

## This job is the PITS: Perpetration Induced Traumatic Stress (PITS) in Animal Care Workers

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### Abstract

This study explores whether perpetration-induced traumatic stress (PITS) exists in animal care workers required to euthanase animals in their occupations and, if so, whether the symptoms are influenced by a number of factors. The sample comprised of 148 animal workers, including veterinarians, veterinary nurses, researchers and animal shelter staff. Participants completed a questionnaire that measured traumatic stress, satisfaction with social support, degree of training and attitudes towards animal death. Eleven percent of the sample reported experiencing moderate levels of traumatic symptomatology. Lower levels of stress were associated with increased satisfaction with social support and the length of time spent working with animals. Those who reported high levels of concern about animal death reported higher levels of euthanasia-related stress. Interestingly, even though reasons for administering euthanasia differed significantly between occupational groups, occupational context was not associated with different levels of stress symptoms.

### Introduction

Many individuals enter animal-based occupations because of their love of animals (Arkow, 1985). However, very few are prepared for the fact that one of their duties may be to kill these animals. Perpetration-induced traumatic stress (PITS) is a term used by some researchers to describe a particular type of stress that results from active participation in traumatic events such as causing death (MacNair, 2002). Preliminary evidence suggests that animal workers may be susceptible to this kind of stress. PITS symptoms such as sleeping disturbances, difficulty concentrating as well as distressing and persistent recollections of the event have been reported by a number of animal workers (Arluke, 1992; White & Shawhan, 1996). Despite these reports however, there has been no standardised measure used on these workers to substantiate such findings. The aim of this project was to investigate whether PITS exists in a sample of animal workers from veterinary clinics, research laboratories and welfare shelters. If symptoms were found to exist, the relationship between traumatic stress symptoms and various factors would be explored.

### Method

One hundred and fifty participants were recruited from various veterinary clinics, humane societies and University laboratories within metropolitan Melbourne. Each participant completed a questionnaire, which included a measure of traumatic stress called the Impact of Event Scale (Horowitz, Wilner & Alvarez 1979). Participants were directed to consider each item in relation to their experiences with the euthanasia of animals. The questionnaire also included items asking participants to provide details of the context in which they are involved in the euthanasia of animals, their current level of exposure to euthanasia, level of training, their attitude towards animal death and their current levels of satisfaction with social support received from a number of sources.

### Results

Traumatic stress in animal workers

Scores were calculated to identify participants experiencing significant levels of traumatic stress. These calculations indicated that while the majority of participants reported symptoms that fell within the subclinical (50%) to mild range (39%), 11% of the sample reported symptoms within the moderate range of symptomatology.

#### Context of euthanasia

Participants were asked to indicate the main reasons for euthanasia in their workplace. The responses are summarised in the Table 1.

**Table 1**

*Percentage of time euthanasia occurs for each reason by occupation*

Context of Euthanasia				
	Private Vet	Private Vet Nurse	Humane Society Staff	Research Staff
	%	%	%	%
Sick	97.4	100.0	100.0	53.8
Old	92.1	95.7	91.9	38.5
Behavioural	81.6	63.8	89.2	11.5
Unwanted	42.1	40.4	73.0	30.8
Experimental	0	0	5.4	96.2

Table 1 indicates that nearly all veterinarians, veterinary nurses and animal shelter staff report killing animals because they are sick and/or old. Research staff report this as a reason for euthanasia less frequently. Nearly 90% of shelter staff also report killing animals for behavioural problems. This was also identified as a reason for euthanasia by many veterinarians, but less frequently by veterinary nurses and quite uncommonly by research staff. As expected, a high percentage of animal shelter staff report killing animals simply because they are unwanted.

#### Level of exposure to euthanasia

Participants were asked to indicate the length of time they had spent working in their current occupation. This information is summarised in Table 2.

**Table 2**

*Percentages of length of time spent working with animals.*

	%
0-6 months	6.8
6-12 months	4.8
1-3 years	17.7
3-6 years	21.8
More than 6 years	49.0

As is evident in Table 2, most participants in this study report working with animals for over 6 years. Thus, the level of exposure to euthanasia of the participants is substantial.

#### Level of Training

The number and percentage of participants who indicated that they had received training in various areas is presented in table 3 below.

**Table 3**

*Frequencies and Percentages of Participants who had received Formal or Informal Training*

	YES	
	N	%
Animal handling	134	90.5
Animal husbandry	108	73.0
Animal welfare issues	12	32.4
Stress management	39	26.4
Grief counselling	39	26.4

From table 3 it can be seen that animal handling and husbandry were the most common forms of training received by participants in this sample. Training in stress management and grief counselling were less common, being reported by just over one quarter of the participants.

#### Satisfaction with Social Support

Social support was measured by asking participants how satisfied they were with various sources of social support. Results indicate that participants were slightly less satisfied with the social support provided from their employer than they were with that provided by other sources. Interestingly, the animal care workers in our sample were most satisfied with the social support received from their pets.

#### Factors associated with traumatic stress symptoms

Statistical analyses were calculated to identify relationships between traumatic stress symptoms and various factors. Traumatic stress symptoms were related to level of exposure to euthanasia and satisfaction with social support. It was apparent that participants employed for a shorter period of time reported more stress than those who had been employed for many years. It was also evident that participants with higher levels of social support were less likely to report stress symptoms. Analyses also revealed that participants who reported a general concern for animal deaths were more likely to report stress than those who did not report concern over animal deaths.

#### Occupational Context

Given that the reasons for killing animals were found to vary quite markedly across occupational contexts the variation of stress levels across occupations was examined. Interestingly, stress symptoms did not vary across occupational contexts.

#### Discussion

The aim in this project was to investigate whether PITS existed in a sample of workers from veterinary clinics, research laboratories and humane societies. It was found that 11% of the sample reported significant PITS symptoms. Although a standardised measure of traumatic stress has not previously been applied to a sample of animal workers, previous qualitative research has indicated that animal euthanasia can evoke traumatic stress reactions in some occupations (Arluke, 1992; White & Shawhan, 1996). This quantitative study therefore confirms animal workers reports of experiencing traumatic stress symptoms.

Relationships between PITS symptoms and various factors were also revealed. PITS symptoms were related to time spent in animal based occupations, satisfaction with social support and concern over animal deaths.

Traumatic stress symptoms diminish with time spent working with animals and many participants did not report any traumatic symptoms at all. This finding suggests that exposure to euthanasia-related stress may foster coping strategies (Epstein, 1983). Alternatively, individual differences might mitigate the experience of stress, or selection may occur whereby those that are traumatically affected by euthanasia at the beginning of their animal career leave the occupation. A fruitful avenue of research would be to conduct a longitudinal study measuring PITS in participants as they progress through their occupation. Testing would begin as they enter the occupation in order to determine whether the novice animal worker experiencing high levels of PITS leaves the occupation or learns appropriate coping skills.

Satisfaction with social support was related to decreased levels of PITS. This finding replicates previous studies that suggest social support acts as a buffer against stress (Cohen & Wills, 1985; Leavy, 1987). It was interesting that the highest perceived level of social support concerned pet animals, while the lowest perceived level of social support involved workplace supervisors. Again, this is an area where education programs for supervisors may be required.

It was found that PITS symptoms did not vary across occupations. This is despite the observation that animal shelter workers are more likely to euthanase healthy, unwanted animals compared to veterinary staff and laboratory personnel. This finding may be explained by the fact that many animal workers, animal shelter workers, veterinary staff and research staff alike, report that they enter their prospective occupations because of a love of animals (Arkow, 1985; Arluke, 1992; Chang & Hart, 2002; White & Shawhan, 1996).

Increased levels of training did not reduce the reported stress symptoms. This suggests that the length of time exposed to the stressor may be more important than short-term training in promoting the development of appropriate coping strategies. It should be noted, however, that only a quarter of animal care workers had specifically received training in grief counselling and stress management. Given the risks of PITS, this is an area where targeted educational programs should be developed and implemented.

This study has several practical implications. First, this study establishes perpetration-induced traumatic stress as a valid avenue of study in animal care workers. Second, it establishes that social support and experience are important determinants of how well animal workers cope with stress. Third, this study suggests that recruiters should not necessarily select animal care workers who exhibit

strong opposition towards animal deaths. These individuals may have acquired appropriate skills to manage their stress and have developed solid relationships with friends, family and previous colleagues.

Some caution must be taken in interpreting the results from this study. Most importantly, the direction of causality cannot be established from this design. It may be that concern over animal deaths fosters traumatic stress, or conversely, that experiencing stress promotes concern over animals. This issue could be resolved by conducting a prospective, longitudinal survey of animal care workers.

In conclusion, 11% of the sample reported significant PITS symptoms. The fact that some individuals suffer PITS and others do not indicates the importance of investigating risk and protective factors. Time spent working with animals was associated with reduced levels of PITS symptoms suggesting that experience may enable an individual to develop appropriate coping strategies. Social support may also buffer against PITS symptoms. Occupational context and the attainment of training were not related to PITS symptoms but future research is required to address additional factors mediating stress symptoms among animal workers. Additional research should also specifically address the occurrence of PITS in persons who work with animals in other context. This may include Urban Animal Management officers, meat processing plant employees and farm workers,

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