he was given kittens by his grandmother when he visited and both he and his grandmother would torture and mutilate the animals until they died. This mutilation involved dismembering the animals.*

It is of note that the offender in Case Study 3 dismembered one of his two victims, and the forensic pathologist commented that the cuts were of a very precise, skillful nature. The offender also admitted that he was cruel to a variety of native animals including water-dragon lizards, and also to cats and dogs. This animal cruelty took place in the same location as one of his sexual homicide offenses. The offender had also been charged with drug offenses and stealing prior to his conviction for the sexual homicides. Of particular interest to the NSW police and law enforcement investigators, in terms of investigation strategy in serial sexual homicide investigations, was the offender’s verified self-report that he was cruel to animals in childhood, adolescence, and adulthood. Implications are that if animal cruelty offenses and offenders are reported to police, investigators could focus on these offenders as part of the suspect pool in the investigation of serious violent crimes. At present animal cruelty is not given priority in the investigation of serious violent crime by other Australian or international law enforcement agencies because too few animal cruelty cases are recorded on law enforcement databases (Clarke, 2003).

Case Study 4: *This case study represents an unsolved series of animal cruelty incidents. It appears an unknown offender is nailing cats to crucifixes in the inner western suburbs of Sydney, New South Wales. The crucified animal is then displayed in a prominent position to be found by the cat’s owner. No*

further information is available about the offender at the time of writing as the series remains unsolved.

The offender's display of the crucified animals is argued to be important for a number of reasons. First, the fact that the offender wants to distress individuals who find their pet dead may indicate a deviant or abnormal psychological need on the part of the offender. Second, the perpetrator's indifference to (or perhaps even enjoyment of) the obvious suffering caused to the animal during crucifixion suggests he/she is desensitized to the pain of a living organism. It is plausible that an individual who displays these types of characteristics may not stop at inflicting suffering on animals. Habituation to the emotional gratification experienced from killing or torturing animals may occur, in which case novel stimuli upon which to target the violence are needed by the offender. Research is needed to address whether this need is generalized to humans, and if so, in what ways this psychological need manifests itself behaviorally.

Case Study 4 also has important implications for the investigation of incidents involving violent behavior directed toward humans. In particular, sexual assault, domestic violence, and homicide have been identified by previous researchers as relevant (Flynn, 2000a; Giannopolous, 1994; Hazelwood & Burgess, 1995). If individuals who had performed the types of animal cruelty observed in Case Study 4 were recorded on a database, these records could facilitate the prioritization of suspects in investigations of violent and serial crime.

Case Study 5: *This case study involves a neighborhood dispute in which the offender beheaded his neighbor's dog and left the animal's head on the victim's barbeque as a symbolic message. There is very little information available about this case from the RSPCA, and no data were recorded on the COPS system.*

Perhaps the most important aspect of Case Study 5 concerns not the circumstances surrounding the case, but the fact that they could not be found on the COPS database. It seems that the suspect, with an extensive criminal history for other matters, has not come under police notice in relation to this animal cruelty incident. Case Study 5 is included to illustrate that serious matters of animal cruelty are not necessarily being recorded on a law enforcement database. Perhaps a more centralized repository of animal cruelty incidents could go some way to solving this problem.

Study 2: Animal Cruelty as a Predictor of Criminal Behavior. As previously noted, animal cruelty has been highlighted in the literature as a potential indicator of subsequent or simultaneous violent criminal behavior. The possibility of such a link in Australia has been supported by anecdotal evidence of notorious violent adult offenders. For example, mass murderer Martin Bryant was known to RSPCA officers in Tasmania in relation to animal cruelty offenses. Similarly, serial killer Ivan Milat was known for being cruel to animals prior to murdering seven victims in New South Wales. Concern has also been increasingly focused on the pain and suffering experienced by animal victims of abuse. Study 2 attempted to elucidate first the descriptive characteristics of persons who perform animal cruelty, and second, what if any other types of criminal behaviors are performed by animal cruelty offenders.

Instances of animal cruelty are increasingly being seen as grounds for investigation into the welfare of children and their families, and more generally, as a sign of concurrent or impending violence toward humans (Dadds et al., 2002). A number of researchers have attempted to clarify the behavior of animal cruelty in childhood and its possible contribution to the development of aggressive or violent tendencies into adulthood. Research focusing on family dynamics, as discussed earlier in this chapter, suggests that animal cruelty may be a symptom of something in a child's life that requires clinical intervention.

Ascione and Arkow (1999) have suggested a possible association between witnessing a parent being cruel toward animals and childhood animal cruelty. This has obvious implications in terms of social learning theory. Giannopolous (1994) has stated that the child may be desensitized toward animal suffering, in addition to imitating animal cruelty exhibited by the parent. It is plausible that the adverse vicarious learning situation may lead to increased levels of both adult interpersonal and animal abuse. As noted earlier, childhood animal cruelty, independent of context, may interfere with the development of empathy in children, a process that could affect attitudes along with vulnerabilities toward violence in adulthood (Clarke & Shea, 2003). This absence of empathy concurs with findings reported by Ressler, Burgess, and Douglas (1988), who have suggested that childhood animal cruelty is a "powerful indicator of violence elsewhere in a sexual homicide offender's life" (p. 40).

In light of existing research, the NSW Police Service Forensic Service Group considered it would

be valuable to investigate the types of criminal behaviors that are observed in the backgrounds of individuals who had been recorded on the COPS database as having a record of animal cruelty offenses. It should be noted that the research was approached from a law enforcement rather than psychological or criminological standpoint. Therefore it primarily focused on the implications of animal cruelty for law enforcement agencies (Clarke, 2002).

A total of 200 participants in Study 2 were randomly selected from a database containing 947 persons involved in animal cruelty incidents in which police were involved. The definition of animal cruelty used was consistent with that outlined earlier in the chapter (RSPCA, 2000). The sample included 38 female ($M=32.8$ years, $SD=12.6$ years) and 162 male ($M=28.4$ years, $SD=8.7$ years) participants. Of the male offenders, 62.9% ($n=102$) resided in urban areas, whereas 73.7% ($n=28$) of the female offenders lived in urban areas.

Participants in Study 2 were located using the NSW Police Service COPS data collection system. This data system allowed for searches to be conducted across all animal cruelty offenders who have come to police attention since 1994. Records for all individuals convicted of animal cruelty between 1994 and 2002 were downloaded from the COPS database using a variety of criterion search models to ensure that a maximum number of offenders was identified from this database. Upon examination of the records of the 200 offenders, it was decided that each individual was suitable for the study based upon their being involved in the animal cruelty incidents recorded. The records of each offender, including all criminal charges and events noted on the system, were then examined individually, and a cumulative total of historical criminal events was compiled.

As is clear from Figure 1, the results indicated that offenders who reported incidents of cruelty to animals had also committed a number of additional

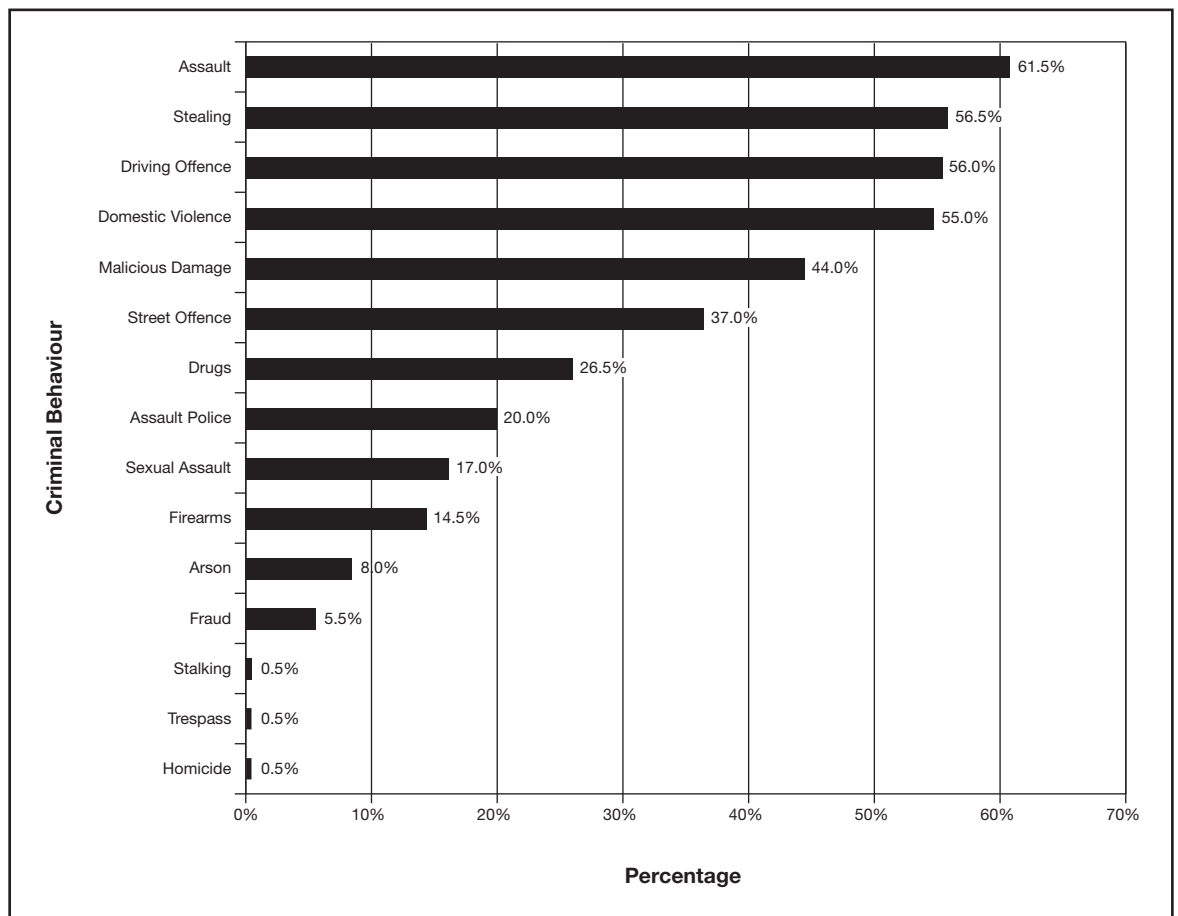


Figure 1 Representation of criminal charge as a percentage for offenders convicted of an animal cruelty offense from highest to lowest frequency

offenses. These offenses were characterized by assaults, stealing, and driving offenses. While normal comparative data were not available (for NSW police operational reasons), it is plausible that out of a sample of 200 participants who had performed animal abuse, the fact that 61.5% had also committed an assault could be considered higher than what would be observed in a non-animal cruelty comparison sample.

Also, more than half of the individuals who had a history of animal abuse also had convictions for driving offenses, domestic violence, and stealing (See Figure 1). Other offenses observed included drug and firearms offenses, sexual assaults, malicious damage, assaulting police, and street offenses. It is noteworthy that 17% of offenders who had performed animal cruelty had also performed sexual abuse. Importantly, animal abuse was a better predictor of sexual assault than previous convictions for homicide, arson, or firearms offenses. Finally, individuals with a conviction for animal cruelty displayed low frequencies for homicide, stalking, and trespassing convictions (See Figure 1), although it can be argued that such crimes are of lower incidence anyway.

Correlational analyses, performed within the animal cruelty offender group, revealed that offenders who had a history of animal cruelty were also more likely to perform assaults, sexual assault, stealing, and street offenses. Domestic violence offenses also featured prominently in their criminal histories.

Among those individuals who had performed animal cruelty, a number of more specific associations were observed. First, animal cruelty offenders who had a record for domestic violence were also more likely to engage in stealing, drug offenses, assaults, and sexual assaults. Animal cruelty offenders who had a conviction for sexual assault were more likely to have been convicted for drug offenses, whereas animal cruelty offenders who had convictions for assault were more likely to also have convictions for stealing.

In relation to the total number of criminal offense categories that offenders with a record of animal abuse could be classified into, the average was 4.03 ($SD=2.64$). The total number of actual offenses committed by offenders would undoubtedly be significantly higher than this figure. Importantly, the 4.03 figure indicates that individuals with a record for animal cruelty are likely to commit a variety of other crimes. Overall,

the number of criminal offense categories that the crimes performed by animal cruelty offenders could be classified into ranged from 0 to 10. Only 1% ($n=2$) of animal cruelty offenders exclusively had conviction for animal cruelty.

Overall, the results revealed support for the prediction that animal cruelty offenders would also have convictions for other types of criminal offenses, though unexpected findings were observed for stalking and homicide convictions. Perhaps the most salient finding was that individuals with a history of animal cruelty were highly likely to be involved in other types of criminal behaviors including, but not limited to, assault, domestic violence, and stealing. The range of criminal behaviors performed by individuals with a history of animal cruelty was also quite large, averaging four different types of criminal offense. This finding is important because it suggests that not only do individuals with a record of animal cruelty perform violent offenses (e.g., sexual assault, domestic violence, and assault), they also appear to perform nonviolent offenses such as drink driving, stealing, malicious damage, fraud, and drug offenses. This generalization across different types of criminal activity has not been observed in previous research.

Animal abusers were highly unlikely to have a conviction for homicide. This was contradictory to both previous research findings and expectations. This result may have occurred for two reasons. First, it may be that animal cruelty offenders generally do not engage in homicide. It is more likely, however, that homicide offenders are not detected by police for animal cruelty offenses. This issue was addressed in Study 3 which specifically examined homicide offenders and animal cruelty.

Similarly, low rates of stalking convictions were observed for offenders convicted of animal cruelty. In the absence of other research, no definitive conclusions can be made about this finding, other than to emphasize the need for more in-depth research to be conducted in a stalker population using structured interviews specifically asking about animal cruelty. This may clarify whether animal cruelty is not being performed by stalkers versus the more likely explanation that animal cruelty is not being detected by police.

Sexual assault, domestic violence, and firearms offenses all featured relatively prominently in the animal cruelty offenders' criminal histories. Arson convictions were recorded for 8% of animal cruelty

offenders. These conviction rates may be comparatively high when compared with the rest of the offender population, which has been documented to be between 1% and 3% (Clarke, 2002). Further research comparing animal cruelty with non-animal cruelty offenders is required before the research findings can be applied to investigative frameworks and decision process models used by police.

In light of the observed associations between animal abuse and subsequent criminal behavior, a number of implications are apparent for law enforcement. The results of Study 2 could aid law enforcement agencies in three main ways.

1. In terms of criminal investigations, knowledge of previous criminal behaviors that are statistically infrequent (such as deliberate animal cruelty) could narrow lists of persons of interest in suspect prioritization plans for serious violent crime.
2. Risk assessment frameworks could be established based upon known information about animal cruelty. This could take the form of a matrix in which all known information is entered relating to criminal offenses, and a mathematical calculation (based upon regression analyses) could estimate a predicted level of future dangerousness taking into account the presence or absence of previous animal cruelty. The present research suggests that individuals with a history of animal cruelty are more likely to engage in criminal behaviors, and therefore should be monitored by law enforcement and other relevant agencies. This is particularly relevant for assault, domestic violence, fraud, and sexual assault.
3. Law enforcement agencies should work with other government agencies to identify and address individuals abusing animals as children prior to their potentially committing more serious violent offenses against people. This long-term "proactive strategy" may lead to a reduction in serious violent crime. Also, the judiciary could be provided with the research findings to ensure proper consideration of animal cruelty is taken into account in sentencing and bail determination hearings.

It should be noted that Study 2 was not designed to examine the psychological factors underlying

animal cruelty or abuse, therefore these factors were not examined in detail. Nevertheless, the findings of Study 2 identified animal cruelty as one factor that may be useful in terms of both investigation of specific types of crime, as well as an area that may identify early offenders with a view to clinical intervention before any potential cycle of violence commences.

Study 3: Animal Cruelty and Homicide in New South Wales. A multiplicity of reasons underlie the act of killing another human being. These range from greed to revenge, jealousy to pleasure, and a diverse array of factors in between. There is an abundance of anecdotal evidence to suggest that the developmental histories of many homicide offenders are characterized by behaviors and cognitions directed against society. In particular, cruelty to animals has been identified as one behavior that may be present in offender developmental histories (Britton, 1997; MacDonald, 1963; Prentky & Carter, 1984; Ressler et al., 1988; Skrapec, 1996).

However, there is a relative paucity of systematic empirical studies that examine the developmental characteristics of homicide offenders (Clarke & Shea, 2003). In particular, there is a notable absence of research examining animal cruelty as a factor specifically in the histories of homicide offenders. Instead, studies have focused on more broad issues of adult violence, including domestic violence, assault, aggressive behavior, and child abuse. Until credible, scientifically sound research begins to examine whether such a link between animal cruelty and homicide exists, policy and decision makers have no way of knowing the significance of existing anecdotal accounts of such links.

Moreover, for research to be of value in providing information about a phenomenon, there must be a context by which to make an evaluation about the meaning of specific results. The context in psychological research is usually obtained by using normative data, in particular a comparison group, from which observations can be made about deviations observed in a group of interest. To date, this has not occurred in research investigating the phenomenon of animal cruelty in the developmental history of homicide offenders. To give a contextual framework to the second part of Study 3, it is necessary to review behavioral indicators associated with a specific form of homicide, namely sexual homicide.

A range of behavioral indicators may be important in identifying and clarifying the difference between

sexual homicide offenders and non-offenders. Patterns of antisocial behavior in childhood and adolescence have been identified among sexual homicide offenders (Arrigo & Purcell, 2001; Canter, 1994; Dietz, Hazelwood & Warren, 1990; Folino, 2000; Giannopolous, 1994; Hickey, 1997; Keppel & Walter, 1999; Skrapec, 1996). These behaviors have been argued by the aforementioned researchers to indicate future sexual homicide behavior. A summary of these behavioral indicators is presented in Table 10.

It is evident from Table 10 that such factors as cruelty to animals and children, enuresis, compulsive masturbation, frequent daydreaming, chronic lying, rebelliousness, and fire setting feature with a large degree of prominence in the behavioral repertoire of sexual homicide offenders in childhood, adolescence, and adulthood. In the literature on sexual homicide, behavioral indicators are important for three reasons. First, they show that the socialization experiences of offenders are translated into negative behavioral expressions (Arrigo & Purcell, 2001; Giannopolous, 1994; Ressler et al., 1988). Second, these behavioral indicators are inextricably linked with the development of violent sexual fantasies (Hazelwood & Burgess, 1995;

Hickey, 1997; Skrapec, 1996). Third, they provide a potential means by which to predict future sexual homicide behavior using objective, observable measures (Canter, 1994; Dietz et al., 1990; Folino, 2000; Keppel & Walter, 1999).

Study 3, therefore, had two main aims. First, to examine to what extent sexual and nonsexual homicide offenders displayed a history of animal cruelty as either children or adults. Second, to establish whether a history of animal cruelty was unique to a subset of the homicide sample who had performed sexual homicides in comparison to a matched non-offender comparison group. Implications for law enforcement in the area of homicide investigation are also discussed.

Study 3 was made up of two parts. Part 1 examined criminal histories of sexual and nonsexual homicide offenders. Part 2 was designed as a comparison between two participant groups: a sexual homicide offender group and a control group.

Part 1 of the present study comprised a group of 49 randomly selected homicide offenders from the COPS law enforcement database. Types of homicide offense included, but were not limited to, domestic homicide, homicide for profit, sexual homicide, group cause homicide, and excitement homicide.

Table 10 Frequency of reported behavioral indicators in childhood, adolescence, and adulthood for sexual homicide offenders as reported in the Ressler et al. (1988) study

Behavior	Frequency					
	Childhood		Adolescence		Adulthood	
	n	%	n	%	n	%
Daydreaming	28	82	27	82	27	81
Compulsive masturbation	28	82	28	82	27	81
Isolation	28	71	26	77	26	73
Chronic lying	28	71	28	75	28	68
Enuresis	22	68	20	60	20	15
Rebelliousness	27	67	25.5	84	25	72
Nightmares	24	67	22	68	21	52
Destroying property	26	58	26	62	23	35
Fire setting	25	56	25	52	25	28
Cruelty to children	28	54	28	64	27	44
Running away	28	36	26	46	26	11
** Cruelty to animals **	28	36	26	46	25	36
Destroying possessions	25	28	23	35	23	35
Self-mutilation	26	19	24	21	25	32

Two of the participants were female and 47 were male. Part 2 of the study examined two groups: (1) 20 incarcerated adult male sexual homicide offenders, and (2) 20 adult male students enrolled in an introductory Psychology course for adult education students at The University of Sydney. The students were matched with the offenders for gender, age, and ethnicity. This was to control for both differential experience levels and variation in cultural factors hypothesized to influence developmental characteristics of sexual homicide offenders (Canter; 1994; Keppel & Walter, 1999; Ressler et al., 1988).

Participants were found using the New South Wales Police Service COPS data collection system. This data system allowed for searches to be conducted across all records of offenders who have come to police attention since 1994. Participants' criminal records were examined and coded in Part 1 of Study 3.

With regard to part 2 of Study 3, the sexual homicide offender and non-offender comparison groups indicated on a structured interview questionnaire the degree to which they had performed animal cruelty as a child, adolescent, and adult. Responses were coded on a Likert-type scale, and included never, rarely, sometimes, often, and always. Three separate questions were asked for childhood, adolescence, and/or adulthood. The question specifically asked "Did you ever deliberately injure or kill an animal?" (Note—animals do not include insects, fish, or reptiles.) Participation in Part 2 of Study 3 was voluntary for participants in each group.

Records for all individuals convicted of a homicide between 1994 and 2002 were downloaded from the COPS database using a variety of criterion search models to ensure that a maximum number of offenders were identified. From this pool of offenders, 49 were randomly selected for inclusion in the present study. Upon examination of the records of all 49 offenders, it was decided that each individual was suitable for inclusion in the study based upon their being tried and convicted for the homicides described in the database. The records of each offender, including all criminal charges and events noted on the system, were then examined individually, and a cumulative total of historical criminal events were compiled.

With regard to Part 2 of the study, the sexual homicide offender and non-offender comparison groups were asked three separate questions as described in the methods section for Study 3 above.

Homicide Offender Group ($n=49$). Only one of the participants examined with a record for homicide also had a record for animal cruelty. Analysis of criminal behaviors present in the homicide offenders' criminal records indicated a high prevalence of stealing and assault among this participant group. Driving and drug offenses also featured prominently, as did firearms offenses. The lowest frequency of criminal convictions recorded for homicide offenders was for animal cruelty offenses. All criminal history percentages for the homicide offender participant group are presented in Figure 2.

Comparison Between Sexual Homicide Offenders and Control Group. Of the sexual homicide offender group, none of the 20 offenders reported never being cruel to an animal as a child, only one reported never being cruel to an animal as an adolescent, and three reported never being cruel to an animal as an adult. None of the sexual homicide offender sample reported never being cruel to animals in childhood, adolescence, and adulthood. In other words, all 20 sexual homicide offenders reported being cruel to animals at some stage in their life.

The reported amount of animal cruelty at each developmental stage was compared between sexual homicide offenders and non-offenders. The sexual homicide offender sample reported significantly higher frequencies of cruelty to animals than the control group as measured on a five point Likert Type scale where a score of 1 equalled 'never' cruel to animals and a score of five indicated 'always' cruel to animals. ($M=3.05$, $SD=0.94$) were more likely to be cruel to animals than non-offenders ($M=1.40$, $SD=0.82$) ($t_{38}=-5.897$, $p<0.001$). A similar result was observed for sexual homicide offenders ($M=3.45$, $SD=1.31$) when compared with non-offenders ($M=1.65$, $SD=1.13$) during adolescence ($t_{38}=-4.627$, $p<0.001$). In adulthood sexual homicide offenders ($M=4.15$, $SD=1.22$) were also more likely to report being cruel to animals when compared with controls ($M=2.05$, $SD=1.43$) ($t_{38}=-4.983$, $p<0.001$).

These findings were congruent with previous research findings examining an American sample of sexual homicide offenders (Ressler et al., 1988) (see Table 10). Importantly, only one of the 20 sexual homicide offenders who reported being cruel to animals had any conviction on the law enforcement database for animal cruelty offenses.

Thus, the results of Study 3 revealed only partial support for each of the predictions put forth. In

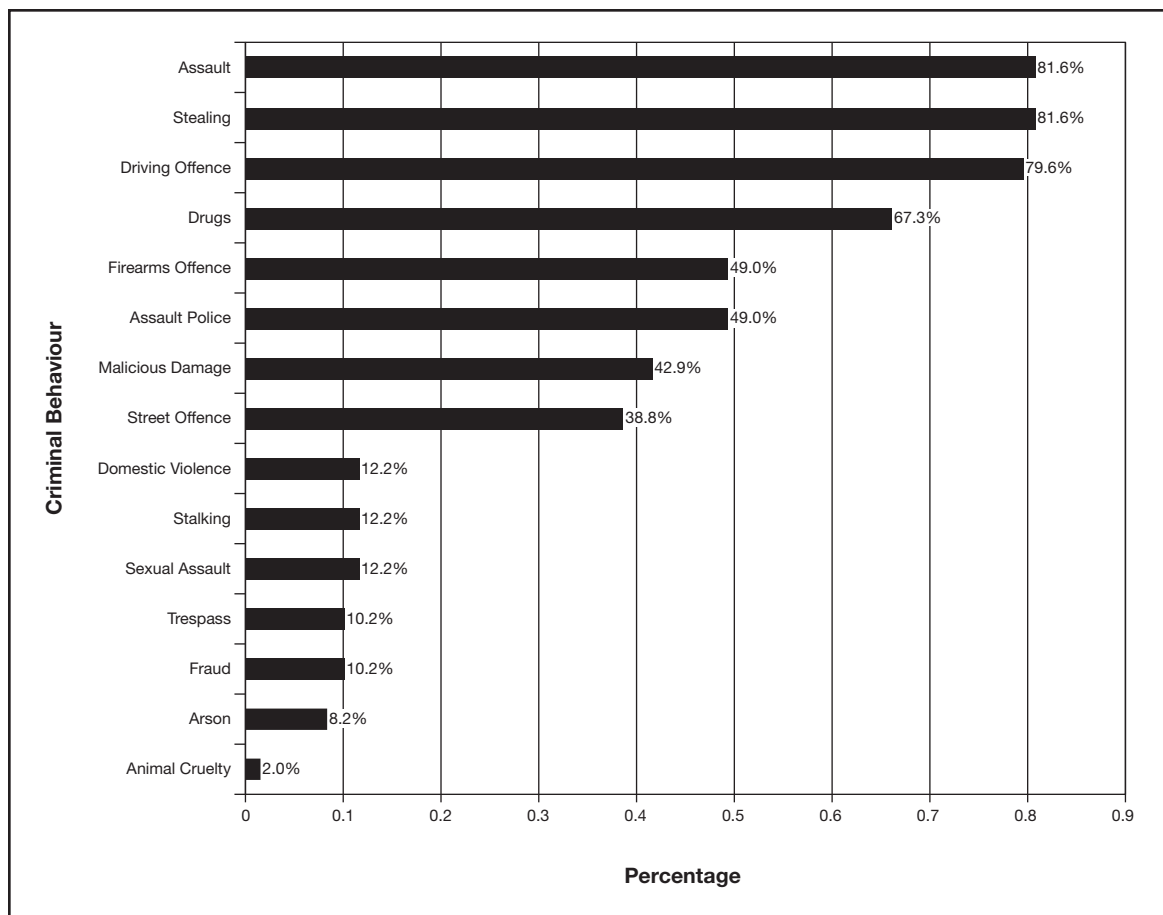


Figure 2 Representation of criminal charge as a percentage for convicted homicide offenders from highest to lowest frequency

relation to the first aim, the criminal behaviors of homicide offenders obtained from the criminal records database did not lend support to any link between animal cruelty and homicide. This finding is significant because, at first glance, it suggests that findings of a link between homicide and animal cruelty observed by previous researchers may not represent the situation in an Australian homicide offender sample.

A number of explanations are possible for the low rate of animal cruelty convictions in the homicide offender sample. First, the fact that research examined all types of homicide, rather than a specific form such as sexual homicide, may have obscured the relevance of animal cruelty as an associated factor. It is possible that animal cruelty is only observed in the developmental histories of specific types of homicide offenders. Second, similar to Study 2, it is plausible that any animal cruelty performed by homicide

offenders has not been detected by or reported to police.

The important issue raised by these observations is whether a method of analysis based upon routine and systematic comparison of criminal history records for homicide offenders could reveal the extent to which animal cruelty was a regular feature in the developmental histories of such offenders. This potential inadequacy in the record system, or indeed low rates of detection of animal cruelty offenses, was addressed by examining self-reported animal cruelty in a sample of sexual homicide offenders in greater detail through the use of a structured interview questionnaire. This led to Part 2 of Study 3, which attempted to establish whether a history of animal cruelty would be reported by a subset of homicide offenders who had performed sexual homicides. It was observed that not only were the sexual homicide offenders in Part 2 of

this study more likely to abuse animals as both children, adolescents, and adults, but they also reported abusing animals more frequently than a matched non-offender comparison group. The high incidence of animal cruelty in sexual homicide offenders, which is congruent with the observations of previous researchers (e.g., Giannopolous, 1994; Keppel & Walter, 1999; Ressler et al., 1988), suggests that, at least for sexual homicide offenders, there may be a link between animal cruelty and subsequent homicide behavior. Equally important, the animal cruelty reported by offenders was not recorded on a law enforcement database in 95% of cases. This suggests that rather than no link being present between homicide and animal cruelty as observed in Part 1 of Study 3, it is more likely that homicide offenders are not being identified by law enforcement agencies for performing animal cruelty offenses (Clarke, 2002, 2003).

Interestingly, this research demonstrated that homicide offenders had criminal records for a diverse array of offenses. Upon more detailed examination, these offenses can be grouped according to a number of common themes. The most common offenses display a lack of long-term planning and a willingness to profit at other individuals' expense. Stealing, assault, and driving offenses all indicate spontaneous types of criminal behavior, as do drug offenses which may have been linked to the commission of a number of the homicides. It also seems that these individuals were not hesitant to assault police, or to illegally use firearms. It could be argued that these high-frequency offenses are indicative of a more general trend toward impulsive behaviors, in which poor behavioral controls are displayed. These characteristics have been associated with a lack of responsibility and early behavioral problems (such as animal abuse) by Hare (1991). These findings further highlight the surprising lack of documented animal cruelty in the offenders' criminal histories, suggesting that this is an element of these individuals' behaviors that goes unnoticed by law enforcement.

The implications of these research findings are potentially far reaching for law enforcement agencies. First, in light of the discrepant findings between Parts 1 and 2 of Study 3, it would appear that detection and/or prosecution of animal cruelty instances when homicide offenders are children, adolescents, and adults is not occurring. This is supported by the observation that only one sexual homicide offender had a record of animal cruelty, yet all sexual homicide offenders, when surveyed,

reported being cruel to animals. This suggests that detection procedures used at present in relation to animal cruelty are inadequate.

Implications of the Present Findings for the Investigation of Violent Crime. The NSW Police Animal Cruelty Research Project has a number of implications for both the prevention and investigation of both serial and violent crime. Specifically, offender profiling of such offenses as homicide, sexual assault, arson, stalking, and child abuse, to name but a few, would benefit a great deal from law enforcement agencies having more information about animal cruelty.

Offender profiling involves inferring personality characteristics from crime scene behaviors. Given the research findings that people who are cruel to animals are also more likely to be involved in a variety of serious and serial violent crimes, a database of animal cruelty offenders would be highly useful.

One aim of offender profiling is to prioritize a large number of suspects identified by police as potentially being responsible for a particular crime. Prioritization of suspects ensures that the actual offender is identified as quickly as possible from the list of possible suspects identified by criminal intelligence and other law enforcement techniques. Given that animal cruelty is statistically infrequent in most populations when compared with violent offender populations, it provides a useful marker to identify high-priority suspects in violent crime investigations.

Offender profiling research (e.g., Clarke, 2003; Clarke & Shea, 2003; Keppel & Walter, 1999) also suggests that individuals who perform sexual homicide and sexual assault crimes, for example, are also likely to display convictions for trespassing, peeping, fetishistic burglary, telecommunications offenses (telephone scatologia), and other sexual paraphilia-related convictions. These sexual paraphilia-related convictions are not statistically infrequent in offender populations. However, individuals with a combination of animal cruelty and these sexual paraphilia-related convictions are statistically infrequent. Therefore, these individuals may be identified by an offender profiler as high-priority suspects in the investigation of sexual assault and sexual homicide crimes, for example (see *Bestiality and Zoophilia* by Beetz, this text).

Unfortunately the operational usefulness of this offender profile characteristic is reduced because it is often the case that very few or no animal cruelty convictions are recorded on the law enforcement

database being used. Certainly the NSW Police Research Project suggests that animal cruelty convictions recorded on one law enforcement database do not represent the true rate of animal cruelty in one group of sexual homicide offenders. While further research is necessary to establish whether similar underreporting is occurring for other types of crime (which one suspects is highly likely given clinical research findings discussed in this and other chapters), law enforcement databases need to capture all instances where people display cruelty to animals for use in subsequent investigation of crime. An example of an investigation where the recording of an animal cruelty conviction aided in the timely identification and arrest of a serial rapist is provided below.

Offender Profiling Case Study. *In 2001 a violent sexual assault took place in Sydney, New South Wales. An offender profile was developed, and the profile stated that the offender was an anger-hostility type offender who would most likely display animal cruelty, and have convictions for domestic violence, assault, drunk and disorderly, as well as minor sex offense convictions. Investigators prioritized all identified suspects based on the profile information, and a very small number of suspects emerged at the top of the suspect list with convictions for animal cruelty offenses and sexual paraphilia-related offenses, in addition to convictions for assault and domestic violence. After extensive investigation of each "high priority" suspect, DNA evidence indicated that one of the high-priority suspects may be responsible for the sexual assault. What is important from the point of view of animal cruelty is that the few offenders identified as "high priority" were differentiated from the remainder of the suspects based on their history of animal cruelty. It could arguably be said that it was good fortune rather than good management that the identified offender had a recorded conviction for animal cruelty. The fact that he did resulted in him being identified, arrested, and charged much more quickly than would otherwise have been the case. Ultimately the swift arrest of the offender may have prevented another victim from being sexually assaulted, in addition to providing some closure for his victim when he was convicted for the offense.*

As a result of both the offender profiling experience and the issues identified in the NSW Police Animal Cruelty Research Project, a number of recommendations were made. First, it was recommended that a

national database be established to record all animal cruelty incidents. Contributors to this database should be veterinarians, the Department of Agriculture, RSPCA, Health Department, Child Welfare agencies, Department of Community Services (government child welfare protection agency in NSW), National Parks and Wildlife Service, the Department of Education, and other relevant agencies. This database would ensure the maximum possible number of animal cruelty incidents are recorded and therefore available to investigators.

Second, the research identified that effective liaison systems could be implemented to allow better communication between various departments who deal with animal cruelty so that no information is lost between "bureaucratic cracks."

Third, it was recommended the judiciary be informed about links between animal cruelty and other forms of criminal behavior. This was to ensure that any bail hearings, sentencing hearings, etc., adequately reflect the potential dangerousness of offenders.

Fourth, it was recommended that all police officers be educated about the links between animal cruelty and other forms of criminal behavior during their initial training. This recommendation was based on anecdotal evidence that some police officers see animal cruelty as a "minor" crime that is more a matter for the RSPCA than the police.

Fifth, it was recommended that a decision process model be developed for police officers who may encounter different types of animal cruelty. Officers could use the decision process model to categorize the type of animal cruelty, and then evaluate offender dangerousness level both for officer risk assessments (given the high rate of resisting arrest and assaults on police officers performed by animal cruelty offenders) as well as other potential crimes (domestic violence, firearms, drugs, sexual assault, homicide). It is important that future research investigate whether different types of animal cruelty are associated with different types of crimes.

Finally, in the interests of early intervention, it was recommended that joint teams be set up between police, Departments of Health, Departments of Community Services, and animal welfare organizations to evaluate the cognitions of children and adolescents who have been identified as animal cruelty offenders. This evaluation could involve detailed, structured interviews investigating such facets as children's escape mechanisms

from reality (i.e., fantasy and play patterns), and symptomatology of such psychopathologies as conduct disorder and oppositional defiant disorder. A risk assessment matrix could identify children for whom early intervention may be valuable in possibly preventing subsequent violent or antisocial behavior.

Summary and Conclusions

In this chapter, we have reviewed a breadth of research relating to animal welfare and cruelty issues as they relate to the Australian context. In recent years, several trends have been apparent. First, it is increasingly being recognized by proponents of animal welfare that animal cruelty is not given the recognition that it deserves by legislators or the judiciary. This has brought about a call for more serious sentencing of animal abuse crimes and for mandatory reporting of animal abuse by veterinarians. It appears, however, that there is still some way to go before mandatory reporting is accepted by Australian veterinarians. Certainly, incorporation into the Australian veterinary training curriculum of specific information regarding the diagnosis of cruelty and appropriate responses to its identification is essential if mandatory reporting is to be perceived as a viable requirement. We have also reviewed Australian research that provides additional empirical support for the proposed link between animal abuse and human violence and criminal behavior. The Australian data demonstrating a high degree of co-occurrence between family violence and animal abuse are concordant with data from international studies. More importantly, however, we have reported data derived from police records in two Australian states (namely Victoria and New South Wales). These data demonstrate that animal abuse is predictive of other criminal behaviors including violent crimes. On the basis of the reported outcomes of the Australian research reviewed, we echo the calls made by others (e.g., Arkow, 2001; Arluke et al., 1999; Ascione, 2001b; Flynn, 2000a) for a coordinated response to identified animal cruelty. There also needs to be increased attention given to developing profiles of animal abusers across developmental stages. More thorough understanding of the role played by animal abuse within families is also needed. In line with the general emphasis, in recent times, on the promotion of mental health through primary prevention, developing a comprehensive knowledge of important

screening variables is essential to any successful prevention effort.

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