



THE UNIVERSITY OF QUEENSLAND  
AUSTRALIA

**Occupational Stress & Compassion Fatigue:  
The effects on workers in animal-related occupations.**

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School of Veterinary Science*

## **Abstract**

The study of occupational stress and compassion fatigue in personnel working in animal-related occupations has gained momentum over the last decade. The impact of these conditions on employee mental wellbeing, workplace productivity and morale is notable and has become more recognised by those who are employed in animal-related occupations. However, there remains incongruence in understanding what is currently termed compassion fatigue and the associated unique contributory factors. Animal-related occupational stress and compassion fatigue are important issues as they can have such a negative impact on people. However, they are largely overlooked in the animal health sector and to date, are very much under researched.

There is a need to build a body of evidence-based knowledge in this area and the aims of this thesis are to begin to address gaps in the literature. The overall aim of this thesis was to conduct a number of projects in order to investigate, describe and quantify factors relating to euthanasia induced stress and, occupational stress and distress associated with working in animal-related occupations. Participants included those working as laboratory animal technicians, veterinary nurses and veterinarians, animal shelter employees, animal control officers and ancillary staff such as receptionists, volunteers and foster carers.

To initially scope and explore the area of animal-related occupational stress and compassion fatigue, a systematic review of euthanasia in animal care workers was conducted. This review showed that there is a high incidence of occupational stress and euthanasia induced stress in animal health care personnel. Working with animals, and performing euthanasia, can evoke traumatic stress responses and compromise the wellbeing of animal health care employees.

To further tease out the context and consequences of euthanasia and occupational stress, a survey which relied on the ProQoL was conducted. This research showed that whilst most people who work in animal-related occupations experience average or above average compassion satisfaction from the work that they do every day, they also report experiencing the negative aspects of caring such as burnout and secondary traumatic stress. Veterinarians and animal research technicians reported the lowest level of compassion satisfaction. A greater risk of burnout was shown by those who had been working in an animal-related occupation for longer and women were reported as facing a greater risk of secondary traumatic stress than men.

Furthermore, focus group interviews were utilised to capture the highly contextualised, emotive expression of employees in regard to the impact of euthanasia and working in animal-related occupations. 'Stress and distress' was overwhelmingly identified as a factor most associated with working with animals. Animal attendants and nurses working in animal shelters reported the highest level of stress and distress followed closely by those in management roles in animal shelters and veterinary nurses working in emergency practice. Further analysis revealed that whilst there were many similar contributing factors causing the stress and distress between the occupations, there were also specific contextual differences.

A key finding of this study was the resounding positive link between engaging in social support and communicating with like-minded people; those who share common goals and similar stressors.

Descriptive data pertaining specifically to the role of management in combating or addressing occupational stress and compassion fatigue gained perspectives and perceptions was elicited directly from those employed in managerial roles. When comparing the sub-themes identified from each of the employee focus groups with those identified from the management focus group, an overlap of common themes suggests that those working in management roles in animal-related occupations are equally susceptible to stress and distress as those who work under them. Thus, those working in managerial roles also represent an at-risk group for developing occupational stress and compassion fatigue.

An obligation to impart knowledge and create an awareness of compassion fatigue should be foremost for all who work in an animal-related occupation, particularly those who are most at risk. In being able to discuss thoughts, feelings, emotions and experiences with like-minded people, participants who contributed to this thesis received tangible evidence that they are not alone in their feelings and, that their reactions, both emotional and behavioural are often mirrored by their colleagues, regardless that they may not be evoked by the exact same events or situations.

Future research should include longitudinal studies at both an individual and organisational level to evaluate coping mechanisms and strategies employed that may prevent clinical symptoms of occupational stress or compassion fatigue and contribute to employee longevity. Investigations of improved education and awareness as well as research in education and facilitation of the development of all staff in emotional intelligence and emotional resilience needs to be conducted.

Results from this thesis should inform the development of resilience training programs and preventative strategies specifically targeted towards those working in animal-related occupations. Research which implements and investigates the effects of these structured prevention and intervention programs would also be a priority.

## **Declaration by author**

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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### **Publications during candidature**

A systematic review of the effects of euthanasia and occupational stress in personnel working with animals in animal shelters, veterinary clinics and biomedical research facilities. *Journal of the American Veterinary Medical Association (JAVMA) 15<sup>th</sup> November, 2015*

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A systematic review of the effects of euthanasia and occupational stress in personnel working with animals in animal shelters, veterinary clinics and biomedical research facilities. *Journal of the American Veterinary Medical Association (JAVMA) 15<sup>th</sup> November, 2015. Erratum JAVMA 1<sup>st</sup> February, 2016* – incorporated as Chapter 2.

<b>Contributor</b>	<b>Statement of contribution</b>
Mrs Rebekah Louise Scotney	Wrote the paper (90%)
Assoc. Prof Deirdre McLaughlin	Edited paper (5%)
Dr Helen Keates	Edited paper (5%)

### **Contributions by others to the thesis**

I acknowledge that my current advisory team comprising Associate Professor Deirdre McLaughlin and Dr Helen Keates contributed to the conceptualisation and design of this project. I would like to acknowledge the contribution of Akilew Adane with data entry work and Assoc. Prof Deirdre McLaughlin for assistance with statistical analysis, for Chapter 3. There were no other significant contributions to data entry, data analysis or drafting written material. All advisors had the opportunity to peruse and comment on chapter drafts.

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Lastly, I pay tribute to my Dad – Alwyn John Wilson - my biggest fan and greatest inspiration. Always in my heart.



***You have created a ripple in an unknown sea  
Those ripples will turn into waves to stir the  
depths of unopened minds.***

***You have created a tide of change that will  
touch many shores  
Bringing silent thoughts alive.***

### **Keywords**

Animal, euthanasia, occupational stress, compassion fatigue

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# Chapter 1

## **Introduction**

Compassion fatigue is the most recently recognised type of secondary traumatic stress in the field of traumatology (Figley 2002). Figley (2002) states that compassion fatigue is a more descriptive term than secondary traumatic stress disorder, which is nearly identical to post-traumatic stress disorder, except that it applies to those emotionally affected by the trauma of another individual (usually a client or family member). For those who work in animal-related occupations, this phenomenon is associated with the ‘cost of caring’ for animals.

Whilst stress, burnout and compassion fatigue have been studied extensively in the human health care sector, there are many gaps in published research and literature in relation to those who work or volunteer in the animal health-care sector. The current literature on compassion fatigue in animal-related contexts is limited to mostly anecdotal reports, a couple of books that are well respected within the animal care community and, a small collection of research studies. Stress, burnout and compassion fatigue pose serious risks to the health and wellbeing of all animal carers. Thus, in order to fully understand these occupational hazards further research must be carried out in order to build on the limited pool of evidence-based research that may then inform the design and implementation of effective prevention and intervention programs.

As outlined in the comprehensive PRISMA systematic review of existing literature and current research in Chapter 2, the diversity in study design and disparity of terminology has made it difficult to determine whether occupational stress equates to compassion fatigue or, at what point occupational stress transforms into compassion fatigue. Furthermore, what particular and contextual factors within the various categories of animal-related occupations, specifically contribute to stress, burnout and compassion fatigue.

The literature described in Chapter 2 consistently stated that working with animals (and performing euthanasia) can generate traumatic stress reactions which compromise the wellbeing of many animal care workers. It also reported the use of various strategies and coping mechanisms used by employees across the many fields of animal care. However, the evidence for efficacy of these methods and strategies requires evaluation. Resources such as editorials and self-help books

(Mathieu 2012, Ayl 2013), webinars and on-line fora provide information to assist people experiencing compassion fatigue. Also, literature is available on resiliency training and other wellness programs which are thought to help combat compassion fatigue. Many of these works appear to include strategies adapted in a generalised fashion from other forms of mental health afflictions such as post-traumatic stress disorder and where research was conducted in other occupational contexts including human health care and business management. Whilst more generalised literature on stress management may be useful, to the author's knowledge, there has been no peer reviewed evidence-based research on the effectiveness of these strategies in managing compassion fatigue in animal-related occupations. As such, there is little empirical evidence to either support or dispute their effectiveness, nor identify any potential need for modification when applied to potentially traumatic situations that are distinctly unique to those exposed to animal suffering and euthanasia. This thesis aims to identify contextual factors which cause stress, burnout and compassion fatigue in animal-related occupations, which is ultimately required to inform more targeted and effective preventative programs and management strategies. Programs and resources which may be developed as a result of this thesis should be initiated and concurrently evaluated by rigorous scientific methods to assess efficacy over time.

The purpose of this thesis was to review the current, sometimes confusing, use of terminology associated with stress and compassion fatigue in animal-related occupations. Existing research on occupational stress and compassion fatigue in those working in animal-related occupations was explored to enable assessment of evidence regarding the prevalence of compassion fatigue and to identify known contributing factors. Initially, this necessitated a review of current human health care literature to apply this existing knowledge to the context of animal health care. The systematic review of literature pertaining to occupational stress and euthanasia-related strain mentioned earlier further informed the direction of this thesis.

This research contributes to the current knowledge surrounding compassion fatigue from the perspective of animal-related occupations with an emphasis on Australia, and provides further contextualised evidence of contributing factors, coping strategies employed by individuals as well as further conceptualising the role and importance of communication in assisting to combat stress, burnout and compassion fatigue. This information may ultimately provide positive contributions to the mental (and physical) wellbeing of those who work in animal-related occupations.

Drawing upon evidence gained from reviewing the literature, the empirical research component was designed to achieve four goals. Firstly, to establish the prevalence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations in Australia using a validated quantitative survey tool (ProQoLv5 – Stamm 2010). Compassion fatigue and burnout are described as overlapping (Figley 2003, Alkema et al. 2008, Potter et al. 2010). However, they are also recognised as two distinct concepts which contribute to a decline in the mental wellbeing of those who suffer from them. These negative aspects of working with animals are referred to as the ‘cost of caring’. Conversely, compassion satisfaction refers to the emotional rewards or gratification received by animal carers through the work they undertake every day; the ‘payment of caring’. Negativity bias refers to the concept that, things of a more negative nature (e.g. unpleasant thoughts, emotions, or social interactions; harmful/traumatic events), even when of equal intensity, have a greater effect on one's psychological state and processes than that of neutral or positive things (Rozin and Royzman 2001). This supports the need to investigate the apparent compensatory and protective mechanism of compassion satisfaction against burnout and compassion fatigue; this is described in Chapter 3.

As all animal-related occupations are intricately involved with caring and compassion; they abound with feelings and emotion. Relying on quantitative methods alone would prevent capture of more diverse perspectives, thoughts and feelings of those working, not only on the frontline of animal care, but also ancillary staff who are not immune to the negative aspects of animal health care. It is known that not every person is affected in the same way by the same events or situations (Lees and Ellis 1990, McVicar 2003). A specific event or situation which one person finds stressful, distressing or traumatising may not evoke the same response in someone else. Therefore, the second goal of this research was to specifically scope the issue of stress and distress in animal-related occupations in Australia by gathering information directly from workers on their perception of work related stressors including euthanasia, perceived workload and management issues, and any other potential contributory factors. Whilst patterns appeared evident in existing literature, due to the variability of research methods, it remained difficult to ascertain consistent trends across multiple occupations. Consequently, there is some contradictory evidence that requires further investigation. Furthermore, there is limited available evidence which identifies any beneficial outcomes in terms of preventative strategies or programs specific to animal-related occupations; this also represents a major gap in the literature. Chapters 4, 5 and 6 employ a standardised approach to researching and analysing qualitative data (specifically, using focus groups) which explores the intricate interactions, thoughts and feelings between individuals

and, their work environment, the work they do specifically and, the people and animals they interact with on a daily basis that contribute specifically to stress and distress. Included throughout this thesis are comments and statements that the researcher found particularly poignant and important to emphasise to the audience of this work; these are presented in boxes at the beginning or end of each Chapter. The themes identified in Chapter 4 recur in other Chapters of this thesis as well as being generally present in existing knowledge (Arluke 1991, White and Shawhan 1996, Reeve, Spitzmuller et al. 2004, Reeve, Rogelberg et al. 2005, Rohlf and Bennett 2005, Rogelberg, DiGiacomo et al. 2007, Baran, Allen et al. 2009, Baran, Rogelberg et al. 2012).

The third goal of this research was to assess the contextual differences in relation to working in various animal-related occupations in Australia. Current literature highlights that those who work in animal-related occupations, particularly those who must actively participate in euthanasia and those who experience the trauma and suffering of animals, are potentially at risk of mental health issues (White and Shawhan 1996, Reeve, Rogelberg et al. 2005, Figley and Roop 2006, Foster and Maples 2011). Chapter 5 draws from the focus group interviews to explore in depth the contextual differences and similarities that assist in a better understanding of the contributing factors of occupational stress pertinent to each occupational category. Furthermore, it examined the way in which stress commonly manifests in different people across different occupations and outlines the various coping mechanisms employed by those in animal health care. Implications and suggestions for future research are also discussed.

The fourth and final goal of this research was to explore the perception of those in management positions in relation to occupational stress and compassion fatigue. In any organisation, institution or facility there is an expectation that there will be forward thinking, proactive and supportive management of all issues that relate to the core business of that enterprise. Occupations in which high-risk tasks and duties are identified warrant particular occupational health and safety policies and protocols to be put in place to prevent, minimise or control adverse events from occurring as a result of having to perform these tasks (Michie 2002). Chapter 6 explores not only the role of management but also the impacts of working in the animal care field on managers and supervisors themselves. There is a gap in the literature pertaining to the negative effects of occupational stress and compassion fatigue experienced by those working in management roles that needs to be examined. Managers are not often involved in the day to day, on the ground tasks that have high negative impacts on employee mental health. However, they are intrinsically involved in the decision making process in regard to animal life, be it in a shelter

environment, biomedical research facility or veterinary clinic thus, the impact of their individual or group decisions on staff, clients, colleague and so forth can have a direct impact on them personally. Neither this link nor its effects have been investigated to any great extent previously.

Additionally, the role of management in identifying contributing factors to occupational stress and compassion fatigue and, the responsibilities they have in addressing issues was investigated. The role of management from both the managers' perspective and that of employees was incorporated, specifically looking at managing existing stress and distress, developing or incorporating mechanisms to prevent and combat compassion fatigue and, provision of or access to, appropriate social and structured support systems. Again, this Chapter discusses suggestions for future research and implications for practice.

The importance of focused and contextualised investigations into occupational stress and compassion fatigue cannot be over-estimated. The impact on the mental health and wellbeing of those working in human care-giving roles has been the focus of research for many decades. Similar focus for those working in animal care-giving roles has been largely under-represented. Perhaps this is due to a perception of 'animal work' not being as stressful as 'people work' and thus those working in animal-related occupations are not considered particularly at-risk. However, the current available evidence supports the notion that working in animal-related occupations can be stressful and traumatic and as such is a major concern that requires dedicated investigation. This research presents the only known mixed methods evaluation of occupational stress and compassion fatigue in those working in animal-related occupations in Australia. It is the first investigation looking at specific contributing factors to the stress and distress experienced by those who work directly with animals, including volunteers and animal foster carers. Those who are employed in management and supervisory roles and, ancillary staff such as receptionists, are also included in investigations. This research unveils various coping mechanisms utilised by employees and, elicits employee opinion on how compassion fatigue should be addressed.

## Chapter 2

**Published as: A systematic review of the effects of euthanasia and occupational stress in personnel working with animals in animal shelters veterinary clinics, and biomedical research facilities**

*Only compassionate, empathic, loving and caring people suffer from compassion fatigue; the very people who are so vital to the animal-care field*  
– Charles Figley, 2006

The study of occupational stress and compassion fatigue in personnel working in animal-related occupations has gained momentum over the last decade. However, there remains incongruence in understanding what is currently termed compassion fatigue and the associated unique contributory factors. Furthermore, there is minimal established evidence of the likely influence of these conditions on the health and wellbeing of individuals working in various animal-related occupations. The study reported in this chapter was conducted in order to assess currently available evidence and terminology regarding occupational stress and compassion fatigue in personnel working in animal-related occupations by reviewing the current relevant literature. This literature review revealed disparity of nomenclature and a lack of consistent and validated data collection tools which perhaps contribute to the general misunderstanding and confusion surrounding unique stressors to which those working with animals are exposed. This provides little foundation from which to identify consistent contributing factors and subsequent outcomes which could otherwise be used to develop evidence-based prevention programs.

The review emphasised the high incidence of occupational stress and euthanasia-related strain in animal care personnel which is of considerable concern to all animal-related occupations. Furthermore, it revealed the need for more extensive research to investigate animal caregiver wellbeing over time as conducted and reported on in chapters 3 through 6 of this thesis.

## **Introduction**

In 1992, Carla Joinson a registered nurse, introduced the term compassion fatigue while studying burnout in emergency department nurses. Joinson stated; ‘compassion fatigue is a unique form of burnout which affects people in caregiving professions; where burnout is overpowering, invasive stress that can begin to dominate us and interfere with our ability to function’ (pp 116). Since then, there have been many studies published evaluating compassion fatigue in the human health care field (Figley 1995, Stamm 1997, Stamm 1999, Rubel 2004, Wu et al. 2007). Each study used either new definitions or variations and permutations of the existing nomenclature associated with occupational stress.

Subsequently in 1995 Charles Figley described compassion fatigue as equivalent to secondary traumatic stress, and defined compassion fatigue as the caregiver’s reduced capacity or interest in being empathic or “bearing the suffering of clients;” and being “the natural consequent behaviours and emotions resulting from knowing about a traumatising event experienced or suffered by a person” (pp7). There is a substantial body of evidence of occupational stress in personnel working in human health care and, to a lesser extent, in animal health care. Professionals who work with people or animals, particularly those who are suffering, must not only cope with the normal stress or dissatisfaction of work but also with their personal feelings and emotional response to that suffering. This is suggested to result from a combination of exposure to several work environment factors (e.g. lack of resources) and employment conditions (e.g. role overload) and is thought to be cumulative; if not addressed, then feelings of physical and emotional exhaustion, depression, and reduced personal achievement may become a constant (Boyle 2011).

Individuals working in veterinary clinics, animal shelters, and research facilities perceive the euthanasia of animals for the relief of suffering, or for human convenience (e.g. controlling overpopulation, working within financial constraints, or within prescribed laboratory management parameters), as one of the main causes of occupational stress (White and Shawhan 1996, Frommer and Arluke 1999, Rohlf and Bennett 2005). Euthanasia within these occupational contexts may be a daily occurrence and discussions typically focus on topics such as the number of animals killed, the rationale for killing, or the methods used (Arluke 1991). There has been minimal exploration of the emotional effects of euthanasia on those working with or caring for these animals. In 2006, Figley wrote “Compassion Fatigue in the Animal Care Community;” this book was developed from his work within the human health care field and initiated the extrapolation of existing nomenclature being applied to caregivers in animal-related professions. However, consistent with

the human health care field, no agreed definition of compassion fatigue currently exists for animal care workers or veterinarians, creating confusion about the concept, as well as any differences that may exist between compassion fatigue and other forms of occupational stress. Within this area of study, where many terms, symptoms and conditions are often used interchangeably, this lack of definitional consensus contributes to the difficulty in identifying those who may be experiencing mental health issues induced or exacerbated by the work that they do. This further invites the question as to what specifically constitutes compassion fatigue for those who work in veterinary clinics, animal shelters and research facilities, versus in human health care, and whether the current interpretation of compassion fatigue is valid within these occupational contexts.

Compassion fatigue in animal-related professions is most often considered to be a direct result of the impact of euthanasia. However, evidence to date suggests that negative feelings are also induced by other common occupational stressors such as client financial constraints, employee workload, long-term care of patients with chronic diseases and, end of life care (Rollin 1987, Figley 1995, Stamm 1999, Figley and Roop 2006, Black, Winefield et al. 2011, Foster and Maples 2011, Baran, Rogelberg et al. 2012). Compassion fatigue and the associated negative feelings can also be compounded by feelings of failing a patient, the client, or both (Arluke 1991, Figley 1995, White and Shawhan 1996, Stamm 1999, Black, Winefield et al. 2011, Foster and Maples 2011, Baran, Rogelberg et al. 2012). There is increasing dialogue on occupational stigma and the negative perception of various animal-related work tasks including broadly, the decision to euthanize, the use of animals in research and the global push towards the ideals of no-kill animal shelters (Rohlf and Bennett 2005, Davies and Lewis 2010, Black, Winefield et al. 2011, Foster and Maples 2011, Baran, Rogelberg et al. 2012, Anderson et al. 2013). This stigma may further compound the effects of occupational stress and compassion fatigue and lead to emotional dissonance and the potential for emotional contagion not only between those directly involved in these tasks but also to ancillary and support staff such as receptionists and other office workers (Rohlf and Bennett 2005, Davies and Lewis 2010, Black, Winefield et al. 2011, Foster and Maples 2011, Baran, Rogelberg et al. 2012, Anderson et al. 2013).

Since the publication of Figley's book in 2006, there have been a number of studies on occupational stress, compassion fatigue, and secondary post-traumatic stress disorder in the animal care community. Predominantly, this research has been done in the United States and to a lesser extent in the United Kingdom. Furthermore, the majority of studies focused on the animal shelter and laboratory animal environments. As such, it may not be valid to directly apply the

results of these studies and the recommendations made by the authors to the veterinary and biomedical research fields worldwide.

Therefore, this review focuses on a subset of specific occupations in which people in animal-related occupations are affected by euthanasia-related stress and occupational stress. These occupations are categorized into 2 groups: companion animal carers (i.e. veterinarians, veterinary nurses and technicians, shelter workers, and animal control attendants) and laboratory animal carers (i.e. researchers and laboratory animal technicians). Whereas both categories have vastly different occupational contexts, strong evidence exists that little if any difference in levels of euthanasia-related stress and occupational stress symptoms occur between the two (Rohlf and Bennett 2005). In the authors' experience, most people who work in these areas do so because they love animals and feel an affinity with them. They are rarely aware of the extent to which they will be required to kill these animals. Those who work with animals where euthanasia is frequent suffer what Arluke has described as the "caring-killing paradox" (Arluke. A 1994). They experience moral stress.

The objectives of this study were to review the literature on occupational stress and compassion fatigue in workers in veterinary clinics, animal shelters, and research facilities, to enable assessment of currently available evidence regarding occurrence, contributing factors and to review the current use of terminology.

## **Methods**

Searches of published literature were conducted between January 17 and February 7, 2014, of ProQuest Research Library, ProQuest Social Science Journals, PsycARTICLES, Web of Science, Science Direct, Scopus, and PsycINFO databases as well as a search conducted through Google Scholar. The search protocol was determined prior to commencement including consensus of search terms. The search terms were: [euthanasia AND animals OR compassion fatigue AND animals OR occupational stress AND animals]. In addition, searches of the reference lists from each of the studies included in this review were conducted.

All articles were pre-screened by title and abstract for the following attributes: investigation of occupational stress or compassion fatigue in the animal or veterinary sector, use of quantitative, qualitative or mixed method techniques to investigate the incidence of

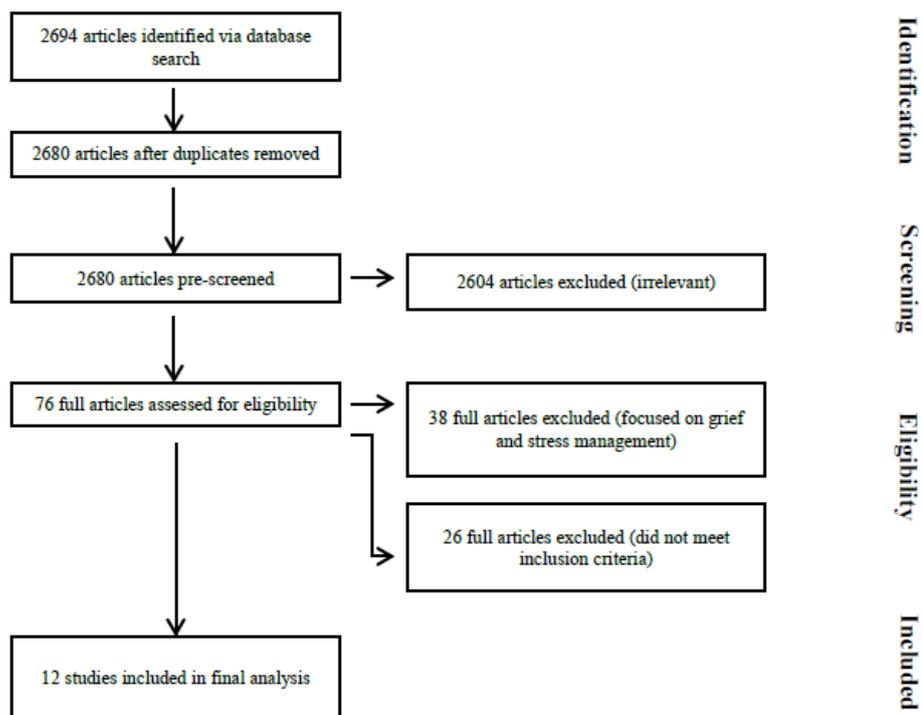
occupational stress or compassion fatigue, publication in peer reviewed journals, and publication in English.

Abstracts which initially appeared relevant were imported for later assessment of suitability. Each complete paper was sourced for review, read in full by the first author (RS), and subsequently reviewed by the other authors (DM and HK). Articles were excluded if they related to human health caregivers or if they described occupational stress or compassion fatigue but did not include any formal evaluations. Studies were excluded if they addressed an unrelated subject or focused on management strategies or coping mechanisms. There were no publication date restrictions placed on the search.

Because of the variability of study designs (quantitative, qualitative and mixed methods) a valid assessment of bias could not be conducted.

## **Results**

The searches identified 2,694 articles for review using the listed search terms. On pre-screening, 2,604 articles were identified as irrelevant. After elimination of 14 duplicate articles, 76 were identified for full review. Thirty-eight articles were found to be irrelevant because they focused on grief and stress management in general, while another 26 were excluded as they were related to human health caregivers, were editorials, did not include any formal evaluations or addressed a subject outside the scope of this review (for example, suicide). Twelve studies were retained for inclusion in the final analysis.



**Figure 1. Flow of information through study selection and inclusion process for a systematic review of occupational stress in people who work with animals in veterinary clinics, animal shelters and research facilities.**

There was considerable variation in research design within the 12 studies included in this review. The method of participant recruitment and the way in which data were analysed and reported also varied. Three studies used quantitative methodology (Reeve, Rogelberg et al. 2005, Rogelberg, Reeve et al. 2007, Black, Winefield et al. 2011), five were qualitative studies (Arluke 1991, Reeve, Spitzmuller et al. 2004, Rogelberg, DiGiacomo et al. 2007, Baran, Allen et al. 2009, Davies and Lewis 2010), and four used a mixed-method approach (Rohlf and Bennett 2005, Foster and Maples 2011, Baran, Rogelberg et al. 2012, Anderson et al. 2013). Two studies were conducted in Australia (Rohlf and Bennett 2005, Black, Winefield et al. 2011), and one study in the United Kingdom (Davies and Lewis 2010), with the remaining studies conducted in the United States.

Seven of the studies recruited participants from the animal shelter environment, whereas two evaluated veterinary nurses or technicians (Black, Winefield et al. 2011, Foster and Maples 2011). There were two studies that recruited participants from multiple occupations, including

animal shelter workers and animal control officers (Anderson et al. 2013) along with research technicians, veterinarians, and veterinary nurses (Rohlf and Bennett 2005), and one study that evaluated only biomedical research technicians (Davies and Lewis 2010).

## **Quantitative Studies**

Table 1 provides a summary of study objectives, research design and outcome measures from the three studies that were conducted using quantitative methodologies. The first formal evaluation of euthanasia-related strain was conducted in 2001 (wave 1 data) and 2002 (wave 2 data) and described by Reeve et.al. (Reeve, Rogelberg et al. 2005). Funded by the Humane Society of the United States, recruitment of individuals involved with animal welfare and control was undertaken at two consecutive annual Animal Care Expos in the United States. This cross-sectional study utilized a multi-section survey which included all or parts thereof from various assessment scales i.e. a Modified Euthanasia Attitude Scale developed from an Abortion Attitudes Scale (Roberts et al. 2000), Overall Job Satisfaction Scale (adapted) (Hoppock 1935), Job in General Scale (Ironside et al. 1989), Job Descriptive Scale (Smith, Kendall et al. 1969, Smith, Balzer et al. 1987), Work-Family-Conflict Scale (Gutek et al. 1991), Substance Use (Latack 1986), Euthanasia-Related Strain Scale (Rogelberg, DiGiacomo et al. 2007) and Somatic Complaints Scale (Derogatis et al. 1974). For those individuals engaged in animal euthanasia, there is a perception that euthanasia-related strain manifests in many diverse forms, from lack of concentration, to directly influencing feelings of happiness and self-worth. Whereas euthanasia-related strain is perceived as a qualitatively distinct type of work place stress, the intensity can both contribute to, and be influenced by, an individual's evaluation of overall job and life satisfaction. Findings suggest that euthanasia-related work is linked to a number of well-being outcomes of established significance in applied psychology (e.g. post-traumatic stress and vicarious trauma) (Reeve, Rogelberg et al. 2005).

Rogelberg et.al (Rogelberg, DiGiacomo et al. 2007) recruited animal shelters from throughout the United States to examine the effects of euthanasia rates, euthanasia practices, and human resource practices on the turnover rate of employees with euthanasia responsibilities. Congruent results were identified between this study and previous research which found that euthanasia typically has a negative impact on an individual's health and well-being (Arluke 1991, Figley 1995, White and Shawhan 1996, Stamm 1997, Reeve, Spitzmuller et al. 2004, Reeve, Rogelberg et al. 2005, Rohlf and Bennett 2005). With a survey instrument devised by the researchers, this particular

cross-sectional study (Rogelberg, Reeve et al. 2007) found a significant correlation between euthanasia rates and employee turnover index ( $r = 0.36, P < 0.05$ ) that is, higher euthanasia rates were associated with increased employee turnover. Conversely, euthanasia rates for cats were not related to employee turnover. This difference was attributed to the perceived level of the shelter worker's attachment to dogs being greater than that between the shelter workers and cats. Overall the objective of this study was to gain insight into how shelter practices might influence employee turnover and thus, examined euthanasia practices including availability of a designated room, absence of other live animals during euthanasia, and removal of euthanased animals prior to entry of another animal to be euthanased. An association between the use of these practices and a decrease in employee turnover was found ( $r = -0.36, P = 0.05$ ; and  $r = -0.33, P < 0.05$  respectively). In contrast, the presence of other live animals during euthanasia and, euthanasia of animals for non-medical or behavioural reasons such as breed, age, or pregnancy, was associated with increased employee turnover ( $r = 0.51, P = 0.01$ ; and  $r = 0.28, P < 0.05$  respectively). Although a number of robust predictors of employee turnover were identified, the study was limited in the ability to make causal inferences due to its cross-sectional nature, the variable employee turnover between shelters, no variation in euthanasia method and little variability in job rotation.

The first empirical study investigating occupational stress in veterinary nurses in Australia was published in 2011 (Black, Winefield et al. 2011). This study sought to determine which environmental aspects of the work situation may be detrimental to wellbeing and which factors may operate to reduce job stress. Participants completed a questionnaire based on demographics, amount of contact with clients, frequency of exposure to euthanasia, and perception of job demands, control, and support. The authors concluded that veterinary nurses were at notable risk for occupational strain because many reported working in a high demand-low control environment. The authors also concluded that there was strong evidence to suggest that the impact of high job demand and low job control may be counterbalanced by positive workplace social support systems. Interestingly, this study reported that greater attachment to one's own companion animal was associated with less job satisfaction rather than more.

**Table 1** Summary of Quantitative Studies (Reeve, Rogelberg et al. 2005, Rogelberg, DiGiacomo et al. 2007, Black, Winefield et al. 2011)

Source	Setting	N	Objective	Research Design	Outcome Measure
Black et.al (2011)	Veterinary Nurses	127	<ol style="list-style-type: none"> <li>1. To investigate levels of occupational stress in veterinary nurses, using measures and a theoretical framework</li> <li>2. To examine the possible influence on veterinary nurses' occupational stress of both euthanasia workload and attachment to their own companion animal</li> </ol>	Postal questionnaire	<ul style="list-style-type: none"> <li>- Psychological distress</li> <li>- Work burnout</li> <li>- Job satisfaction</li> <li>- Attachment to animals</li> </ul>
Reeve et.al (2005)	Animal care workers	335	<ol style="list-style-type: none"> <li>1. To obtain descriptive data regarding animal shelter employee perceptions of euthanasia-related strain (ERS) on their well-being.</li> <li>2. To investigate how an employee's attitude towards euthanasia as a practice relates to ERS and well-being</li> <li>3. To gain an understanding of work and organisational differences that may be associated with reactions to performing euthanasia</li> </ol>	Multi-section Likert Scale survey	<ul style="list-style-type: none"> <li>- Level of perceived ERS</li> <li>- Personal wellbeing</li> <li>- Job satisfaction</li> </ul>
Rogelberg & Reeve et.al (2007)	Animal shelters	36	To examine the effects of euthanasia rates, euthanasia practices, and human resource practices on the turnover rate among employees with euthanasia responsibilities at animal shelters	Cross sectional study using novel survey	<ul style="list-style-type: none"> <li>- Euthanasia practices</li> <li>- Euthanasia rate</li> <li>- Employee turnover</li> <li>- HR management practices</li> </ul>

## Qualitative Studies

Table 2 summarizes study objectives and research design from the five qualitative studies. Arluke (Arluke 1991) believed it was important to immerse himself in a single US shelter facility over several months, allowing participants to feel comfortable during the interview process and to allow them to be freely observed in all aspects of shelter work. Open-ended, semi-structured interviews were conducted with each shelter employee (n = 16) and focused on exploring how shelter culture helped workers cope with the moral stress of euthanasia. Arluke reported that whereas this particular shelter may have been more concerned about how its staff dealt with euthanasia in comparison to other facilities, shelter culture as discussed in his article would certainly extrapolate and be recognized by shelter workers in general. Analysis, although not described, was reported using general magnitude levels. Each magnitude level was assigned a percentage approximation (i.e. rarely = 5%, few = 10%, some = 11% to 20%, many = 21% to 50%, most = 50% to 80%, and vast majority  $\geq$  81%). It was identified that shelter culture served to ease newcomers into performing euthanasia by allowing opportunities to become used to the idea before being exposed to or having to perform it. It focused on technical capabilities and defined the killing of animals as a humane act to end suffering and as a preferable alternative than living under certain circumstances.

Employed as a form of self-preservation, shelter culture also facilitates moral shift; shifting the responsibility of having to kill animals away from themselves to people outside the shelter (i.e. those who were seen to create the necessity for euthanasia, neglectful owners, and irresponsible owners who contribute to pet overpopulation). This moral shift also focused on workers in “no-kill” shelters, specifically; workers wondered how their peers could feel comfortable rejecting unadoptable animals knowing that someone else would have to euthanase them. An inner community network of social support exists and serves to create a protective barrier between those who perform euthanasia and those who do not. Arluke also discovered that the attachment of staff members to the animals is naturally formed and is an important aspect of animal care which is considered normal. However, strategies are required to protect staff members from the potential issues caused by feelings of loss and grief. In contrast, workers who had some influence over the euthanasia selection process and, over their own involvement in the act, further confirmed within themselves, that they were in fact, caring people.

Reeve et.al (Reeve, Spitzmuller et al. 2004) conducted 38 interviews with attendees at the 2002 Animal Care Expo in Florida. More than half of the participants worked at a humane society,

while the remainder were employed in animal control, veterinary services, or other animal care capacities that involved euthanasia. With the aim of this study being to identify turning-point events (both negative and positive) that spur changes in employees' attitudes, cognitions, and perceived stress regarding euthanasia-related work, this study used unusual methodology. By means of adjustment trajectory graphs, each participant was asked to draw a trajectory line depicting their own personal story of adjustment to euthanasia-related work. The researchers then used a retrospective narrative concept and semi-structured interview format to elicit longitudinal autobiographical narratives that focused specifically on interpreting each individual's graph. Researchers reported that emotionally charged events were recollected particularly well over time. From 83 identified turning points, a total of 10 themes were recorded. These ranged from a person's first time performing euthanasia, a euthanasia process that is technically difficult or emotionally demanding, increased influx of animals and euthanasia of healthy animals to level of technical training, decreased number of animals euthanized, reduced number of animals euthanased by an individual, improved euthanasia method and coping mechanisms, and interactions with management. Whereas this study showed a number of negative aspects associated with working in animal-related occupations that implicate a variety of workplace and organizational issues, there are an equal number of positive aspects that facilitate adjustment to euthanasia related-work. Hence, while it is clear that adjustment to euthanasia-related work is arduous, poor adjustment is not inevitable.

Rogelberg et.al (Rogelberg, DiGiacomo et al. 2007) recruited 305 participants from 62 shelters across the United States to complete a survey investigating what recommendations shelter employees believe would assist them in coping with euthanasia-related stress. Three hundred and five usable surveys were incorporated into the final analysis, which used thematic coding techniques to identify and categorise common broad themes of responses. The results of the survey indicated that euthanasia-related stress is certainly a concern to many shelter employees, demonstrated by the high percentage (80% 244/305) of employees who provided constructive suggestions and comments. The most frequently mentioned category involved promoting understanding and support between employees charged with performing euthanasia and those working alongside them but who were not involved with euthanasia. Availability of professional counsellors (impromptu or scheduled) was another popular suggestion with some respondents suggesting specific stress management and compassion fatigue seminars being of possible great benefit.

**Table 2** Summary of Qualitative Studies (Arluke 1991, Reeve, Spitzmuller et al. 2004, Rogelberg, DiGiacomo et al. 2007, Baran, Allen et al. 2009, Davies and Lewis 2010)

<b>Source</b>	<b>Setting</b>	<b>N</b>	<b>Objective</b>	<b>Research Design</b>
Arluke (1991)	Animal shelter	16	To explore how shelter culture helped workers cope with the moral stress of euthanasia	Open-ended, semi-structured interviews
Davies & Lewis (2010)	Biomedical Technicians	31	Identify key themes from initial qualitative research and then use those themes to formulate a unique quantitative survey instrument exploring whether emotional dissonance occurs within animal technicians in the UK	Semi-structured Focus Group Interviews
Reeve et.al (2004)	Animal care workers	38	To identify turning-point events, particularly stressful or particularly positive events that spur changes in employees' attitudes, cognition, and perceived stress regarding euthanasia-related work	Semi-structured interview and retrospective narrative to elicit longitudinal autobiographical narratives
Rogelberg & DiGiacomo et.al (2007)	Animal shelter	305	To gather employee perspectives on what can be done to assist shelter workers in dealing with euthanasia-related stress	Survey, including one broad-based open-ended question
Baran et.al (2009)	Animal shelter	242	To identify and evaluate coping strategies advocated by experienced animal shelter workers who are directly engaged in euthanasing animals	Cross sectional study using novel survey

Another category that appeared very important to employees was a belief that management should actively seek employee input regarding euthanasia-related decisions and practices. Interestingly, 4.1% (12/305) of respondents reported that they did not experience stress while, in contrast, 4.5% (14/305) felt that nothing could be done to improve euthanasia stress.

Baran et.al (Baran, Allen et al. 2009) analysed responses from 242 shelter employees recruited from 62 shelters across the United States. This study aimed to identify and evaluate the various coping strategies that were being used or advocated by experienced animal shelter employees who were directly involved in animal euthanasia. This cross-sectional study utilized a survey that requested demographic information including length of time and experience in engagement with euthanasia-related tasks. Specific information relating to coping strategies was elicited by posing an open-ended question regarding what recommendations and advice would each respondent give to someone just starting out in this career field in regard to coping with euthanasia-related work tasks. Consistent with other qualitative studies, analysis was conducted using thematic coding analysis techniques and provided 26 distinct categories of coping strategies. However, these could be reclassified into eight broader types that fit into two subcategories: those relating to methods of dealing with euthanasia-related stress on the job (competence strategies, euthanasia behavioural strategies, cognitive or self-talk strategies, and emotional regulation strategies) and those related to methods of dealing with stress after conducting euthanasia-related work (separation strategies, get-help strategies, long-term solution strategies, and withdrawal strategies). It was noted that whereas respondents were asked advice on coping strategies, they were not asked about coping strategies that were actually used, nor was there an attempt to assess the effectiveness of any strategy.

Davies and Lewis (Davies and Lewis 2010) conducted six focus group interviews with employees from biomedical research facilities across the United Kingdom. These employees covered a broad range of roles, responsibilities, and years of experience. Although methods of analysis were not described, extracts of potential statements were utilized to convey themes of concern regarding the emotional challenges faced by biomedical research technicians. The aims of this study were to elicit these themes of concern and from these, develop a unique survey instrument that could then be used to explore emotional dissonance in animal technicians. The focus groups did provide evidence of emotional dissonance as well as probable occurrence of emotional contagion or transference of one's emotions to others. Coping mechanisms made up a considerable part of discussions across the focus groups and included things like alcohol

consumption and social support both within and external to the workplace. Engaging with people facing the same challenges was a popular coping mechanism. However, respondents felt that opportunities to do so were very limited. Social isolation and poor induction protocols for new staff were also high on the list of challenges within organizations. Causes of emotional dissonance within animal research facilities included type of activity engaged in (e.g. animal care, scientific procedure or euthanasia) and the species with which a person worked, with dogs, cats, and primates placed higher on the emotional plane.

### **Mixed-Method Studies**

Table 3 provides a summary of study objectives, research design and outcome measures from the four studies identified as mixed method. A study by Rohlf and Bennett (Rohlf and Bennett 2005) investigating the incidence of perpetration-induced traumatic stress recruited animal workers from veterinary clinics, research laboratories, and welfare shelters in the state of Victoria, Australia, who actively participated in animal euthanasia. One hundred and fifty participants responded with 148 of those included in the final analysis. Participants were asked to complete a 22-item self-report measure that assessed three broad fields of current traumatic stress, including intrusive phenomena (i.e. recurring nightmares), avoidance phenomena, and hyper-arousal phenomena (i.e. exaggerated startle response). Participants also answered a number of questions regarding context of euthanasia, exposure to euthanasia (length of time and frequency), type and level of animal-related training, their level of concern about animal death, and social support. Participants were also asked three open-ended questions probing their reasons for entering their chosen profession and identifying the best and worst aspects of their current job.

The quantitative data analysis served to identify participants who may be experiencing clinically significant levels of euthanasia-related traumatic stress. Results indicated that the majority (50%) reported symptoms that fell within a subclinical range and that no participant reported symptoms that fell within the severe range of traumatic stress. However, 39% (58/148) of participants reported stress symptoms that fell within the mild range and 11% (68/148) within the moderate range. From the qualitative data, four themes relating to reasons for entering the profession were identified; they were animal-focused, job-focused, self-focused, and career-focused reasons. Similarly, when asked to identify the best aspects of working with animals, three themes arose: satisfaction received from helping and caring for animals, achieving personal goals at work, and the achievement of work-related goals (e.g. successfully treating the sick or finding

new homes for unwanted animals). Unfavourable aspects of working with animals also elicited 3 themes: aversive work conditions (i.e. the smells and mess that can be associated with animal work, the risk of personal illness and injury including; zoonoses and bites); dealing with client and owner difficulties (i.e. negligence and non-compliance); animal euthanasia.

The results of this study are consistent with that of previous qualitative research, which suggests that involvement in euthanasia-related tasks can evoke traumatic stress reactions in some people, while also providing further quantitative evidence of the incidence of this issue across many areas of the animal care community.

In the study by Foster and Maples (Foster and Maples 2011), a mixed-method approach was used to characterize occupational stress, health status, and the coping strategies of veterinary technicians. Data were obtained from 79 members of the Alabama Veterinary Technician Association using three validated survey instruments. The Nursing Stress Scale (Derogatis et.al. 1974) was modified to suit the veterinary profession and assessed factors including the physical, psychological, and social environments of veterinary practice. This study also used the Short Form-36 Version 2 Health Survey (Ware et al. 2000) which has a physical component score and a mental component score. Third, the Ways of Coping Questionnaire (Folkman and Lazarus 1988) was used to elicit thoughts and actions participants used to cope with stressful events and encounters at work. All quantitative assessment indicated that this workforce experiences high stress and a heavy workload and revealed that employees tended to use coping strategies that may adversely affect their health. In the qualitative phase, semi-structured interviews were conducted to collect data post survey completion. Five predetermined open-ended questions were used to elicit information and probe for further clarification as necessary. Analysis of this data resulted in the identification of 10 'phenomena' which supported the findings from the quantitative phase of this study. For example, the duties of veterinary support staff are numerous, ever changing and undefined; the demands on this workforce can become consuming for the dedicated professional; support staff often take the blame for negative outcomes in veterinary settings; and unhealthy coping strategies were being used to cope with stressors in the workplace. Stressors present in the veterinary setting included frequent contact with dead and dying patients, heavy workload, and conflicts with veterinarians. Moral and ethical conflicts felt by veterinary support staff may also contribute to the mental health of this workforce (Foster and Maples, 2011).

**Table 3** Summary of Mixed Method Studies (Rohlf and Bennett 2005; Foster and Maples 2011; Baran, Rogelberg et al. 2012; Anderson et al. 2013).

Source	Setting	N	Objective	Research Design	Outcome Measure
Rohlf & Bennett (2005)	Veterinary practice, biomedical research and animal shelter	148	1. To explore possible identification of Perpetration-Induced Traumatic Stress (PITS) in workers whose occupation required euthanasing nonhuman animals 2. To determine whether event or person-related factors influenced stress symptoms	A 22-item self-report survey including three open-ended questions	- Level of current traumatic stress - Job satisfaction - Level of perceived social support
Foster & Maples (2011)	Veterinary Technicians	79	To characterize the occupational stress, health status and coping strategies of veterinary support staff	A web-based survey and semi-structured interviews	- Level of perceived occupational strain - Coping Mechanisms - Personal wellbeing
Baran & Rogelberg et.al (2012)	Animal shelter	499	1. To demonstrate how dirty-work engagement relates to higher levels of strain, job involvement, and reluctance to discuss work while negatively influencing work satisfaction. 2. Reporting the differences between the outcomes of dirty-task frequency and dirty-task psychological salience, thereby providing additional insight into the complexity of stigmatized occupations	Survey including a number of open-ended questions	- Level of perceived employee strain and work burnout
Anderson et.al (2013)	Animal shelter	54	1. To understand animal shelter management's perspective on staff reactions to euthanasia 2. To identify support programs and policies, and to understand the challenges and barriers to offering such services.	Cross-sectional survey (17 novel items) including open-ended questions	- Managements perception of employee reactions to participating in euthanasia

Baran et.al (Baran, Rogelberg et al. 2012) incorporated social support theory and conservation of resources theory into their study, which examined ‘dirty tasks’ within the context of occupation as opposed to the more common perspective of taking an occupational perspective to ‘dirty work’. That is, an occupation has many tasks, some of which may be considered disgusting, dirty, or degrading while other tasks do not carry the same stigma. This study specifically evaluated the task of animal euthanasia performed by animal shelter workers, demonstrating how dirty work engagement relates to higher levels of strain, job involvement, and reluctance to discuss work while negatively influencing job satisfaction. Four hundred and ninety nine animal shelter workers from 62 shelters across the United States completed a survey constructed from a number of validated instruments and explored quantitative evidence relating to dirty task involvement and dirty task frequency. These measures were set at the beginning of the survey and were followed by the qualitative data collection which looked specifically at assessing the psychological salience of the dirty task (animal euthanasia) by posing an open-ended question: “what is the most negative aspect of your job that occurs fairly regularly?” This question was then followed by further quantitative measures which elicited information regarding employee strain, reluctance to discuss work, work satisfaction, and job involvement. The format of questioning appeared a purposeful method of ensuring reliability and validity of responses in relation to the dirty task being investigated. Results from this study suggest that being involved in performing a dirty task can negatively affect employee wellbeing and is a fundamental risk to intrinsic coping resources used to combat occupational stressors. Interestingly, this study revealed higher levels of dirty-task involvement were related to higher levels of job involvement. That is, rather than withdraw from their work due to strain and dissatisfaction, employees who are tasked with dirty work have a tendency to become more immersed in their jobs.

Anderson et.al (Anderson et al. 2013) conducted an exploratory study using a cross-sectional survey design. Managers from 54 animal shelters across Ohio were recruited to complete a 17-item questionnaire developed by an interdisciplinary team of experts specifically for this study. Further to personnel and facility demographics, investigations focused on management’s perspectives on staff reactions to euthanasia, identifying support programs and policies, and understanding the challenges and barriers to offering such support services. The quantitative data relating to employees response to euthanasia indicated that negative reactions are quite common and include feelings of sadness (83.3% 45/54), crying (68.5% 37/54) and anger and depression (both, 57.4% 31/54). While the majority of shelter managers believed that euthanasia was a notable contributor to employee burnout, fewer felt that euthanasia led to turnover. Support programs were

considered important for employees that perform animal euthanasia. However, management indicated that a lack of funding was a common obstacle in providing formal group or individual support services, which were the ones that respondents considered would be most beneficial. Open-ended questions were used to collect qualitative data. However, these data were neither analysed nor reported on in the study; rather, they were “used in an illustrative method to support the findings from the quantitative data”.

## **Discussion**

The present systematic review found that there is a wide range of approaches to the study of occupational stress in caregivers in animal-related fields. Most of the studies included in this review specifically evaluated animal shelter employees (Arluke 1991, Reeve, Spitzmuller et al. 2004, Reeve, Rogelberg et al. 2005, Rohlfs and Bennett 2005, Rogelberg, DiGiacomo et al. 2007, Rogelberg, Reeve et al. 2007, Baran, Allen et al. 2009, Baran, Rogelberg et al. 2012, Anderson et al. 2013), and 50% of all studies were conducted on small (<100) sample groups (Arluke 1991, Reeve, Spitzmuller et al. 2004, Rogelberg, DiGiacomo et al. 2007, Davies and Lewis 2010, Foster and Maples 2011, Anderson et al. 2013). In some instances, pertinent methodological and analytical processes such as ethnographic analysis (Arluke 1991), and thematic analysis (Davies and Lewis 2010), were incompletely described. Demographic information from participants did not include length of time in the profession in the majority of studies, and only three studies (Rogelberg, Reeve et al. 2007, Baran, Allen et al. 2009, Baran, Rogelberg et al. 2012) indicated the level of financial and physical resources available to them. No single survey item was found to be common among the studies reviewed; rather, a myriad of surveys, scales, and questionnaires were deployed. This variance in assessed variables, along with omission of methods of qualitative analysis, made it difficult to fully compare results. However, all of the studies consistently reported that working with animals (and performing euthanasia) can generate traumatic stress reactions and compromise the wellbeing of many animal care workers.

The qualitative data provides evidence and insight into coping mechanisms and various strategies used by employees across the many fields of animal care (Arluke 1991, Reeve, Spitzmuller et al. 2004, Rogelberg, DiGiacomo et al. 2007, Baran, Allen et al. 2009, Anderson et al. 2013). However, these methods and strategies are anecdotal, and further research needs to be conducted to provide evidence to inform the development of structured and validated programs designed to help employees manage occupational stress that can be associated with animal care.

This can only be achieved via longitudinal studies that follow individuals over time and likely should incorporate physiological measures of stress symptoms (e.g. blood cortisol levels), alongside psychological measures.

Diversity in study design and disparity of terminology proved challenging when trying to determine whether occupational stress equated with compassion fatigue. The study selection criteria, specifically which restricted potential sources to peer-reviewed journal articles, proved to be a major limitation in reviewing compassion fatigue in the context of the animal-related professions targeted in this review. To our knowledge, there have been no empirical studies published which specifically focus on compassion fatigue in animal-related professions. A number of additional materials could have been included had we widened our inclusion criteria to include editorials and reviews.

The most intriguing study from this review was that of Rohlf and Bennett (Rohlf and Bennett 2005), which suggests that perpetration-induced traumatic stress is a possibility in workers who perform euthanasia. This was the only study in which participants were sourced from across multiple occupational settings (including veterinary clinics, biomedical research facilities and animal shelters) for which the results indicated that the mean level of reported stress as measured by means of The Impact of Events Scale-Revised (IES-R) (Weiss and Marmar 1997) did not vary across occupations; however, the reasons for euthanasia were different between the fields evaluated. Related to this, a commonly reported contributor to occupational stress is that of societal opinion and the stigma associated with those who engage in “dirty work” (Baran, Rogelberg et al. 2012) (i.e. the euthanasia of animals). Individuals who work in tainted occupations become acutely aware of public perception and the stigma associated with what they do (Baran, Rogelberg et al. 2012). As a number of studies (Arluke 1991, Rogelberg, Reeve et al. 2007, Baran, Rogelberg et al. 2012) suggested that social supports are an instrumental coping resource in animal-related work, this stigma can create or further compound internal conflict, identity-threatening circumstances and potentially lead to adverse influences on employee wellbeing (Baran, Rogelberg et al. 2012). As an outcome of this review and our personal involvement in and contact with the animal care community, we suggest that improved education and awareness of the positive impact animal care workers have in all fields (e.g. research, teaching, animal control, veterinary medicine, etc.) should be prioritized to combat misconceptions about their personal character. Therefore, the question needs to be asked as to whether the word

“perpetration” as used by Rohlf and Bennett (Rohlf and Bennett 2005), adds to the negative stigma.

Most studies in the present review surmised that for the majority of personnel studied, exposure to continual occupational stress appeared to foster coping strategies. Rogelberg et al (Rogelberg, Reeve et al. 2007) reported that whereas employees in veterinary clinics, animal shelters, and research facilities often suffer considerable burnout, this does not often lead to turnover, perhaps due to the fact that staff in a caregiving role feel that what they are doing (i.e. euthanasia) is something beneficial. This may be true for those that are able to maintain emotional resilience. However, this would not account for those workers who cannot do so and subsequently resign from animal-related employment. These employees must also be accounted for in future research to fully understand the effects of the unique stressors associated with working in veterinary clinics, animal shelters, and research facilities.

The most commonly applied theory in the study of occupational stress and stress management is the “demand-perception-response” perspective. This perspective states that stress is directly related to both an individuals’ perception of the demands being made to them and to their perception of their capability to meet those demands (Bartlett 1998). As Clancy and McVicar (2002) report, a mismatch of these perceptions results in an individual’s stress threshold or stress “hardiness” being exceeded, therefore triggering a stress response. Many of the studies in this review revealed that workplace social support networks are crucial to minimizing job stress, and perhaps it is this that facilitates counteraction of the negative effects and provides positive influence on those who are feeling stressed or burnt-out.

Reeves et.al (Reeve, Spitzmuller et al. 2004) suggest the highest degree of employee turnover occurs within the first year of experience with animal euthanasia, defining those who remained in veterinary clinics, animal shelters, and research facilities past two years as being “survivors.”. Again, there is a lack of data evaluating those who have left these professions, those that didn’t “survive the profession”; why did they leave, and what was the turning point?

There is a lack of dedicated experts available across worldwide to work with the animal-related professions in this important field of study. The need for well-designed studies to build a body of evidence-based knowledge should incorporate evaluation of currently employed coping mechanisms and investigate strategies that may prevent clinical symptoms of occupational stress

or compassion fatigue. Specifically, longitudinal studies of individual facilities and their employees using validated, consistent questionnaires and structured interviews at pivotal intervals to investigate employee longevity (and turnover) are required. This will facilitate the gathering of evidence on long term effects of occupational stress and euthanasia-related strain in animal care workers and will also allow insight into whether those who remain in these fields as “survivors” do so because they become desensitized or because they develop successful coping strategies.

It is important to recognize that there are many other animal-related occupations similarly exposed to occupational stressors for which participants would also be susceptible to compassion fatigue. For example, anecdotal evidence gathered via personal communications suggests that personnel caring for captive animals, zoo animals, and native wildlife suffer compassion fatigue. Slaughterhouse employees, while vastly different in their primary occupational purpose, have also been reported to experience adverse mental health issues directly related to their occupation (Fitzgerald et al. 2009, Emhan 2012, Richards et al. 2013).

Also of importance is the emerging literature relating to an increased risk of suicide within animal-related professions, in particular the veterinary profession (Bartram and Baldwin 2010, Skipper and Williams 2012, Nett et al. 2015). While this area of study is very relevant in the context of this chapter, the mechanisms underlying a person’s propensity to commit suicide are a complete area of study within itself. Therefore, while the absolute importance and implications of this are well recognised by the authors, suicide was excluded from the key word search as it was deemed outside the scope of this review.

The high incidence of occupational stress and euthanasia-related strain in animal care workers is of great concern to veterinary clinics, animal shelters, and research facilities alike. Whereas there are a number of studies which have investigated contributing factors and coping mechanisms, it is difficult to fully delineate a comprehensive approach to addressing the issue because of the disparity of investigative methods. The profession uses an array of terminology, many of which are used interchangeably. This precipitates confusion and misunderstanding of occupational stress. A more cohesive and standardised approach to future research and implementation of standard terminology may aid the development of effective programs of early intervention and prevention for individuals at risk and be most effective for personnel working in animal-related fields.

The following Chapter (3), represents the first study of its kind in Australia which aims to explore occupational stress across various animal-related occupations. As the Professional Quality of Life Scale (ProQoL) is the most commonly used and, is a validated measure for assessing the positive and negative effects of working with extremely stressful events, it was employed in Chapter 3 to investigate the prevalence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations.

### Chapter 3

## **An investigation of the prevalence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations using the Professional Quality of Life (ProQoL) Scale**

*“I never got told there was such a thing as compassion fatigue [that it] existed or that I might start to feel emotionally overwhelmed....I kind of figured if I can deal with it, I can deal with it forever...I didn't think I would get to a point – a nervous breakdown...”* Animal research technician F: 25-30

### **Introduction**

There has been an increase in recognition of work-related mental health disorders affecting all industries and professions worldwide (Australian Safety and Compensation Council 2006). With an estimated cost of AUD\$200 million dollars annually, workers' compensation claims for stress-related mental disorders in Australia are on an upward trajectory. Data collected by Work Safe Australia show not only an increase in workers' compensation claims for stress-related conditions and mental disorders (5700 in 1997/98 to 8260 in 2004/05) but also in the duration of claims where median time lost for mental disorders suffered at work rose from 6.8 weeks in 1997/98 to 9.7 weeks per claim in 2004/05 (Guthrie et al. 2010). Mental stress is understood to be the foremost causative factor of work-related mental disorders in Australia, with *exposure to a traumatic event* and *work pressure* being the most commonly reported mechanisms (Australian Safety and Compensation Council 2006).

The National Data Set for Compensation-based Statistics (NDS) lists a standard set of data items, concepts and definitions for inclusion in workers' compensation systems operating in Australia. The NDS has been implemented in workers' compensation-based collections administered by state, territory and Australian government agencies to enable the production of national and nationally comparable workers' compensation-based data (Safe Work Australia, 2008). According to the NDS, the industries with the highest claims or incidence were health and community services and education and personal and other services. The highest claims according to occupational groups were professionals, and intermediate clerical, sales and service workers.

However, extremely high incidence rates were also evident for police officers, prison officers and social welfare professionals and school teachers (Australian Safety and Compensation Council 2006). These findings are consistent with the extensive literature published in the human health care and social sciences sector.

Martins Pereira et al. (2011) state that the experience of working with high levels of death and dying puts those who work in palliative care at particular risk of burnout and compassion fatigue (Martins Pereira et al. 2011). Similarly, those who work in emergency, oncology and other care-giving occupations also have a high prevalence of occupational stress and compassion fatigue (Najjar et al. 2009, Hooper et al. 2010, Potter et al. 2010, Ray et al. 2013). Nonetheless, it appears that job satisfaction remains comparatively high in these occupations. Whilst there are a great number of articles and published research examining compassion fatigue, burnout and compassion satisfaction in human healthcare occupations, there is little focus on those working in animal healthcare and other animal-related occupations.

Compassion fatigue as introduced by Carla Joinson in 1992 is used to describe the negative consequences of working in a caregiving occupation, specifically, caring for those who are experiencing trauma and suffering, coupled with empathy and a strong desire to help (Figley 1995).

As discussed in Chapter 2, burnout occurs as a result of severe, prolonged stress at work and is described by Maslach and Jackson (1981) as having three components: emotional exhaustion from chronic stress; cynicism and detachment from the job; and feelings of incompetency and a lack of achievement resulting in a lack of personal performance or accomplishment. Generally, work related stressors which lead to burnout are related to organisational management including factors such as role ambiguity, excessive workload, staff inequity and social factors (Sardiwalla et al. 2007). Those working in care-giving occupations including animal-related occupations are susceptible to burnout due to the emotional intensity of working with those who are in distress and traumatised (Sardiwalla et al. 2007).

Current research (Figley 2003, Alkema et al. 2008, Potter et al. 2010) describes the relationship between compassion fatigue and burnout as overlapping; burnout is one negative component of compassion fatigue. It is important to recognise that compassion fatigue and burnout are distinct concepts whereby one, (burnout), describes a general reaction to work-related

environmental stress that can be experienced by employees in any occupational field and the other, compassion fatigue, relates directly to the relationship an employee has with the work that is being undertaken.

Compassion satisfaction refers to the positive aspect of working as a care-giver. It refers to the emotional rewards or gratification received through empathy and compassion felt by those who care for the suffering and traumatised (Stamm 2010). Whilst there is limited literature focusing on compassion fatigue, there is even less that focuses on compassion satisfaction. This is true in human healthcare and even more so in animal healthcare. Only one single study was identified which looked at veterinarian satisfaction (Shaw et.al. 2012). However, this study measured veterinarian satisfaction specific to interactions during companion animal visits and the veterinarian-client-patient interaction and whilst positive interactions within this triangular relationship certainly contribute to personal satisfaction and mental wellbeing, it does not take into account the many other external factors which may positively influence overall job satisfaction (Shaw et.al. 2012).

It is the researchers' belief that often human nature has a propensity toward fixating on the negative aspects of life and, if left unabated can lead to mental health disorders such as anxiety and distress. It is therefore important to investigate the concept of compassion satisfaction in order to understand its apparent counterbalancing protective mechanism against compassion fatigue.

This study aims to investigate the incidence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations using the Professional Quality of Life (ProQoL) Scale.

## **Materials and methods**

### Participants

Participants were recruited opportunistically at animal-related conferences (n=4) or in-house seminars (n=3) where the aims of the study were specified. Return of the completed survey was interpreted as informed consent to participate. All ProQoL surveys were completed and returned to the researcher on the same day thus the response rate was 100% (n=233 respondents). Four (4) of the returned surveys were incomplete and therefore were not included in the analysis and report of results. The adjusted return rate was 98% (n = 229). Those participants included in the analysis

were drawn from a range of animal-related occupations: Emergency Veterinary Practices n=17; Animal Technicians n=32; Shelter Workers n=40; Veterinary Practices n=140.

The researcher has worked in various animal-related occupations across SE Qld including positions in veterinary practice, biomedical research and, veterinary and animal science higher education. Having also worked with colleagues from animal management and those employed in animal shelters, it is evident that the researcher would share some identity with some participants from the various occupational categories (insider status; Braun and Clarke 2012). Therefore careful reflection and consideration was given to pre-conceived assumptions of the researcher and how this might shape the knowledge produced. Of equal importance to note, is that the researcher was largely independent; the supervisors did not play a major role in the research but rather gave a multi-disciplinary perspective on how the information gathered through could be interpreted.

This study was approved by the University of Queensland Human Research Ethics Committee (2012000819).

### Measures

The Professional Quality of Life scale (ProQoL) is a self-report survey and is the most commonly used measure of positive (compassion satisfaction - CS) and negative (compassion fatigue - CF) effects on people who are working with extremely stressful events. Compassion satisfaction is about the pleasure derived from work well done. Compassion fatigue is partitioned into two sections: burnout (BO), measured by exhaustion, frustration, anger and depression; and secondary traumatic stress (STS) which is about work related secondary exposure to extreme or traumatic stressful events. The negative effects of secondary traumatic stress include fear, sleep difficulties, intrusive images or avoiding reminders of traumatic experiences. There is good construct validity of the ProQoL which has been utilised in more than 200 publications (Stamm 2010). Reliability estimates for the three subscales have been reported as 0.87 for the compassion satisfaction scale; 0.72 for the burnout scale; and 0.80 for the compassion fatigue scale. (Bride, Radley and Figley, 2007). The three scales of the ProQoL (CS, BO and STS) measure separate constructs, although compassion fatigue has shared variance with burnout (5%,  $r=-0.14$ ;  $\text{co-}\sigma=2\%$ ;  $n=1187$ ) and secondary traumatic stress (2%,  $r=-0.23$ ;  $\text{co-}\sigma=5\%$ ;  $n=1187$ ). Burnout and secondary traumatic stress have demonstrated a shared variance of 34% in previous analyses, likely reflecting the distress that is common to both conditions (Stamm 2010).

Completion of the ProQoL involves selecting response choices on a 0 (never) to 5 (very often) Likert scale. Scoring of the ProQoL initially involves reversing items 1 (I am happy), 4 (I feel connected to others), 15 (I have beliefs that sustain me), 17 (I am the person I always wanted to be) and 29 (I am a very caring person), then summing the items for each scale and converting the raw score into a t-score. Each scale therefore has a mean of 50 (SD 10). Higher scores on the compassion satisfaction scale represent greater satisfaction while higher scores on both burnout and secondary traumatic stress represent greater risk of burnout and higher secondary traumatic stress.

Stamm (2010) makes the point that the ProQoL is not a diagnostic tool but rather a screening instrument that can be useful in raising awareness of issues which may need to be addressed. That is, the ProQoL provides a snapshot of an individual's or organisational balance of positive and negative experience related to the work being undertaken. Any definitive conclusions are best drawn when the tool is used over time and trends are identified (Potter et al. 2010).

For the purposes of this study respondents were also asked to provide the following demographic data; workplace type, gender, age, occupation and number of years in the industry.

### **Statistical analysis**

Descriptive analyses of demographic characteristics of participants were conducted, followed by exploration of the range of scores (raw scores and t-scores) and frequency of cut-off scores according to levels of distress (low, average, high). Descriptive scores on the three scales by gender, age group, number of years in the industry and occupation category were conducted. Cross tabulation and  $\chi^2$  tests were conducted between t-scores on each of the three scales and gender, age, number of years in the industry and occupation categories.

### **Results**

A total of 229 people working in animal-related occupations participated in the study. Most respondents were employed in veterinary practice (either veterinarians or veterinary nurses/technicians) and 85% of all respondents were female. 42% of participants were between 26 and 35 years of age and, 71% had been working in animal-related occupations between 1 and 10 years (see Table 1).

**Table 1: Demographic characteristics**

Characteristics		Frequency	%
Group	Emergency Practices	17	7.4
	Animal Technicians	32	14.0
	Shelter Workers	40	17.5
	Veterinary Practices	140	61.1
Gender	Female	195	85.2
	Male	34	14.8
Age (in years)	18-25	46	20.1
	26-35	97	42.4
	36-45	46	20.1
	46-55	30	13.1
	>50	10	4.4
Occupation	Veterinarian	69	30.1
	Veterinary Nurse	67	29.3
	Animal Technician	23	10.0
	Practice Manager/supervisor	36	15.7
	Receptionist	8	3.5
	Animal foster	11	4.8
	Student	5	2.2
	Others	10	4.4
Number of years in Industry	<1	15	6.6
	1-5	86	37.6
	6-10	77	33.6
	11-15	18	7.9
	16-20	17	7.4
	>20	16	7.0

Table 2 displays the summary statistics (raw scores and t scores) on the three scales of the ProQoL. The range of scores was widest on the two scales which measured the negative aspects; burnout (range 25.1 – 82.3) and secondary traumatic stress (range 28.7 – 81.25).

**Table 2: Summary Statistics on the three scales of the ProQoL**

(CS: compassion satisfaction, BO: Burnout, STS: secondary traumatic stress)

	N	Minimum	Maximum	Mean	Std. Deviation
CS	229	23	50	39.2	5.9
BO	229	10	44	24.8	5.9
STS	229	12	43	24.6	5.9
CS t score	229	22.8	68.18	50.0	10.0
BO t score	229	25.1	82.30	50.0	10.0
STS t score	229	28.7	81.25	50.0	10.0

Table 3 illustrates the frequency of cut-off scale t-scores for the 229 participants in this study. While most participants scored in the mean or top quartile on the compassion satisfaction scale, demonstrating professional fulfilment, about a quarter reported a score which indicated that they were deriving less satisfaction from their work. Low burnout was reported by 78% of participants; however 21% of participants had a score which indicated that they were at higher risk of burnout. Low or average symptoms of secondary traumatic stress was reported by 74% of participants; however, 25.8% were at risk of secondary traumatic stress.

**Table 3: Frequency of low, average and high t-scores on the three subscales of the ProQoL for the 229 participants**

		Compassion Satisfaction		Burn Out		Secondary Traumatic Stress	
		<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
t-scores	Low	59	25.8	54	23.6	63	27.5
	average	109	47.6	126	55.0	107	46.7
	High	61	26.6	49	21.4	59	25.8

### ***Compassion Satisfaction***

As shown in Table 4, findings were statistically significant for the relationship between compassion satisfaction and age ( $\chi^2=7.96$ ,  $p=0.02$ ) where older workers reported more satisfaction and, compassion satisfaction and number of years in the industry ( $\chi^2=9.51$ ,  $p=0.05$ ) as those who had been employed in the industry for between 6 and 15 years were more likely to report average or lower satisfaction. Occupation was also an important factor, with veterinarians and animal technicians reporting significantly lower compassion satisfaction scores ( $\chi^2=31.78$ ,  $p<0.001$ ). There were no statistically significant differences by gender. Those categorised as ‘Others’ (which includes ancillary staff such as receptionists, volunteers and foster carers) had the greatest percentage of high scores for compassion satisfaction (50%) whilst veterinarians revealed the greatest percentage of low scores (43.5%).

**Table 4: CS: t-scores by gender, age, number of years in industry and occupation categories**

		CS-t scores			
		Low %	Average %	High %	
Gender	Female	25.6	49.2	25.1	$\chi^2 = 1.87, p = 0.39$
	Male	26.5	38.2	35.3	
Age	18-35	23.8	54.5	21.7	$\chi^2 = 7.96, p = 0.02$
	$\geq 36$	29.1	36.0	34.9	
Number of years in industry	1-5yrs	17.8	54.5	27.7	$\chi^2 = 9.51, p = 0.05$
	6-15yrs	31.6	46.3	22.1	
	>15yrs	33.3	30.3	36.4	
Occupation	Veterinarian	43.5	36.2	20.3	$\chi^2 = 31.78, p < 0.001$
	Veterinary Nurse	16.4	64.2	19.4	
	Animal Technician	34.8	43.5	21.7	
	Practice	16.7	50.0	33.3	
	Manager/supervisor	16.7	50.0	33.3	
	Others*	11.8	38.2	50.0	

\* Includes receptionist, students, animal fosterers and other non-professional volunteers

### **Burnout**

Analyses of the relationship between burnout and time spent in the industry indicated that those who had been employed 6 – 15 years reported significantly higher scores indicative of a greater risk of burnout ( $\chi^2=11.98, p=0.02$ ) as shown in Table 5. There were no statistically significant differences by gender, age, or occupation. However, veterinarians revealed the greatest percentage of high scores for burnout (34.8%) whilst ‘Others’ reported the greatest percentage of low scores (29.4%)

**Table 5: BO: t-scores by gender, age, number of years in industry and occupation categories**

		BO-t scores			
		Low %	Average %	High %	
Gender	Female	21.5	55.9	22.6	$\chi^2 = 3.34, p = 0.19$
	Male	35.3	50.0	14.7	
Age	18-35	21.0	60.1	18.9	$\chi^2 = 4.03, p = 0.13$
	$\geq 36$	27.9	46.5	25.6	
Number of years in industry	1-5yrs	26.7	59.4	13.9	$\chi^2 = 11.98, p = 0.02$
	6-15yrs	15.8	55.8	28.4	
	>15yrs	36.4	39.4	24.2	
Occupation	Veterinarian	20.3	44.9	34.8	$\chi^2 = 12.40, p = 0.13$
	Veterinary Nurse	25.4	59.7	14.9	
	Animal Technician	26.1	60.9	13.0	
	Practice	19.4	58.3	22.2	
	Manager/supervisor	19.4	58.3	22.2	
	Others*	29.4	58.8	11.8	

\* Includes receptionist, students, animal fosterers and other non-professional volunteers

### Secondary Traumatic Stress

In contrast, analyses demonstrated that gender was more influential on the reporting of secondary traumatic stress ( $\chi^2=7.10$ ,  $p=0.03$ ) with women being significantly more likely than men to report high scores (see Table 6). No other variables reached statistical significance in this analysis of secondary traumatic stress. However, veterinarians also revealed the largest percentage of high scores for secondary traumatic stress (31.9%), closely followed by ‘others’ (29.4%) and practice managers/supervisors (27.8%). Interestingly, animal technicians had the lowest percentage of high-risk secondary traumatic stress scores (8.7%).

**Table 6: STS: t-scores by gender, age, number of years in industry and occupation categories**

		STS-t score			
		Low %	Average %	High %	
Gender	Female	24.6	47.2	28.2	$\chi^2 = 7.10$ , $p = 0.03$
	Male	44.1	44.1	11.8	
Age	18-35	26.6	51.0	22.4	$\chi^2 = 3.34$ , $p = 0.20$
	$\geq 36$	29.1	39.5	31.4	
Number of years in industry	1-5yrs	28.7	48.5	22.8	$\chi^2 = 4.53$ , $p = 0.34$
	6-15yrs	22.1	48.4	29.5	
	>15yrs	39.4	36.4	24.2	
Occupation	Veterinarian	21.7	46.4	31.9	$\chi^2 = 11.67$ , $p = 0.17$
	Veterinary Nurse	23.9	53.7	22.4	
	Animal Technician	52.2	39.1	8.7	
	Practice Manager/supervisor	27.8	44.4	27.8	
	Others*	29.4	41.2	29.4	

\* Includes receptionist, students, animal fosterers and other non-professional volunteers

### Discussion

The findings of this study indicate that compassion satisfaction is lowest among vets and animal research technicians. However, occupation was not a significant factor in the risk of burnout or secondary traumatic stress. These findings are congruent with those of Rohlfs & Harris (2005) where occupational context was reported as not being associated with different levels of stress symptoms, in particular, euthanasia-related stress. The negative aspects of professional quality of life – burnout and secondary traumatic stress – showed contrasting patterns, with significant differences apparent in those who had been working longer in the industry associated with greater risk of burnout and women facing a greater risk of secondary traumatic stress than men.

It is apparent to the author from these studies that with the pressures of workload and perhaps specifically, patient load, there would be little time for veterinarians to engage in the nurturing behaviour (e.g. petting, grooming, and providing fundamental comfort care) that may contribute to compassion satisfaction. Veterinarians are moving from patient to patient, providing diagnosis, prognosis and treatment plans, these activities are essential to veterinary care. However, the intimate interactions of implementing medical treatment and the associated care, nursing and nurturing are carried out by the veterinary nurses. A veterinarian's ability to gain compassion satisfaction is perhaps hindered by their inability to engage with their patients at this level. Similarly, the low levels of compassion satisfaction among animal research technicians may be attributed to their involvement in the processes of research which can induce disease, discomfort, anxiety or pain. These conditions require the animals to be cared for and nursed with the ultimate outcome being euthanasia, a situation which is described by Arluke (1994) as 'the caring – killing paradox': where employees care for the animals which they ultimately have to kill. This is a painful process that often evokes complex emotional states (Arluke. A 1994).

Contrastingly, compassion satisfaction was reported to be higher for those categorised as 'others'. As mentioned above, this is likely due to the types of interaction with animals. That is, veterinary nurses, foster carers and volunteers for instance are very tactile and nurturing in their interactions with the animals under their care. Cleaning, feeding, changing bedding; providing not only medical nursing and rehabilitation but the loving, caring, bonding type behaviours which are 'feel good' undertakings. Engaging in positive interactions and behaviours which create feelings of satisfaction helps to balance the negative effects of caring for the acutely ill or traumatised patients (Stamm 1999). For an individual or organisation, high scores on compassion satisfaction are a reflection of engagement with the work being done (Stamm 2010). This indicates the importance of being proactive in both self-care and team-care in at-risk occupations; by facilitating and fostering policies and procedures that promote positive interactions and downtime which are focused on building compassion satisfaction.

This research showed that those who had been in an animal-related occupation for more than 15 years reported the most satisfaction. Stamm (2010) states that whilst it is tempting to presume those with more experience do better, it is likely that those with greater exposure and low resiliency left the field, while those who remained were differentially resilient. Furthermore, the current analyses indicate a possible link between compassion satisfaction and burnout for those who had been employed in animal-related occupations for between 6-15 years. That is, they

reported higher scores indicative of a greater risk of burnout and were more likely to report average or lower scores for compassion satisfaction.

Hooper et al. (2010) state that human health care workers (nurses) are struggling to meet the demands for improved patient satisfaction and outcomes with demands for greater efficiency at a time when patients expect improved service. The author believes this point is also true for those working in animal-related occupations where resources are often limited and workload is high. Being intrinsically woven in high responsibility/low control environments further adds to the pressures of animal health care workers (Hooper et.al. 2010).

Maslach & Jackson (1981) describe burnout as a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people-work’. The symptoms of burnout; depleted emotional resources, development of cynical feelings and attitudes and, markedly increased negative self-evaluation (Maslach and Jackson 1981) are evident throughout subsequent qualitative chapters of this thesis. Thus, burnout can be extrapolated to people who do ‘animal-work’. Burnout involves a prolonged response to stressors in the workplace (Maslach 2003) and is a cumulative syndrome which can have a negative impact on employee longevity (Potter et al. 2010). It is therefore unsurprising that the results of the analyses in this chapter demonstrate the significant relationship between burnout and length of time in animal-related occupations (specifically those employed for between 6-15 years). However, in contrast those who are employed for greater than 15 years’ experience higher levels of compassion satisfaction which is congruent with the concept of ‘survivors’; those who are better able to cope with the stressors of animal-related work or have greater resiliency. Perhaps this is best explained by Figley and Roop in their book *Compassion fatigue in the Animal-Care Community* (2006). Figley and Roop explain that there are five phases of transition for a new helper (animal care-giver); Phase One is *The Dream* developed often in childhood and sustained through education until employment. Phase Two is *The Start* – employment, ready to make a difference and make the world a better place for animals, enthusiasm overflows. Phase Three is *Losing Our Breath* – realising the journey is long and arduous, enthusiasm dampens and feelings of anger, frustration and perhaps hopelessness filter in. Phase Four is *Seeking Rhythm* – recognising a need to set a steady pace in order to sustain sanity, health and energy. This is the phase that see’s employees either take steps to move forward or ‘check out’ and leave the profession. And finally, Phase Five is *Finding Rhythm* – finding the pace, the niche, the rhythm - a stride that is sustainable and provides a sense of relief. This system of understanding fits with the findings of this research where those employed for between 6 -15 years are perhaps in Phases Three

and Four; losing breath and leaving the industry or looking for rhythm and surviving the journey. It is surmised that the direction taken at the crossroads of Phase Three and Phase Four would be influenced by an individual's own characteristics including level of compassion satisfaction and resilience.

Where previously classified as an anxiety disorder, the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association 2013) now defines post-traumatic stress disorder (PTSD) as a trauma and/or stress-related disorder precipitated by a traumatic event or exposure to a traumatic event. It is characterised by symptoms of re-experiencing the trauma, avoidance and numbing, negative cognitions and mood, and arousal (American Psychiatric Association 2013). This research revealed that women are at greater risk of secondary traumatic stress than men. It is difficult to surmise why this might be the case. However, one hypothesis could be that more women are acutely affected by trauma experienced by animals than men. A study conducted by Tolin & Foa (2006) entailed a review of literature spanning 25 years of research investigating the sex differences in vulnerability to post traumatic stress disorder, men and women were found to experience different forms of post traumatic events (PTE's) and even when the type of post traumatic event was controlled for, measurable sex differences in prevalence and severity remained. However, Tolin & Foa (2006) concluded that much more research needed to be done before any conclusions could be reached regarding how sex acts as a vulnerability or resilience factor.

As veterinarians are often charged with ultimate responsibility for the lives of animals in their care, it is easy to see how constant interactions with traumatised patients and distressed clients can become fuel for secondary traumatic stress. However, whilst veterinarians showed the greatest risk of burnout (80% of respondents reporting moderate to high levels) and secondary traumatic stress (77% of respondents reporting moderate to high levels), these did not reach statistical significance. Similarly, veterinary nurses were also identified as at-risk group for burnout (75% of respondents reporting moderate to high levels) and secondary traumatic stress (75% of respondents reporting moderate to high levels), but again these did not reach statistical significance. The interesting difference between these two occupations is that 84% of veterinary nurses reported moderate to high levels of compassion satisfaction whereas veterinarians' reported the lowest levels (43.5%).

Given the unique environment of biomedical research, it is curious that animal research technicians were not shown to be an at-risk group for secondary traumatic stress. This finding may

relate to the fact that these technicians are, more often than not, educated and informed about the procedures, methods and expected outcomes of the work that they do. However, this contradicts the work of Rohlf & Harris (2005) who indicate that people who look after animals and, as part of their occupation, are required to euthanase them should be regarded as an at-risk population for post-traumatic stress. Furthermore, as quoted in Rohlf & Harris (2005), McNair (2002) explains that there are people, who in other contexts, experience PTS as a result of actively participating in traumatic events, these people are said to have perpetration-induced traumatic stress (PITS). For example, armed forces veterans who have killed people in warfare (MacNair 2005) and police officers who have shot criminals in the line of duty (Loo 1986).

In interpreting the results of combination scores, those reporting high compassion satisfaction with low to moderate burnout and secondary traumatic stress are thought to be in the most positive situation. This combination indicates a greater balance between the positive and negative aspects of animal-related occupations. Findings from this study suggest that those employees under the 'others' category are more likely to experience this combination. It is conceivable that this finding may be related to the satisfaction and healing effects of fostering and volunteering. That is, those who engage in foster care and volunteering are perhaps sustained by the satisfaction gained from the specific nurturing work they do every day and the tangible difference they can see in each animal they work with. The 'happy endings' outweigh the sad. It is however, important to note here that those categorised as 'others' may be unpaid for the work that they do (with the exception of receptionists). Hamilton and Taylor (2012) report that it is not necessarily a straightforward desire to care for other species that motivates people to work with animals nor is it solely motivated by financial reward. Often rewards reach into more symbolic and ethical domains of value creation (Hamilton and Taylor 2012). This point is perhaps a significant factor in the results for this category and warrants further investigation.

Contrastingly, those reporting high secondary traumatic stress and high burnout with low compassion satisfaction are considered to be in the most distressing situation. This combination describes an employee who is not only physically and emotionally exhausted but is experiencing traumatic events both in 'real time' and as recurring flashbacks (typically symptomatic of post-traumatic stress disorder). A deficit of any form of satisfaction and a propensity to judge themselves harshly would add to the severity of this combination. Whilst not reaching statistical significance, it was evident from the results reported in this chapter that those working as veterinarians were most at risk of experiencing this combination. This is not entirely surprising given the consistent reports

of traumatic events/situations, time constraints and high patient load as described in the following chapters of this thesis. This result may contribute some explanation as to the growing rate of suicide in veterinarians (Jones-Fairnie et al. 2008, Bartram and Baldwin 2010, Platt et al. 2010). As previously stated, the author notes that there appears little time for veterinarians to engage in the 'feel good' behaviours and interactions which promote workplace satisfaction. Perhaps compounding this is a lack of downtime to reflect, digest, re-set. That is, heal from hectic and/or traumatic shifts before having to return again.

According to Stamm (2010), those who score high on burnout, in any combination with the other scales, are at risk as individuals and may also put their organisation in high-risk situations as physical and mental exhaustion can create a myriad of health and safety concerns when reflexes and response times are compromised. Veterinarians, veterinary nurses, animal research technicians and practice managers/supervisors all report moderate to high scores on burnout (74% - 80%). Approximately, 20% - 25% of each of these occupations reported a low score on burnout. Primarily associated with high workloads and poor workplace procedures or policies, burnout manifests as feelings of inefficiency and, a loss of purpose and direction. Often people suffering burnout feel as though nothing they do makes a difference and they are likely to be disengaged with their patients (Stamm, 2010), clients or animals under their care.

Animal research technicians were least likely to experience secondary traumatic stress with moderate to low scores for 91% of the surveyed population. However, with moderate to high scores for burnout and low to moderate scores for compassion satisfaction, this occupational category is classified as an at-risk group.

Previous studies conducted in the human health care sector (Hooper et al. 2010, Potter et al. 2010, Stamm 2010, Ray et al. 2013) revealed mean scores for compassion satisfaction of approximately 37. Thus, the mean for compassion satisfaction in those working in animal-related occupations is similar to that experienced by oncology nurses, emergency, nephrology and medical-surgical intensive care unit nurses and, those working as mental health care professionals. The mean burnout score of 24.8 is higher than that reported in the studies by Stamm (22) and Potter et al (21.5). The mean secondary traumatic stress score of 24.6 is much higher in this study where the average compassion fatigue scores for Stamm and, Potter et.al were 13 and 15.2 respectively. This demonstrates that the risk for secondary traumatic stress is perhaps considerably higher for those working in animal-related occupations than it is for those working in human health care.

This research shows that there is a need for effective consideration at both an organisational and individual level, in the development of strategies and, the development tools and resources available to support employees within animal-related work environments. Research which implements and investigates the effects of these structured prevention and intervention programs is a priority.

## **Conclusion**

This study aimed to investigate the prevalence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations. Whilst most of the surveyed population scored in the mean or top quartile on the compassion satisfaction scale, all of the occupational categories reported experiencing the negative aspects of caring; burnout and secondary traumatic stress. The prevalence of compassion fatigue demonstrated in these results should be a major concern in animal-related occupations. Longitudinal studies which examine the attributes and characteristics of those who remain in the industry for greater than 15 years need to be conducted in order to further understand how individual mental and emotional constructs might have an impact on occupational success and longevity in animal-related occupations. This information would provide a beneficial, contextualised resource to inform resilience training programs and preventative strategies specifically targeted towards those working in animal-related occupations. Thus, providing access to resources aimed at ensuring mental wellbeing and a positive work/life balance for all employees.

The researchers' personal experience gave authenticity to understanding the results of this study and, reflection upon theoretical orientations and personal anticipation of findings enabled consideration of alternatives to be included and concluded.

This Chapter has demonstrated the need to address concerns relating to the mental wellbeing of those employed in animal-related occupations. The following Chapters use qualitative research methods to further explore the issues of occupational stress and compassion fatigue in animal-related occupations. Chapter 4 describes investigations into the scope and depth of factors which may contribute to occupational stress and distress using focus group interviews to elicit the subjective, contextualised and often highly emotive perspectives of employees across various animal-related occupations.

## Chapter 4

### **Stress and Distress: Scoping the Issue of Occupational Stress and Compassion Fatigue in Animal-Related Occupations in Australia**

*“I work in an intensive care unit....the ones I find the hardest....where the whole families are there.....it's heartbreaking....the pain....the guilt....They don't feel relieved....that weighs on me....I don't know how to relieve them of the guilt....”* Veterinary emergency nurse F: 25-30

*“....the daughter....seeing her grief in almost a raw, pure form....she kept asking....why do we have to do this? He's just a baby. I don't understand....causing me to well up....rehashing of emotion....with every patient that you touch....an interaction....you find some way of compartmentalising it and then moving on to the next one....”* Veterinary emergency nurse F: 25-30

*“...most of our animals are being culled because they're not needed....you're looking after an animal that's on the green mile for a week....they are all bojangles....its death row....over 600 in one day....killing animals regardless....just heartbreaking....”* Biomedical research technician M: 25-30

#### **Introduction**

As highlighted in Chapter 2, there are considerable variations in interpretation of occupational stress and in particular, our understanding of Compassion Fatigue in animal related occupations. There is however, evidence of a high incidence of occupational stress and euthanasia-related strain in animal care workers (Arluke 1991, Reeve, Spitzmuller et al. 2004, Rohlf and Bennett 2005, Rogelberg, DiGiacomo et al. 2007, Rogelberg, Reeve et al. 2007, Baran, Allen et al. 2009, Davies and Lewis 2010, Black, Winefield et al. 2011, Foster and Maples 2011, Baran, Rogelberg et al. 2012, Anderson et al. 2013) which is cause for great concern to veterinary clinics, animal shelters and research facilities alike. The need for a standardised approach to research and analysis in order to further build a body of evidence-based knowledge in this area was made apparent in the review of current literature (Chapter 2).

There are inherent difficulties in conducting research with animal care personnel due to the highly emotive nature of the work. Relying on quantitative methods alone would prevent capturing the diverse perspectives, thoughts and feelings of research participants. It is the qualitative nature of the thoughts and feelings of these employees that will inform the direction and content of

preventative strategies, contextualised coping mechanisms and in-house tools that can be incorporated into preventative programs within individual workplaces.

Scott-Howman & Walls (Scott-Howman and Walls 2003) defines stress as “an interaction between the person and their (work) environment and the awareness of not being able to cope with the demands of one’s environment when this realisation is of concern to the person” (pp 42). McVicar (2003) states that personal characteristics, experiences, circumstance and coping mechanisms all impact on an individual’s stress threshold. Therefore it was important for this study to be able to gather information that is far more contextualised than numerical data. That is, being able to access different complex information through conversation which people may use in their day-to-day interactions in the workplace. According to Jenny Kitzinger (Kitzinger 1995), the focus group method is an ideal technique for examining qualitative data collected through personal narratives built on experiences, points of view, beliefs, thoughts and emotions, perceptions, and the needs and concerns of individuals.

Professionals who work with animals, particularly those animals that are suffering, must not only cope with the normal stress or dissatisfaction of work but, also with their emotional and personal reactions to that suffering. They can, and do, absorb the trauma experienced by animals and are affected by continual exposure to the suffering of those in their care (Ayl 2013). Compassion Fatigue is the result of this continual exposure and is described by Charles Figley, an internationally-renowned traumatologist, as a type of ‘secondary stress disorder’ (Figley 1995). In 2006, Figley teamed with Robert Roop and wrote that compassion fatigue was “a deep awareness of the suffering of another coupled with the wish to relieve it” (pp 10).

Intense stress when left unresolved can become distracting and difficult to manage for some people and may develop into psychological distress. Psychological distress is an emotional condition that involves negative views of self, others and the environment and is characterised by unpleasant subjective states such as feeling tense, worried, worthless and irritable (Barlow and Durand 2005).

In Australia, there is much anecdotal evidence of compassion fatigue in animal-related occupations, affirmed by personal communications with the researcher, on-line forums and various editorials. However, there have been no empirical studies that define the extent to which compassion fatigue is present. For the purposes of this study, animal-related occupations include: the veterinary

profession including higher education institutes, animal control and management, animal shelters and, the fields of biomedical science and research. Those who choose to work in these areas do so because they love animals; they are compassionate and caring in nature – a common attribute of all compassion fatigue sufferers. Charles Figley (2006) stated, ‘only compassionate, empathic, loving and caring people suffer from compassion fatigue – the very people who are so vital to the animal care field’(pp 11).

The main aims of this study were firstly, to gather information directly from workers in animal shelters, animal control and management, veterinary and animal science higher education, research facilities and veterinary clinics on their perception of work related stressors including euthanasia and perceived workload and management issues as well as to explore participants’ experiences and the coping mechanisms they employ in managing everyday stress. Secondly, this study aims to investigate whether there are other factors within the workplace that contribute to employee stress and distress for example, irresponsible and annoying pet owners (Sanders 1994) or researchers who appear complacent about the number of animals utilised for their work or the wellbeing of those animals. The third aim is to investigate the perception held by animal industry workers of the role of management in addressing compassion fatigue and burnout and to develop an understanding of the perceived deficits in this area.

## **Method**

A qualitative study was carried out in South East Queensland (SE Qld) over 2011-2014. Focus groups were conducted with employees recruited from five defined animal-related workplaces; veterinary practice (2), biomedical research (1), veterinary and animal science higher education institute (1), animal control (1) and animal shelter (3). Initial recruitment was conducted by contacting managers from appropriate SE Qld workplaces who were polled for expressions of interest in participating in the study. The author visited as many sites as was practical and presented a 1 hour seminar (see appendix) on compassion fatigue in animal-related occupations. At the conclusion of the seminar, attendees were invited to register interest in participating in focus group work.

Each focus group took place at the premises of the participating workplace and lasted between 1hour and 1.5hours. Participants (n=38 [refer to Table 1 for demographics]) were recruited on a voluntary basis and each group consisted of between five and nine participants. Consent was obtained from each participant at the start of the focus group. Each focus group was facilitated solely by the researcher, with the exception of the first two. These two were done in conjunction

with an experienced qualitative researcher to ensure expert techniques were employed to ensure elicitation of data by appropriate methods.

The focus groups explored the issues of occupational stress and compassion fatigue in the animal-related occupations. The impact of euthanasia on employees and its psychological and social effects were also examined, along with participant’s perception of the role of management in addressing compassion fatigue and burnout. Furthermore, any coping strategies utilised by participants were explored.

Each focus group followed a semi-structured format (see appendix) aimed at exploring the experiences of individuals working in particular animal-focused occupations. The interview format was designed around central questions which were based on the initial literature review. Prompting questions derived from the central research questions, personal experience and insight of the researcher (RS) and, expert contribution from a second researcher (DM) were used to stimulate the continuation of discussion if it appeared to be stalling. This intervention technique was also used to encourage the group to discuss any inconsistencies either between participants or within their own thinking. Focus groups were audio-recorded using a digital voice recorder and later transcribed verbatim (Pacific Solutions Pty Ltd, Brisbane).

**Table 1:** Focus group categories and participant demographics

Focus group	Occupation	Gender		Age range
		M	F	
1	Veterinary and animal science higher education institute	1	4	30-50
2	Biomedical research	3	6	18-35
3	Animal Control	0	10	18-40
4	Animal shelter – attendants & nurses	0	5	20-45
5	Animal shelter - management	0	5	25-50
6	Animal shelter – attendants & ancillary staff	0	6	20-60
7	Veterinary practice – emergency nurses	1	6	20-35
8	Veterinary practice – emergency nurses & ancillary staff	0	5	20-40

## Analysis

The complete transcripts for all eight focus groups were made available to the second reviewer (DM) and a sample of quotes, selected at random points during the focus group discussions, was then coded by DM independently. At least six quotes were selected from each

transcript. The coding was then compared with that of the researcher (RS) and any discrepancies discussed. About 10% of the data required discussion to reach agreement, with most disagreement involving data which could be coded to multiple themes. In theme identification, the researcher was able to identify particular topics, themes, patterns, concerns and responses which were repeated by respondents both within and between each focus group. Each group (rather than the individual) is the unit of analysis (Knodel et al. 1988). NVivo qualitative data analysis Software; QSR International Pty Ltd. Version 10, 2012 was used in the data analysis.

Constant comparison analysis is characterised by three major stages; stage 1 – open coding where the data is reviewed to obtain an overview of the content. The content is then dissected into small units and descriptors are attached to each unit. Stage 2 – axial coding where the descriptors or key statements are grouped into categories and Stage 3 – selective coding whereby the researcher develops one or more themes that express the content of each of the groups (Strauss and Corbin 1998, Onwuegbuzie et al. 2009). A fourth stage in this study included an amalgamation or grouping of occupations in order to facilitate more fluent interpretation of each data set. The constant comparison method of analysis is useful when there are multiple focus groups within the same study as it allows the researcher to assess saturation in general and across-group saturation in particular (Bender and Ewbank 1994).

Incidence density is defined as the number of times a theme is mentioned within each data set (focus group) (Bender and Ewbank 1994). To establish incidence density, the data sets were reviewed again and the number of times a particular theme was mentioned within a focus group or across all focus groups was tallied. Further to this, particular reactions to a theme as well as repetitions of the occurrence of each theme were recorded. This data proved helpful in comparing the relative importance of identified themes to participants.

Often a statement varied in length from only one word to several sentences. The meaning or sentiment behind these needed to be interpreted in the context of the surrounding dialogue within the focus group interview. Therefore, it was imperative to have the full transcript on hand during Stage 3 of the constant comparison analysis.

Of particular interest were content themes that spanned many, if not all of the occupations across the focus groups. The outcome of content theme review, constant comparison analysis and incidence density were tabulated and included in the results section where occupational groupings and themes are discussed in detail.

## Results

The themes identified (n=17) during analysis of the focus groups revealed a high level of consistency in employee experiences in relation to occupational stressors and compassion fatigue. The themes that were consistent across all of the focus groups included; “*Stress & Distress*”, “*Coping & Justifying*”, “*Anger & Crankiness*”, “*Emotionally Drained, Tired & Worn Out*”, “*Role of Management*”, “*Education and the Perception of Others*”, “*Resentment and Empathy towards Colleagues*” and, “*Bond & Attachment*”. The full list of themes identified and their ranking has been presented in Table 2.

*Stress and distress* was overwhelmingly identified as a factor most associated with working with animals, exposure to euthanasia and, compassion fatigue across the eight focus groups. As this theme was the strongest reported (28.4% [582 comments] across all themes identified from the eight focus groups) it is appropriate to describe findings allied to this theme foremost; that is, as previously stated, *stress and distress* will be the focus for this Chapter. Interestingly, whilst there were inter-occupational similarities in factors reported as contributing to stress and distress, there was also great diversity. For this reason, findings will also be described within occupational context in the Chapters following.

*Stress and distress* ranked highest in five of the eight focus groups. For each group, the numbers presented in brackets represents the percentage of comments relating to stress and distress and the raw data); animal shelter – attendants & nurses (38% - 84/221), animal shelter – management (37.2% - 61/164), veterinary practice – emergency nurses (34.6% - 189/547), animal control (31.8% - 87/274), veterinary practice – emergency and specialist nurses (28.7% - 87/303), animal shelter – animal attendants & ancillary staff (17.4% - 28/161), biomedical research (14.7% - 32/218) and lastly, the veterinary and animal science higher education institute (9.6% - 14/146).

**Table 2:** Thematic analysis of themes from focus group interviews

Themes Identified (ranked in order of prevalence)	In FG's	Comments = total no.	FG1 VetAnSc HE	FG2 BiomedTech	FG3 AnContr ol	FG4 AnShelter	FG5 AnShelter	FG6 AnShelter	FG7 VetPractice	FG8 VetPractice
Stress & distress	1-8	582	14	32	87	28	61	84	87	189
Coping & justifying	1-8	304	33	30	39	20	42	40	38	62
Anger & crankiness	1-8	248	17	5	29	33	5	30	57	72
Emotionally drained/tired/worn out	1-8	198	12	5	19	9	17	20	38	78
Role of management	1-8	184	10	28	11	27	17	11	36	44
Hurt/guilt & wastage	1-3, 5-8	119	11	15	30	0	5	9	13	36
Education & perception of others	1-8	118	6	43	9	29	5	10	12	4
Resentment/empathy towards colleagues	1-8	99	6	12	17	7	7	14	11	25
Bond & attachment	1-8	42	7	6	6	4	5	3	6	5
Method of euthanasia	1-3	31	21	2	8	0	0	0	0	0
Training & job preparation	1-3, 7	27	6	12	6	0	0	0	3	0
Grief & sadness	7 & 8	26	0	0	0	0	0	0	2	24
Nightmares & physical effects	1-4, 8	25	1	16	3	3	0	0	0	2
Denial	2, 3, & 8	12	0	5	1	0	0	0	0	6
Confronting	2, 3	11	0	6	5	0	0	0	0	0
Desensitised	1, 3 & 5	5	2	1	1	0	1	0	0	0
Relief	3	4	0	0	4	0	0	0	0	0
<b>TOTAL NUMBER OF COMMENTS</b>		2035	146	218	275	160	165	221	303	547

Key: FG (focus groups)

\*See Appendices for Thematic Analysis - Theme Codes

Using incidence density in comparing factors reported as contributing to stress and distress, a number of sub-themes were identified (refer to Table 3). Each of these sub-themes will be discussed in turn.

**Table 3:** Sub-themes identified as contributing factors for *Stress & Distress*

<b>Sub-themes Identified</b>	<b>FG1&amp;FG2 Vet&amp;AnSc /Biomed</b>	<b>FG3&amp;FG4 AnControl /AnShelter</b>	<b>FG7&amp;8 VetPractice</b>
Euthanasia in general	11	47	21
Human-animal bond	4	19	6
Method of euthanasia	7	2	0
Anticipation of death	1	1	1
Perception of others/judgment	3	6	0
Lack of respect from peers	0	0	3
Excess of animals	8	15	0
Lack of care/empathy from others	3	0	0
Others coping mechanisms	1	0	0
Decision process on euthanasia	0	30	0
Public ignorance	0	24	0
Lack of support/resources	0	30	27
Workload	0	21	80
Death in general	0	0	25
Bad death	0	0	8
Grief	0	0	12
Animal welfare concerns	0	1	10
Vicarious trauma/emotional contagion	0	5	0
Management & euthanasia processes	0	5	0
Euthanasia – financial decision	0	0	7
General stress	0	0	23
Other	0	13	0
<b>Total number of comments</b>	<b>38</b>	<b>219</b>	<b>223</b>

*Euthanasia in general* was reported to be most associated with stress and distress in the fields of veterinary and animal science higher education and biomedical research (28.9% - 11/38 comments) and those employees working in animal control and animal shelters (21.5% 47/219 comments). In describing the impact of euthanasia, whilst only a small proportion of an employee’s working week is dedicated to performing euthanasia, the act itself takes up an enormous amount of emotional energy. One veterinary technician stated; “*After doing it for so many years I found that I couldn't do it anymore....picking up these animals....and doing it all....I was actually having*

*nightmares....of actually putting old people to sleep”*. Similarly, another technician relayed; *“even though you don't have a bond with the animal, you're looking into that animal's eyes, into their face....I guess I've always gotten myself through that by saying that a lot of them are in such a terrible condition, you don't know what they've been through. At least they are not going to be suffering anymore”*.

Previous research (Arluke 1994, Reeve, Rogelberg et al. 2005, Rohlf and Bennett 2005, Rogelberg, Reeve et al. 2007, Baran, Allen et al. 2009, Leinberger Jr 2009, Rollin 2011) collectively conclude that employees in animal-related occupations indicate a love of or affinity with animals. Thus, they are likely to suffer ‘moral stress’ (Rollin 2011) when their duties alternate between the caring for and the killing of animals. The magnitude of pet overpopulation appears to make euthanasia a necessary reality for these employees and validates their perception that irresponsible pet ownership is the leading cause. A cause which is beyond their control but for which they believe they *‘clean up the mess’*. Therefore, it is reasonable to imply, that euthanasia in general is the most common factor causing stress and distress in these employees further reinforces this perception.

Statements were also made in reference to how long term exposure to euthanasia may lead to negative outcomes in mental wellbeing and, that these may manifest in many varied ways in different employees. A biomedical research technician conveyed; *“....a lot of people just sort of kid themselves and think they're doing okay and say they're doing okay and it's part of the job and it may surface after weeks, months or even years. But it does surface.....you do notice things about people the longer they work in this industry and I really do think that it....is compassion fatigue ... surfaces in ways that you wouldn't even recognise .. as compassion fatigue”*. Herzog (2002), stated that individuals who work with animals in the context of biomedical research will at some point inevitably form a bond with the animals with whom they interact. Thus, the animal is transformed from ‘object’ to ‘pet’ and the result is a change in moral status. Whilst this may enhance the wellbeing of the laboratory animal, it may also involve a moral cost to the human caretaker (Herzog 2012).

For veterinary clinic employees, ***euthanasia in general*** accounted for only 9.4% (21/223 comments) of the reported contributing factors, behind those of ***workload*** (35.8% - 80/223 comments), ***lack of support and resources*** (12% - 27/223 comments), ***death*** (11.2% - 25/223 comments) and ***general workplace stress*** (10.3% - 23/223 comments). This lower concern surrounding euthanasia in this occupational context can be best summed up by the following

statement from a veterinary nurse; *“I completely feel that euthanasia is an amazing treatment option....”*. Similarly, an emergency nurse states; *“You also get the ones like Nikki... ..that got put through surgery and blood transfusions and should never have - so we had her for, what, 4 days or something. The owners are so dedicated but it should never have gone ahead.... at the end of the day, it's the owners' decisions. But then to see the dog for four days go through so much and then....euthanasia would have been the kindest thing for her four days ago”*. In her book *Blue Juice* (2012), Patricia Morris states that most veterinarians do not find moral or emotional difficulty in decisions regarding ethically grey cases in which uncertain health outcomes are balanced against known adverse effects of treatment or, poor treatment success. Most veterinarians conclude that it is equally legitimate to treat or euthanase an animal (Morris 2012).

Analysis of **workload** issues for veterinary clinic employees revealed that nurse to patient ratio caused most stress and distress. A conversation from one focus group between a male and female emergency nurse provides insight into this contributing factor;

*“Last night we did twenty-two consults. The night before that....”*

*“Twenty-seven”*

*“...twenty-seven. That's in five hours”*

*“Twelve critical patients in ICU, two ventilated, and there were two nurses... ..another dog that had a cholecystectomy that was....absolutely actively dying. You cannot leave that patient. We've saved it, but did we have to sacrifice the others?”*

Similarly, a veterinary nurse describes the severity of staffing shortages in the following excerpt; *“....it got to the point, when it was busy you'd just run around going, alive, alive, alive, alive. Like that was your TPR....we literally are doing our best. We're not ignoring them because we're playing hopscotch upstairs or something. Like we're trying to do everything we can and we're trying to get to the critical ones first, which we think need us the most, and the rest will be okay until we get to them. But it doesn't make it any easier”*.

Participants described feelings of being stressed and under duress due to excessive patient load. They believed that they're unable to perform their duties to the high standards that they not only expect of themselves but that which they believe the animals deserve and the clients expect. One nurse explained; *“I'm a perfectionist with myself, and if I'm not paying 100 per cent to my game.....because we can be pulled in five different directions with 20 different patients and four*

*vets is that, if we don't get to have that perfect craft, it can be really frustrating for us. Increases anxiety.” Another nurse added “You just feel lousy...that kills...I guess you're giving 100 per cent effort but you know that the patients aren't getting 100 per cent of what they need, is the hardest thing.....”.*

Discussions around nurse to patient ratios highlighted the unpredictability of veterinary emergency practice. It was agreed between the participants of one focus group that it is difficult to roster for emergency shifts as the influx of patients varies so much from one shift to the next. There is a fundamental lack of ability to control these numbers and as such, places added pressure on not only the person doing the rosters but also those whom are affected by ineffective and inefficient staffing levels. Furthermore, there was evidence that employees were not only inwardly affected by issues of workload and resource limitations but are also adversely affected by witnessing the struggles of their peers; *“To watch good nurses crumble... because they couldn't get to that patient and it's deteriorated or they didn't have time to check its blood pressure and it's really hypertensive and then it goes to surgery and you've got a hypertensive arrest... were too busy to check the anaesthetic machine properly and there's an anaesthetic fault relating to a patient problem. You make a mistake with a drug calculation and it has catastrophic effects because you're tired and you don't have enough systems to check your work properly”.*

Furthermore, nurses expressed a level of stress caused by what they perceive as unrealistic expectations placed on them by veterinarians when patient numbers are high; *“...as nurses, we have to be advocates for all of the patients, for all of the vets... but there are still vets that will get really snarky if their patients aren't at the forefront of your consciousness....you might have 12 patients....why didn't you do this?....., please don't ask me that.....”.*

Adding to this, is a feeling of minimal support and a lack of provision of resources, a male veterinary nurse described the following; *“You'll walk in on a shift and they'll all be full and we'll have run out of pumps. There'll be pumps going off and there are animals on the ground, and you just know that you're in for it. I think, for me, just knowing that you've got a set time to do all the patients, and you're not going to be able to do 100 per cent for all of them, so just trying to figure out who gets my priority”.* This was further substantiated by a colleague who conveyed that is not only a shortage of life saving resources which contribute to their stress and distress, but also time and resources which enhance patient care and comfort; *“....little things like animals in their own urine and faeces -... dogs especially - that you know need to go out to the toilet.... hasn't been*

*barking the entire time it's been there but is barking now and it needs to go to the toilet.... That stresses me out....like running out of litter trays for cats or the cats not getting litter trays because people are too busy....". A senior nurse/shift supervisor relayed the unique situation in which employees such as herself are often faced with, where support mechanisms or peer support are absent or they fail; "...you take on everything. You know what the problem is in that corner of the hospital,....in ICU....with the vets....with the clients, you get the worst phone calls coming through to you....sometimes there's not a very good support system. Understaffing is a horrific problem".*

Nurses were open in describing the negative emotional effects of feeling unsupported and, in lacking the vital resources needed to do their job. They relayed a belief that their concerns and opinions were dismissed and about not being listened to when discussing issues around patient care. For example, one emergency nurse explained; *"We had management there on the weekend and we were telling them our concerns. I don't know if it was denial...but we're like, patient care is the lowest....its non-existent today. They were like, no, no everyone's getting looked at, everything's getting its treatments. I was like...it's not. How are you not seeing how awful this is? How no one's coping. I don't know how to get through to them. So, there's a level of frustration about not being heard, not being listened to. I think a lot of people too, if they are criers, will cry on the way home, when they get home".* Nurses also described some interactions and responses to concerns as being patronising. This further adds to their distress in regards to having no control over this aspect of their job and, feeling that there are no processes available to them to help rectify situations in which they feel there are major deficits in patient care.

It appears that this may have some impact on the way in which employees in veterinary clinics cope with or, relate to death and dying patients. One nurse described the trauma she felt at the death of a patient as follows; *"....not being heard when I felt that we could have - even if he wasn't going to live - I feel like we could have euthanased him. We could have stopped him from having that completely. The look in their eyes when they can't breathe is one you never forget, and he was frantic"* Similarly, *"Some... vets are awesome....but sometimes they are absolutely wrong and they need to listen to their nurses, who tenfold know animal behaviour over them. Some of the little signs that we can tell them, your patient is deteriorating. Its respiratory effort has changed. Not being listened to - that destroys me".* This nurse further adds, *"They think it's a personal challenge... Even though I may have seen hundreds of this case in particular and might have something really beneficial for the patient to say, it will almost be like they do the exact opposite just because I've said something. It can be frustrating when they don't want to work as a team*

*because, at the end of the day, I want the best for that patient just as much as they do. Why wouldn't you utilise what you've got?"*

In contrast, ***lack of support and resources*** (13.7% - 30/219 comments) and the ***decision process leading to euthanasia*** (also 13.7% - 30/219 comments) were considered more stress provoking than that of ***workload*** (9.6% - 21/219 comments) in animal control and animal shelter environments. Interestingly, neither of these contributing factors was evident amongst employees in veterinary and animal science higher education or the biomedical research sectors. Rather, for these occupations, the ***excess or surplus of animals*** which necessitate euthanasia (21% - 8/38 comments) and the ***method used to perform euthanasia*** (18.4% - 7/38 comments) were considered to have higher impact on levels of stress and distress.

In analysing the focus groups for animal shelter employees, it must be noted that whilst lack of support and resources, and the decision process leading to euthanasia were rated equal in terms of causing stress and distress, the employee occupations contributing to each sub-theme were different. That is, whilst attendants and nurses described concerns and the negative impacts on their mental wellbeing in relation to the decision making process leading to euthanasia, they felt more strongly about the lack of support and resources. Conversely, whilst management also had concerns over resources, they were more adversely affected by the decisions they are required to make regarding the fate of animals within their facilities. In describing the impact of the decision making process one manager from a shelter explains; *"....it can be quite difficult, because you do have to go back to facts only, but we're in this industry because we are nurturers as well....communicating what restrictions we have as a manager - you're on the ground, you're looking at this one animal in this situation but we do have to look big picture wise....trying to make the best assessment that we can but it might not be the result they want....I think you get a secondary guilt....people that maybe believe that your decision is not the right decision.... you're the one that's either making the decision or you have to go through that process of justifying in yourself to make yourself feel okay....people maybe....think you're heartless....You've already made a very difficult decision and then it gets raked over and you've got to re-justify it and re-justify it, and that gets really hard"*.

However, in relation to this, the nurses and attendants indicated that whilst they put their trust in the veterinarians and management to make 'the right decisions' about individual animals, they don't necessarily always believe that those decisions made are the right ones. One attendant stated; *"I think it's really hard when you think the animal can be saved...and no one else believes*

*that....and unless you're willing to take it yourself sometimes you don't have any control, there's nowhere for it to go. We don't have the resources". Similarly, "...we've all walked away from different careers to make a difference. Emotionally our hands are all tied. And we're the ones who are grassroots level. And we have to deal with it emotionally again....for us to actually be able to have enough time for everything you need twice as many staff....we're getting everything done just in the nick of time, but we haven't got that extra time to look at this dog, spend some time with it, find out its character, you know, make sure its behaviour is improving and not going backwards".* This statement aptly conveys why it is that attendants and nurses indicated that a lack of support and resources evokes more stress and distress symptoms in them. These employees believe that if more resources were available, both physical space and personnel, then many more dogs and cats would be able to be successfully rehomed, and not euthanased.

Findings indicate that the sheer ***number of animals being euthanased*** in animal control and management and animal shelters, whilst distressing, appears less of a contributing factor than that of ***perceived public ignorance*** as to what constitutes responsible pet ownership (6.8% - 15/219 comments and 11% - 24/219 comments, respectively). This is interesting as one would surmise that irresponsible pet ownership is the root cause of overpopulation and therefore has a direct bearing on the number of animals having to be euthanased due to lack of available homes or adoptability of animals. One animal control officer states; *"Cats....much more difficult, because of the sheer volume....it just gets to the point where you just need to step away from it....you can either fall apart or you can go the other way, where you shut down.....I'm a very, sort of, shut down person emotionally, so..."*.

Another animal control officer stated; *"the hardest ones to euthanasia are the ones that deserve it the most..... the ones that you know have just had the shittiest, shittiest life that deserve so much more than they've had, they're, for me sometimes the most emotional ones to euthanase. They deserve it. You know, they deserve to be free, but...."* This resonates how irresponsible pet ownership affects those working in this occupation. Further evidence of the stress and distress experienced by animal control officers was provided by an employee who stated; *"They come in year after year after year with their litters of kittens and they refuse to get their queen de-sexed and they say to their little kids, it's going off to the farm. Well, sorry, no, it isn't. It's going down the back and I, myself, am going to hold this thing while it dies"*.

In recognising the importance of the *human-animal bond*, the data showed it had most impact on those working in animal control & management and animal shelters (8.7% - 19/219 comments). In contrast, employees in veterinary and animal science higher education (10.5% - 4/38 comments) and veterinary practice (2.7% - 6/223 comments) conveyed a lesser impact caused by this sub-theme. Participants from the animal shelter focus groups revealed a much larger proportion of employees being emotionally attached to the animals in their care. They believe this may be in part, due to the use of foster care programs (in which most staff are involved). Additionally, there were discussions on animals that were abused and neglected and the '*extra connection and instant bond*' this can create between animal and carer. One employee describes her experience in becoming attached to animals within the workplace and having to cope with the decision to euthanase these animals, decisions that are beyond her control; "... *I've had three dogs in the three years ...that I got really attached to. No talk after it....how are you going, your feelings about it, that sort of stuff....it is very emotional because... it's not your dog but you've spent so many weeks with this dog before it's been euthanased....management walking past the dog....they don't even know the dog....straight down 'barrier aggression', it's for euthanasia*".

Interestingly, one participant who had moved from an active role in performing euthanasia to a more managerial role described how she believed she had become more sensitive and heightened in her reaction to witnessing euthanasia since changing positions within her organisation; "...*I struggle with that....I'm removed from it....if I'm just by happening chance walking through the clinic and there's a euthanasia all I see is big brown eyes staring back at me. ...I find that my reaction is probably to the extreme now, where in the past....I could emotionally handle it, whereas now I connect with everything that's being euthanased....*".

**Grief** over animal suffering and death was a sub-theme also identified as a contributing factor for stress and distress in the veterinary clinic focus groups. Comments (5.4% - 12/223 comments) related particularly to the emotional toll that client grief took on the veterinary nurses. One nurse stated; "*It's interesting because, when you talk about euthanasia in a pound situation or an animal control situation, you're dealing with your own grief in terms of euthanasing the animals. But in working as a nurse or a veterinarian in a clinic, you're not only dealing with that side of things, but also the grief of the clients*".

Another sub-theme of interest in veterinary practice was that of concern caused by a belief that **general animal welfare** was at times compromised. This theme related predominantly to how

animals (dogs in particular) might be 'feeling' whilst hospitalised. For example, the anxiety and 'embarrassment' experienced by animals that are unable to eliminate outside of their cage. Staffing levels and workload are believed to be the one factor preventing animals from being toileted in a timely manner. Furthermore, the stress on animal mental wellbeing evoked by being in unfamiliar surrounds and being exposed to noxious stimuli such as barking dogs and, strange scents. One conversation between participants went as follows;

*"...you also have guilt about, okay well that dog sat in its pee for the last hour..."*

*"...you've got one that's barking or one that needs to urinate and you're like, I don't have time for you.*

*"...and they're already sick and they're covered in piss, it's like this is awful. We don't treat people like this"*

*"They're behind bars and they're in a foreign place....terrified because it doesn't know what's happening. It's in a strange place...."*

*"Cats even more so...with the dogs barking...."*

*"...and it smells...and you're forcing it to do stuff. Then we're like, stop being annoying. I'm like...God, like it just must be horrifying for them, terrifying"*

Those working in animal control and animal shelters also noted that their concern for animal welfare and mental wellbeing was a contributing factor to their stress and distress. However, the animal welfare concerns varied from those of veterinary clinic employees. For example, one comment from an animal control officer explains the effects on mental wellbeing when dogs in shelters are overcrowded; *"...with overcrowding....more stress on the animals....that stresses staff tremendously, because then we're killing animals by getting them into the shelter....our dogs that go cage crazy, all our dogs start attacking each other because they're too stuck on top of each other and they're jammed in and we end up TBDing (To Be Destroyed) them because they've gone nuts, which we've created, which is a massive stress on everyone"*

Another animal control officer describes the situation with one courtesy cage as being horrendous; *"...two sets of drop boxes....dogs go down one, cats go at the top....they're getting so many drops in....10, 12 litters dropped in overnight and then six dogs....if you do that you're basically better off just killing them and euthanasing them because if you've got a dog underneath and you've got a stressed out mum and litter up top and they've been like that all night that's a horrendous spot for that animal to be in".*

As previously mentioned, those employees in animal control and animal shelters are exposed to a unique sub-theme stressor, that is, sheer excess in numbers of animals coming into their facilities and, more often than not, having to be euthanased. This causes much angst amongst staff as participants describe the ‘chaos and cacophony’ caused by overcrowding. The following conversation describes how employees are effected so differently in situations where they have some form of control (performing euthanasia once the decision has already been made) as opposed to situations in which they have no control (intake numbers and overcrowding of animals within a shelter environment);

*“Everyone's very stressed. People are getting to the point where they'll walk....everyone's trying to cope as best they can, trying to battle on, but the chaos of the whole place....has just accelerated so much” “It's just absolute chaos. You cannot think, you can't hear yourself. People are shouting because they can't be heard....”*

*“...because of the stress, obviously work and all this crazy, chaotic, is causing more stress than potentially the euthanasia at the moment...”*

*“Yeah, well the euthanasia's - that's actually fairly easy to deal with compared to the rest of the day, because you've signed it off already”*

*“So you have control over that whereas all this chaos you have no control over”.*

Similarly, for the veterinary and animal science and biomedical research technicians, an **excess or surplus of animals** having to be euthanased is a significant cause of stress and distress (21% - 8/38 comments). Comments were made regarding the senseless nature of surplus breeding, pet overpopulation and a perceived lack of appreciation of animal life wastage. One biomedical research technician described; *“...it was just mass production....excess didn't matter....a 60 litre tub and they'd all just - you'd be treating them like they weren't animals”*. Similarly, a technician who had previously worked in an animal shelter stated; *“....pups....you've got an excess of them....we don't know where they're from or what they're from....or their behaviour just went wrong, whatever....bang you've got this production line of death. It did really get to me in the end.....just a production line and it really affected me badly. That's why I got out of that industry of the [shelter]. But I think it's carried on anyway, regardless”*.

There were a small number of other sub-themes that are worth noting here, in order of incidence density and occupation. Veterinary practice; experiencing a **‘bad death’** (3.6% - 8/223 comments), **dealing with clients and money** (3.1% - 7/223 comments) were both identified as

casual factors of stress and distress. In the case of animal control and animal shelter employees; the *perception of others and judgement by others* (2.7% - 6/219 comments) evoked a stress response. This sub-theme was shared by those employees working in veterinary and animal science higher education (7.9% - 3/38 comments). Similarly, the *coping mechanisms of others* were also identified as being a contributing factor for stress and distress for the veterinary and animal science higher education technicians and the biomedical research technicians (7.9% - 3/38 comments) as well as for those working in animal control and animal shelters (2.7% - 6/219 comments).

*Vicarious trauma* and *emotional contagion* was a sub-theme identified in the animal control and animal welfare focus group (2.3% - 5/219 comments), along with *management processes* and *euthanasia* (2.3% - 5/219 comments). A sub-theme common across all three occupationally assimilated groups was that of, the *anticipation of euthanasia and/or death*. However, the incidence factors were minimal (2.6% - 1/38 comments) in veterinary and animal science and biomedical research technicians, (0.5% - 1/219 comments) in the animal control and animal shelter sector, whilst only 0.45% or 1/223 comments) in veterinary practice.

Whilst the effects on employees of others' coping mechanisms was not a significant contributing factor for stress and distress, a number of statements and comments made by participants from each of the focus groups were significant. For example, one animal control officer stated; *"a pressure that affects me a lot is other people's coping mechanisms.....we do have a person here who's....coping mechanism is to block off and be quite rough. When I say rough, at some points, I mean cruel, frankly. That is a particularly hard thing for me to deal with....sometimes we need to shut down. We need to put ourselves into that way that we can get through this..."* A colleague continued to convey this negative perspective; *"....but what you're talking about is....the dogs here have had such a hard time and they're being euthanased and their last moments is another human being treating them like shit"*.

It is pertinent to extrapolate on the emergence of statements relating to vicarious trauma and emotional contagion. These were identified in the animal shelter focus group, specifically focus group 5 in which there were managers and those in supervisory roles. One manager stated; *"I seem to be one of those 'go to' people for a lot of people, which is fine, but you get to a certain stage....where I've kind of gone I can't do this anymore and the wall's gone up. I'm very different now to what I was like....because I've got to that stage....I just can't do this anymore...."*. This

same participant later described how the simple task of grocery shopping became too difficult due to feelings of being overwhelmed by the trauma of others – “...and I just stood there and I burst into tears. I just couldn't cope. It was just sensory overload....I just broke down. Just left my grocery trolley there and walked out and went home”.

Another participant who works in a supervisory position stated; “...I've hit a wall....I just can't take too much more emotional people coming - and I do picture those waves hitting me, and sometimes you're okay, they're baby waves and you can just stand there and they'll just hit your legs but other times it's like a tsunami and you can feel it sucking you and it's going to whack you”.

A powerful statement came from another manager; “I think there's closeness amongst the team but sometimes I think that's a little bit counterproductive, because we all should switch off at the end of the day. These guys, for me in particular, they're all friends, so they talk about work outside of work and then all the issues become huge issues. So those are challenges that I face”. The role of management and that of managers was a very strong theme throughout all focus groups and therefore is reported on more specifically in Chapter 6.

Lastly, a number of statements and comments were identified by participants of each of the focus groups as contributing to stress and distress. As these were broad in nature or perhaps very specific to one person, they were sub-themed ‘*other*’. These included statements regarding the stress and distress associated with housing and caring for long-term impounded cases in animal control where particular animals are held for extended periods of time pending court hearings. The doubts and concerns surrounding the rehoming of animals from animal shelters and the angst felt in regards to whether an adoption will be successful or not.

Other stressful situations were described in relation to a lack of space and privacy during euthanasia in a veterinary emergency clinic. As well as, statements made in relation to the impacts that work stressors have on one's personal life.

## **Discussion:**

The systematic conceptualisation of stress through research has been in existence for a number of decades. Lazarus and Folkman (1984) point out that stress is an inevitable aspect of life and that what makes the difference in human functioning is how people cope with it.

Most commonly, stress is categorised as either stimulus or response, whereby stimulus refers to events within the environment such as noxious conditions, illness or natural disasters. Response refers to a state of stress; a person is labelled as reacting with stress or being under stress (Lazarus and Folkman 1984). These definitions are limiting in the interpretation of an individual's circumstance as a stimulus may only be defined as stressful if there is in fact a stress response to that stimulus. The response to any given stimulus will vary on an individual basis. That is, not everyone will find a particular noxious condition stressful. The extent to which an individual is negatively affected by workplace stress, if at all, is dependent upon their personality characteristics (Jeanneau and Armelius 2000, Glasberg et al. 2007) experiences and coping mechanisms (McVicar 2003) and level of social support (Peeters and Le Blanc 2001, Glasberg et al. 2007). An individual's stress threshold is also dependant on the circumstances under which demands are being made (McVicar 2003). Therefore, a source of stress for one individual may not constitute a source of stress for all or, for a particular individual at all times (Lees and Ellis 1990, McVicar 2003). These statements are evidenced by the results of this study.

Using the focus group approach for this study gave the researchers an interactive platform in which participants were able to disclose and discuss their experiences, thoughts and feelings on occupational stress, euthanasia and compassion fatigue. The design of the focus groups and the intention behind selecting this forum style were to ensure participant privacy and confidentiality in order that they felt comfortable in speaking freely. However, it is worthy to note that in presenting a seminar to potential participants prior to their enrolment in this study could have shaped the results. Whilst not all participants attended a seminar, this should be considered a limitation of this study.

By soliciting participants from the five defined animal-related occupations, we were able to obtain insights into what they believe constitutes common workplace stressors and the perceived contributing factors involved. There is considerable literature that looks specifically at compassion fatigue in veterinarians (Mitchener and Ogilvie 2002; Cohen 2007; Bartram and Baldwin 2010; Hatch, Winefield et.al. 2011; Mastenbroek, Demerouti et.al. 2014) and whilst efforts were made to include veterinarians in this study they were unsuccessful. This is a limitation of the research and veterinarians are integral to all animal-related occupations and their perspective would have value added to the conversations. Regardless, other diverse occupations in regard to 'core business focus' were able to be included and thus exploration of possible similarities in contributing factors as well as identifying unique differences was conducted. This broad method of triangulation contributes to the trustworthiness and rigor of the qualitative data as it provides a more accurate picture of the

research area by capturing the multiple ‘voices’ or ‘truths’ that relate to the topic, rather than being understood as a way to access the right ‘result’ (Silverman 1993). Thus, a version of reliability of the research is achieved through the principles of ecological validity and the apparent transferability of the results across multiple occupational contexts within this study. Furthermore, this gives rise to the generated results perhaps being applied to wider or different populations working within other animal-related occupations not included in this thesis (i.e. veterinarians, slaughtermen, wildlife carers and so forth). Whilst some researchers argue that this type of generalisability is not a meaningful goal for qualitative research (Johnson 1997; Schofield 1993 in Braun and Clarke 2013), others (Sandelowski 2004; Stephens 1982 in Braun and Clarke 2013), argue that qualitative research results are generalisable, just not in the same way as quantitative results are (Braun and Clarke 2013 pp. 280).

Burnout is a result of severe, prolonged stress at work and those in the human health care and animal care industries are considered particularly susceptible (Wu et al. 2007). Exposure to death and dying and a lack of resources are commonly documented as main stressors leading to burnout (Wu et al. 2007). The views, opinions and feelings of participants in this study concur. Burnout is largely considered a management issue, that is, it is created by prolonged excessive workload which leads to employees feeling consistently overwhelmed by the demands of the workplace. As such, you may expect the contributing factors of burnout to be relatively easy to address and rectify as part of normal management practices. However, it appears that for employees in animal-related occupations this presents further difficulties in addressing employee mental wellbeing if accompanied or compounded by the effects of compassion fatigue.

Whilst stress and distress ranked highest amongst the majority of focus groups, there was disparity behind contributing factors between the occupational groupings, demonstrated to be directly linked to the core focus of each animal-related occupation. That is, those employees working in animal control & management, animal shelters and veterinary clinics are focused on animal health and wellbeing, whereas those employees working in veterinary and animal science higher education and biomedical research are focused on science.

In this light, it is interesting to consider the occupational choices made by those in each of the varied occupations. For example; perhaps those working in animal control and management are more likely to have opportunistically ‘fallen into’ their job rather than specifically sought a position in that occupation. In comparison, you could argue that those

working in animal shelters are more likely to have chosen their occupation due to a strong desire to help those animals who are homeless. Similarly, this conscious decision on occupational choice would apply to those in veterinary clinics.

Hence, when highlighting the apparent disproportional concern regarding euthanasia in general, those employed in veterinary and animal science higher education and biomedical research anecdotally appear considerably less concerned. This may not necessarily mean that they have less regard for the life of animals but is perhaps a result of employment focus and conditioning.

In analysing the theme stress and distress for those working in veterinary and animal science higher education and those working in biomedical research, it was evident that contributing factors were clustered around euthanasia; euthanasia in general, methods of euthanasia used and, the sheer numbers of animals being euthanased. Contrastingly, those working in veterinary practice expressed greater angst in relation to workload, resource limitations (both physical and personnel) as well as euthanasia in general and, death in general. In comparison, for those working in animal management & control and animal shelters the contributing factors, whilst also bearing a cluster of concern around euthanasia, identified a comparatively even spread of concern across a number of identified contributing factors. That is, of the 22 identified casual factors of stress and distress, animal control & management assimilated with 14 of them, veterinary practice 10 and veterinary and animal science higher education and biomedical science eight.

Workload was a significant factor for those working in veterinary clinics; in particular the disproportionate nurse to patient ratio was of greatest concern to the nursing staff. Nurses and technicians felt that this posed an unacceptable risk to the care and safety of patients and, thus has a negative impact on staff morale. There was some concern surrounding workload for those in animal control & management and in animal shelters. However, workload did not rate as a contributing factor for stress and distress for those working in veterinary and animal science higher education or biomedical research. It is presumed that human resource policies and procedures enforced within government organisations and institutions may account for this.

A similar pattern was evident regarding thoughts of perceived lack of support and resources within animal control and management, animal shelters and veterinary practice. The

presumption as to why this might be the case pertains to both financial constraints (for physical resources and staffing resources) and a lack of understanding and knowledge of mental health and personal wellbeing and, how to address these and support staff in the workplace.

The decision process with regard to the euthanasia of animals is a significant concern to those working in animal control and management and, in animal shelters. Evidence from this study suggests that this is due to employees having a perceived feeling of powerlessness in the decision making process. This was echoed across each of the focus groups which incorporated employees from these animal-related occupations. In comparison, those working in veterinary clinics, biomedical research and in veterinary and animal science higher education expressed little concern with the decision making process. It is presumed that in veterinary practice this would be because most often euthanasia is performed as a treatment option. The decision is most commonly made as a result of irreversible illness or injury, or due to heavy financial constraints. Thus, it is more likely to be viewed as valid and acceptable. Similarly, in biomedical research, decisions regarding the fate of animals are often made before the animals are bred or purchased. Therefore, euthanasia as an outcome is part of a formalised process that would involve an animal ethics committee which perhaps releases some moral stress from those who perform the actual euthanasia. However, this being said, there is current literature which reports a link between attachment and the human-animal bond, euthanasia and stress and anxiety in veterinary clinic personnel and those working in biomedical research (for example; Bayne 2002, Rohlf and Bennett 2005).

A further area that could be usefully explored is that of the role problematic or 'annoying' owners have on contributing to occupational stress and compassion fatigue. Whilst this was not specifically elicited in this focus group work, it is an important area as reported by Sanders (1994). Sanders states, that veterinarians define problematic clients as those who are annoyingly ignorant, inattentive, demanding, and apparently neglectful of their pets' physical condition (pp160). Furthermore, owners who are described as emotionally over-involved are deemed troublesome because of the extra time and unnecessary attention they demand (pp166) as well as, those who are cost-driven rather than focused on the welfare of their pet (pp167). Whilst this study focused on reporting what criteria defines annoying or problematic clients, it would be valuable to add to the literature by conducting more targeted investigations on potential links between these defined clients and compassion fatigue.

## Conclusion

Working with animals is a highly rewarding and yet incredibly taxing occupation. There are many events and situations that bring a great amount of personal and organisational satisfaction. Equally, there are many factors that can contribute to burnout and fatigue in individual workers. These factors can vary significantly between individuals as well as between occupational contexts. Thus, it is important to understand these variations and the likely differences in an individual's response when considering the design and development of intervention programs and coping strategies. A one-size-fits-all program may not provide the mechanisms needed to support all employees.

Ensuring an open and safe fora to allow for identification of stressors is vital and, would prove a powerful tool for any employer in combating occupational stress and compassion fatigue. Therefore, it is important that any program designed and implemented to address mental health and wellbeing of those working in animal-related occupations should include mechanisms for both formal and informal debriefing.

As occupational context was highlighted as having a noteworthy influence on stress and distress, it is important to explore the diversity of contributing factors across a variety of animal-related occupations in order to further understand the complexity of compassion fatigue. Chapter 5 describes contextual differences and similarities in stress response across a variety of animal-related occupations and, draws further evidence of variability between individual responses to the negative aspects of working with animals.

*“They were dying horribly. Rose came up to me and was like, you need to look at this dog, and it's dying. I didn't want to look at it....I didn't want to see it, didn't want to talk about it, didn't want to make the decision. She's like, no seriously. So I walked over there and she was right. I was just like, [you're staring there and I'm looking at it]. She's like; you need to call the owners. I was looking at the dog and I'm like, it's fine, it's heart's still beating, he's still breathing. She's like, barely. I was like, okay, fine; just leave me alone for a second. She was right. But it depends on who it was. I think if I didn't respect the nurse, I probably would have lost my shit...don't tell me what to do. But she was right. She was right, I needed to look at that dog. I mean it was dying; I needed to tell the owners to euthanase. I needed to stop being stupid and euthanase it because it wasn't going to live” Veterinarian: F25-35*

## Chapter 5

### **Occupational Stress and Compassion Fatigue: contextual differences in response to working in various animal-related occupations in Australia**

*“....they had no money.....I'll never forget the wailing....just the absolute wailing and guilt. She was a nice person and she just didn't have the money to treat this dog. The vet.... did everything they were meant to - maybe not the most - empathetic is not the right word, because they are very empathetic - but maybe just didn't connect on another level. She just was wailing. She grabbed onto my arm at one point and said I've killed my dog. I killed him. She was just screaming; this awful wailing. It went through the whole clinic at 2am in the morning...one of the most traumatic ones I've ever had to deal with. It went for so long as well”* Emergency veterinary nurse F: 25-30.

#### **Introduction**

As highlighted in Chapter 4, there were variations in responses of animal care workers to occupational stress. Similarly, there was considerable diversity in contributing factors of occupational stress and compassion fatigue, both intra and inter occupation. This variability exemplifies the importance of considering why certain aspects of animal-related occupations affect some people and not others and, how an individual's reaction to these aspects has an impact on their health or mental wellbeing.

Drawing from the focus group interviews examined and discussed in Chapter 4, this chapter aims to analyse and report on contextual differences (and similarities) in responses to working with animals across a variety of animal-related occupations, namely; veterinary and animal science higher education, biomedical research, animal control, animal shelters and veterinary practice.

In analysing the identified theme of stress and distress in the previous chapter, there is reason to believe that those working in animal-related occupations, particularly those who must actively participate in euthanasia and those who experience perceived suffering of animals, are potentially at risk of mental health issues. Therefore, it is important to gain a full understanding of contributing factors associated with occupational stress and the ways in which occupational stress may commonly manifest in different people across different occupations.

As reported in Chapter 4, there were 17 themes identified during analysis of the eight focus groups and a high level of consistency in themes was apparent across all of the focus groups. This study aims to further analyse data from these focus groups in order to gain preliminary empirical evidence of the prevalence and associated relationships of occupational stress and compassion fatigue in animal-related occupations. Each participants subjective experiences are critical to understanding any relationship that may emerge between an ostensible noxious task or event, an individual's reaction to that task or event and, any perceived (or real) negative impact on mental health and wellbeing.

For ease of understanding and interpretation of data, the results will be discussed under occupational groupings. This method of reporting gives rich contextualised qualitative data that provides insight in to the contributing factors of occupational stress and compassion fatigue. It further provides a means of ascertaining the prevalence of identified themes within each occupational grouping thereby gaining an awareness of the relevant impact issues. This level of awareness is pivotal to the successful design, development and integration of preventative strategies to combat negative trends in mental health in animal-related occupations, not only in Australia but across the globe.

### **5.1 Veterinary & Animal Science Higher Education Technicians and Biomedical Research Technicians**

Two focus groups were conducted, one with veterinary and animal science higher education technicians (four of which were female and one was male). The second focus group was conducted with nine biomedical research technicians, of whom six were female and three were male. The main themes identified during focus group interviews with both the veterinary and animal science higher education technicians and biomedical research technicians are outlined in Table 1.

**Table 1:** Analysis of themes identified from focus groups held with veterinary & animal science higher education technicians and biomedical research technicians

Themes Identified	FG1 VetAnScHE	FG2 BiomedTech
Stress & distress	14	32
Coping & justifying	33	30
Anger & crankiness	17	5
Emotionally drained/tired/worn out	12	5
Role of management	10	28
Hurt/guilt & wastage	11	15
Education & perception of others	6	43
Resentment/empathy towards colleagues	6	12
Bond & attachment	7	6
Method of euthanasia	21	2
Training & job preparation	6	12
Grief & sadness	0	0
Nightmares & physical effects	1	16
Denial	0	5
Confronting	0	6
Desensitised	2	1
Relief	0	0
<b>Total number of comments</b>	146	218

It was pertinent to group ‘**coping**’ and ‘**justifying**’ together as linked themes as many participants indicated a strong association between moral justifications as a means of coping. Many examples of coping mechanisms were given, for example one veterinary technician stated; “*one of the coping mechanisms is you're hopefully helping further somebody's education, that they can either learn from this to be a better vet, to possibly stop this willy nilly breeding of animals and try to control it a bit better....justify it....that's one of the ways that I cope....*”. Similarly, a biomedical research technician relays: “*If you're euthanizing an animal and you know that that animal is....for research purposes, you can....justify that. It is for a purpose and I will thank them for it. That's my way of coping with it....if you believe in what you're doing.....there is something beneficial coming from this...so there is no emptiness at the end of it*”. Another technician further relayed; “*There are those who will be very emotional based. There will be those who are very scientific based....everybody is different....some people have nightmares. Some people will go home and get themselves drunk....everyone copes differently....some will go home and have a big cry....they reach that breaking point....it's very difficult. They'll eventually crash*”.

Analysis revealed a great emphasis on the importance of justifying the value and ethics of their jobs. For veterinary & animal science higher education technicians, the ability to justify animal death and the use of animals for teaching and research (incidence density of 22.7% - 33/146) is a key mechanism for coping with everyday tasks that are physically and emotionally taxing. This was reflected in discussions around animals relinquished to a veterinary school from council animal control and management facilities; “....*you are euthanasing a dog....someone is going to use it to educate themselves or they're going to gain something....just doing it because there is too many or something and throw them straight in the bin, it's not really making me feel too good....*”. Holding a personal philosophy that the life of an unwanted animal is not extinguished in vain but rather utilised for the benefit of education and the betterment of veterinary and medical science appears common amongst employees in this occupational arena.

Whilst justifying animal use was the most prominent theme for veterinary technicians, their biomedical research colleagues also felt that justifying animal use in research is an important factor in relation to maintaining their mental health (incidence density of 13.8% - 30/218). However, this theme ranked third behind education & the perception of others and, stress & distress; 19.7% (43/218) and 14.7% (32/218) respectively. Similar to veterinary technicians, those in biomedical research conveyed that their reasoning and attitudes were also based upon the benefits and greater good that come from warranted, quality science and research. Participants expressed that having a good understanding of the science and objectives behind the research, would give them a better sense of self-worth and confidence behind what they were tasked with each day. One biomedical research technician stated; “*Unless you physically go and seek out your researcher and say please tell me....what it is you are doing and trying to achieve, you don't get told anything and you then don't feel that you have a purpose....if I have a purpose - it sits with me a lot better and I can do what I can do and I'm very confident in my skills and my capabilities*”. Participants (in particular those who were still relatively new to the industry) expressed that having to personally seek out project information contributed significantly to their level of stress. One reason given for this was because perhaps they felt they had no right to know, that project confidentiality did not always include them and therefore their contribution to the project is considered insignificant.

It is not surprising to the researchers that ***education and the perception of others***, in relation to the use of animals in biomedical research, ranked highest as a stressor. Participants believed that there was a lack of openness or broadmindedness within the greater community when considering the work being carried out in the biomedical research sector. And, that people were more likely to gain information

from social media and the internet which, more often than not, reflected the biased views of animal activists. Participants described how the negative attitude and perception of people who are not involved in or who have no experience in animal research can have such an adverse impact on their mental wellbeing. There was a level of frustration amongst biomedical technicians in relation to the barriers that people put up to avoid learning about and educating themselves on what is involved with animal research and the fact that these same people would willingly utilise the benefits gained in order to make their own lives or the lives of loved ones better, easier, more comfortable. This was explained by one male participant as follows;

*“I think it's the attitude of people who aren't involved, the way they just sort of put up their barriers straight away when you try to explain things to them....the majority of the population are all for research and improving human health....you ask the general population....would you eat meat if you had to kill your own meat, would you be so accepting of this research....if it was your child who needed open heart surgery and we needed to use a piece of cow tissue, but in order to use that cow tissue, you're the one who has to slaughter the animal....then it's like oh well, I want your research, but I don't want anything to do with it...I couldn't do it. But I'll take all the benefits that come with it. We've made it our job”.*

In combating the negative perceptions of the public, education was targeted as the most powerful tool. One biomedical research technician explains; *“It's education. If you can tell someone the projects you work on and the things that had been done. When you see that article in the paper that's new research, new products....this will add 10 years to someone's life.....so when you [see] guys like Ian Fraser and you are watching Channel 9 News....they might do a really quick shot in the lab.....that's the end of it....what is stopping us from....getting rid of the taboo.....gradually exposing it to the public....Steve Irwin has come along and it's all about preservation and having - the captive population in case things happen.....it's all positive, positive, positive. I don't know why they couldn't put a spin on our industry....”*

Others described the *perceived* role that animal liberationist organisations such as People for the Ethical Treatment of Animals (PETA), play in perpetuating inaccurate animal research propaganda using photos and footage which they believe are out of date. Participants acknowledged the disreputable history of animal research. However; they are fervent about the advances that have been made within the field of biomedical science, in relation to animal welfare, over the last two decades. Participants were also most certainly passionate about their level of care, management and professionalism in the work

that they do. Participants felt that the falsehoods perpetuated by these groups can have an enormous adverse effect on their mental wellbeing.

Interestingly, it is not only those external to the workplace that can cause distress to 'front-line' personnel. Participants described how remarks from colleagues impacted on them, how off-the-cuff comments can have a lasting effect. One female veterinary technician explained *"It's hard when your own staff - another staff member is calling you a killer and a murderer.....It's very offensive....they think they're funny and they're joking. But I'm not finding it funny"*. Similarly, when dealing with members of the public, another female veterinary technician stated; *"a couple of people....brought in greyhounds and one guy brought his wife....they were wholly attached to it....she shouldn't have come....having to be the one to tell him I could not promise him it would be [re]homed....the woman is standing there bawling her eyes out....I'm just like what are you doing to me! The job is hard enough already as it is"*. This recollection is indicative of the impact vicarious trauma can have on an individual. Not only did this participant have to deal with her own feelings and emotions in having to euthanase this animal but being exposed to the distress of the person surrendering the animal increased the negative emotional burden of the situation.

*"....the students....they ask a lot of questions of why, how come and how can you do this job....Education....if they witness a euthanasia being done at an early stage of their career, like first year even, they would understand what we go through and how we have to cope with doing this. I think that's the problem - especially what we do"*. This statement made by a male employee working in the animal and veterinary sciences higher education sector, relates to the impact of varying levels of education and perception of euthanasia and the use of animals in teaching and research. Employees reported that misinformation or a lack of information can elicit comments and opinions which have a negative impact on their mental wellbeing. Another employee stated; *"I also found it very hard - they [students] know what you are going to be doing,....saying we're murderers or killers and things and that's really hard when it's a hard job to do to start off with.... that makes it even harder ....the look they give you....is really hard to cope"*. The behaviour or the expressions and comments that others exhibit can cause distress amongst both veterinary and animal science higher education technicians and biomedical research technicians. Further evidence of this comes from a statement which is commonly used and may cause distress to people working in occupations in which euthanasia is a necessary task is; *"I love animals too much. I couldn't do what you do"*. One participant explained the impact this comment has had on him as follows; *"It affects you....I mean everyone wants a job that they can....be proud of...and are happy to explain it to people in detail. It gets to you...."*

There is a flow on effect from these that moves into the personal lives of those affected. They may become disengaged from friends and family, or feel the need to hide what they do every day for fear of being judged “*My family don't know what I do for a living*” reveals one female biomedical research technician. Another relays a conversation with her mother; “*....told her when I first started....we had to do this today and we had to do that - I thought you loved animals? It's like Mum....this is part of the job*”. A male participant described his feelings of misperception “*....is like you go to dinner parties and you speak to people about what you do and they don't want to know about it or they don't agree with it and for me, as soon somebody shuts themselves off like that with sort of ignorance, I find it hard to even bother trying....it's like bashing your head against a brick wall*”. This sentiment was echoed by a number of participants within this focus group.

The ***method of euthanasia*** was of considerable concern to veterinary technicians (14.4% - 21/146) in comparison to the biomedical research technicians who recorded less than 1% incidence density (2/218). This was of interest as the veterinary technicians' discussion related to both laboratory animal euthanasia (intraperitoneal injection versus cervical dislocation) and intraperitoneal euthanasia of small companion animals (pups and kittens). The most common form of euthanasia in laboratory animal facilities is by use of carbon dioxide (CO<sub>2</sub>). However, there is a substantial and conflicting difference in response to CO<sub>2</sub> inhalation both between and within species, strains and breeds (AVMA 2013) which can lead to considerable distress in those animals being euthanased. The inconsistencies in this method also proved traumatic for the veterinary technicians but posed less of an issue to the biomedical technicians. It is surmised that this may be due to the level of training received in carrying out euthanasia using this method. A further interesting finding was that cervical dislocation was favoured over the use of CO<sub>2</sub> in both occupations. However, the logistics behind using this method for mass culling poses a great limitation which necessitates the use of CO<sub>2</sub>.

One female biomedical technician said of the CO<sub>2</sub> method; “*....I think one of the factors that would help me deal with it....that would help me justify it to myself more is improving the methodology of the euthanasia. Carbon dioxide is often a method used...I hate it. I cannot stand it...I don't think it's a humane method of death. Carbon dioxide stimulates the suffocation instinct in the brain. So they die feeling like they're suffocating*”. Participants who felt they had no choice in the method used expressed feelings of frustration and anxiety in having to perform euthanasia in a manner they had less confidence in; both as a method in itself and in their own perceived ability to carry out the euthanasia using the dictated method.

A strong point that was echoed a number of times throughout the focus group interviews for both the veterinary technicians and the biomedical research technicians was that a level of autonomy and decision making from their perspective in relation to the method of euthanasia used would be beneficial to their coping and mental health. This was described in the following way by a female technician; *“I nearly threw up on the spot when I found out that you cervical dislocate the animals..... I still don't do it and, for me personally, using Lethobarb and a syringe and a needle is external to myself. I know that it's not, obviously, but cervical dislocating I can't. I just can't do. I don't do....”*. Another female participant described her experience; *“I got - obviously shown how to gas....then cervical dislocation....I had to practice on some dead ones that had been gassed. Then I got given two live ones and did the first one and that worked okay for me and the second one I messed it up....I was a blubbering mess and.....traumatised by the whole thing....I swore I would never do that again....”*. These statements support the notion that there appears to be less stress evoked when employees are afforded control over difficult tasks and how they are carried out.

In discussions around a euthanasia that does not run smoothly, one male veterinary technician conveyed how a fear of euthanasia going wrong can have adverse effects on staff *“....that's part of the problem and it's almost like a fear factor....the dogs can pick up that if you are a little bit on edge and we're thinking this dog is a little bit more of a handful than I'm quite expecting”*. Not only can animals sense stress in people, it also appears that emotional contagion amongst peers can be a precipitating stress factor prior to and during euthanasia sessions, further adding to the unpleasantness of euthanasia. A female participant relayed *“....what is so upsetting with euthanasia that....don't go smoothly.....the ones that I think where the animal - for whatever reason - it flips out'....that's really hard when it's a hard job to do to start off with”*. Further discussion around this comment revealed that it is not uncommon for animals to have involuntary adverse reactions due to technical errors such as, when euthanasia solution is mistakenly delivered extra-vascularly often causing violent spasms of the limbs and, vocalisation. Or, it may be the result of an animal becoming panicked due to unfamiliar surrounds, scents and personnel thus, resulting in fear resulting in aggressive behaviour. This is traumatic and distressing for the animal and therefore, can also be traumatic for personnel.

There was some feeling among some participants that not being present during euthanasia may be beneficial, that this would minimise feelings of grief and guilt; *“I imagine in your situation where you've got dogs that you're doing all the time, it would be relatively simple to have a closed off plastic cage where they are nice and comfortable first. You get them settled....give them a bowl of dog food and a comfy bed. Then put carbon monoxide into the room....that would definitely save....a lot of grief and*

guilt”. Along similar lines; “*Ideally, it would be wonderful to be able to give the dog a bowl of food and put a pill in there and you come back half an hour later, it's eaten it and it's just gone to sleep....to not....have any idea....it's eating and....it just goes to sleep*”. However, this line of thought from those working in animal and veterinary science higher education and biomedical research is in total contrast to that expressed by emergency veterinary nurses. These employees reported that they find it traumatic if an animal dies alone.

***Feelings of anger & crankiness*** ranked third highest for veterinary technicians (incidence density of 11.6% - 17/146). This anger is directed towards those in the community who surrender pets to animal management or who do not desex their animals; irresponsible owners whose pets have numerous litters which ultimately end up in animal management facilities and are euthanased for reasons such as limited holding capacity within the facility or for behavioural reasons. For example, a female veterinary technician explains; “*that was harder, because she wasn't there because it was her fault and she was having to be euthanased because of some other idiot that had treated her like that*”. Further to this, participants talked about a level of anger and crankiness felt within them as a manifestation of given situations that were beyond their control (such as pet overpopulation or excessive breeding of laboratory animals). This anger and crankiness was felt to surface at times in their daily interactions with animals and towards their daily duties, for example, one technician describes her feelings; “*Definitely cranky....not that you take it out on the other animals at work. But you find yourself where you normally wouldn't be....like if you clean the litter tray and you've just cleaned it and the cat goes and poos in it just as soon as you've cleaned it....*”. Similarly, “*You lose your patience, because you're sort of moving along....it's obviously in the back of your mind....not thinking of it in the forefront....something back there and that's when I start to realise okay, well maybe it's time that I look....because I'm getting cranky....*”.

Additionally, participants were not comfortable with the over-breeding of dogs in the greyhound racing industry and the seemingly blasé attitude of owners and trainers. There was strong agreement among participants that these are the roots at which the problem needs to be addressed. However, what further contributes to this angst is a lack of control over the outcome for these animals, an inability to find homes for them all. Even further to this, once they are euthanased, an inability to utilise the cadaver for teaching or research purposes also contributes the anger felt by employees as this contravenes their philosophical beliefs that if an animal is to be sacrificed then there is a duty to ensure that it does not die in vain, but rather is utilised in a manner that gives back to its species through quality teaching and research. This is evidenced in the following statement made by a male veterinary

technician; “....where I see a perfectly good animal that you think could be re-homed ... - but you know for a fact you can't do anything but euthanase....that's the part that I get really cranky about....I can make more sense of it if you were....reusing them. I can understand....but it's just the pure waste of animals coming in, being euthanased and thrown away and getting no benefit out of them”.

Often, feelings of anger and crankiness may lead to more in depth mental weariness; this was identified in the theme of; ***emotionally drained, tired & worn out***. Veterinary and animal science higher education technicians appeared more significantly prone to this with an incidence density of 8.2% (12/146), whilst their biomedical research technician counterparts revealed an incidence density of 2.3% (5/218). Drawing inference from the comments, it appears that the disparity between these occupations may be attributed to veterinary and animal science technicians being more exposed to companion animal euthanasia. In particular, feelings associated with having to make the decision as to which animals are to be euthanased. This can take a heavy toll, especially if this task is not shared but rather left to the discretion of only one or two people. One technician states; “*I don't like it how we have to choose the animals, which ones are the best ones....it can be very hard to make that decision....because.... another animal....not....be given a chance.... it is what we have to do....*”. A fellow technician further added; “*If we're not having to do it so regularly in our job day to day....that will make people want to stay in the industry more....they not going to get burnt out, emotionally drained....*”.

Whilst this theme ranked fifth across all identified themes within this focus group, the qualitative evidence of the impact it has on employees particularly as it encroaches into their personal lives is indicated in the following excerpt; “....*I find it really hard to switch off....on the weekends sometimes thinking about stuff.... wake up in the middle of the night and then I won't sleep because I think oh my God, I don't know if I locked that....just even little things. It's not even about euthanasia....*”.

A powerful message that echoes throughout the themes is that ***overbreeding and wastage of animals*** is a constant source of stress and distress for both of these occupations' employees. The theme; hurt, guilt & wastage, was relatively equally represented by both veterinary and animal science technicians and biomedical research technicians (7.5% - 11/146 and 6.9% - 15/218 comments, respectively). All of the comments attributed to this theme had a direct inference to the waste of animal life and the hurt and guilt which they felt in relation to this. This is particularly true for those technicians charged with breeding laboratory animals; “....*not only have they been bred for nothing, but they've had procedures done to them for nothing, because they haven't taken any samples....these animals you've*

*looked after for seven weeks, seven months, whatever, all of a sudden within a phone call someone says no, we're not doing that....just killing animals regardless it seemed like. It's just heartbreaking...*” To provide similarity of concern regarding overbreeding and wastage of animals, and the impact it has on those who work with companion animals, a technician stated; “*....just because it's feral....it doesn't matter....the fact that they act like that, makes you feel more guilty....it's not the animal's fault, the poor animal....that's what has probably hurt me the most out of all of it*”. Those working in biomedical research are not dissimilar in their concerns; “*I've worked with 1.5 metre long sharks....they euthanase it all they want is its eyes....you've been looking after it for six months and....named it and patting it....the whole belief system....do you believe in an afterlife, do you believe animals are in an afterlife? It can be a real [thorn]. If you are lying there at night thinking about these things....*”

Another theme that emerged from these focus groups was that of ***bonding & attachment***. Evidence suggests that the greater the bond or attachment to an animal, be it a physical bond that has developed as a direct result of interactions with an animal or an abstract bond created by an employee's pre-developed attachment to a particular species or breed, the more adverse the emotional impact. Regardless of species or breed, a technician from each occupation concluded; “*....even with mice, you still get attached to certain ones....go into any mouse room and try not to find a pet that's sitting on a shelf, which you're not supposed to have*” and, “*obviously the ones that you've got history with and you might know their character and you know that they're a lovely natured animal or something, that's obviously going to cause more distress*”. These feelings of distress can manifest in people in many different ways, one of the more extreme examples of this was stated by a technician who had worked in both biomedical research facilities as well as in veterinary and animal science higher education, she explained; “*...initially you don't know what it is. You don't know why your heart is racing and you can't draw a full breath and you just put it out of your head and you keep going about doing whatever it is that you're doing and get on with the day and try to get home in the afternoon. What? I can't breathe properly, still? Day after day after day doing euthanasia and....walking into that room would trigger those same physical signs for me. So I stopped doing it for a while....*”

Discussions within both focus groups about ***training and job preparation*** revealed enough concern to warrant this being identified as another theme. Incidence density analysis saw that biomedical research technicians were more overtly concerned (5.5% - 12/218) than their veterinary and animal science counterparts (4.1% - 6/146). What resonated between the two groups was the opinion that it did not matter how much information was relayed to new employees regarding euthanasia and the sheer numbers to be euthanased, no one can really be prepared for it, nor the emotions it may invoke and the

feelings that may arise, until they have experienced it first-hand. However, it was agreed that it is imperative to have as much information and preparation as possible prior to being involved in or performing euthanasia. Furthermore, comments were made in relation to there being ample training for the practical and technical aspects of performing euthanasia but the deficit lies in the training and preparation to be able to mentally and emotionally cope with it. Some participants believe that this lack of training in emotional intelligence has led to the desensitisation of employees as a mechanism for self-preservation. This in itself creates further distress amongst their colleagues. This is powerfully portrayed by one young male technician who stated; *“I think anyone who can with their bare hands or syringe or with gas can stand in front of an animal and by your own hands kill it and have no emotion, that's scarier than having emotions. They're the people that should really be looked at”*.

**Resentment & empathy** emerged as a theme for both focus groups. However, it was interesting to break down this theme further to analyse each feeling and compare them across the two occupations. As a whole theme, the incidence density was greater for the biomedical research technicians (5.5% - 12/218) than for the veterinary and animals science technicians (4.1% - 6/146). What was interesting was that the biomedical technicians conveyed much higher level of resentment towards their colleagues (58% - 7/12), more specifically, researchers than those employees working as veterinary and animals science technicians (16.7% - 1/6). In analysing the qualitative data, it was apparent that the biomedical research technicians perceived that there was a high level of apathy from researchers towards the plight of their research animals. This is evidenced by the following conversation;

*“...I think it may trickle down from the fact that we work alongside a lot of people that....view animals as a tool to better their research”*

*“But don't....deal with the dirty aspects of the job. “They don't have that predisposition, I suppose, to the human/animal bond”*

*“A lot of frustration comes from that aspect of my job....some people can be very flippant”*

*“But it all came down to how much the project was worth”*

*“Or they're more worried about the results more than the welfare of the animal”*

*“I feel part of our job is to be policing. I shouldn't have to....because it's so obvious to me that this animal is suffering and this animal is in distress or is diseased”*

Themes identified only in the biomedical research technician focus group were those of **“denial” and “confronting”**. Comments based around **denial** related specifically to employees attempts to convince themselves that euthanasia and occupational stress would not have any impact on their

cognitive function or emotional self. For example; *“I walked in with this mentality I need this job, I want this job, I can see myself working in this industry. I put my hand up to prove myself and although management would have shared the load, like shared that job, I took it upon myself, probably just being a bit sort of macho and just going I'll cull them. There are no worries. It doesn't bother me....”* However, this technician went on to reveal that denial appears only a short term fix, that hidden emotion will most likely surface eventually; *“....you just end up kidding yourself after a while that you cope....think they're doing okay and say they're doing okay and it's part of the job....it may surface after weeks, months or even years. But it does surface”*.

Comments relating to **confronting** were specifically related to exposure to death and dying. A technician working in animal and veterinary sciences higher education gave insight into the challenging nature of her work; *“It is confronting....how quickly it can change within a day of bringing it in, spending that time with it, cleaning it, looking after it, giving a warm bed and a bowl of food and the next day it's your best friend and 72 hours later you're going to be using that animal for a non-recovery surgery....we're on the frontline of that. Even though it's hard sometimes....we should be proud of the industry that we're involved in....”*.

Whilst the biomedical research technicians conveyed a more significant prevalence of stress and distress in comparison to veterinary technicians (14.7% and 9.6% incidence density, respectively), many of the factors relating to or causing the stress and/or distress varied within each occupation. However, there were also a number of similarities between the two occupations. For example, there was discussion on disparity of care standards between conventional laboratory animals such as rats and mice and that of larger species (sheep, cattle and pigs) and again with respect to companion animals. One biomedical technician explained; *“If a sick animal is identified in a rodent colony, its euthanased. There is a double standard there. In large animals, if it's a sick animal, you have to use the full extent of the vet services to fix that animal...I don't think it matters....what size it is. It affects people in one way or another”*.

## **5.2 Animal Control and Animal Shelter**

Four focus groups were conducted, one with council animal control employees (all of whom were female n=10) and three were conducted within a single animal shelter. The first and third of the animal shelter focus groups consisted of animal attendants, veterinary nurses and ancillary staff such as receptionists (n=5 and 6 female employees respectively), the remaining focus group comprised

participants at a management level (n=5 female employees). As the composition of the first and third focus groups conducted within the animal shelter was similar, these were amalgamated for ease of analysis. The main themes identified during focus group interviews with both the animal control employees and those working in animal shelters are outlined in Table 2.

**Table 2:** Thematic analysis of themes identified from focus groups held with animal control and animal shelter employees

Themes Identified	FG3 Animal Control	FG4&6 Animal Shelter
Stress & distress	87	112
Coping & justifying	39	60
Anger & crankiness	29	63
Emotionally drained/tired/worn out	19	29
Role of management	11	38
Hurt/guilt & wastage	30	9
Education & perception of others	9	39
Resentment/empathy towards colleagues	17	21
Bond & attachment	6	7
Method of euthanasia	8	0
Training & job preparation	6	0
Grief & sadness	0	0
Nightmares & physical effects	3	3
Denial	1	0
Confronting	5	0
Desensitised	1	1
Relief	4	0
<b>Total number of comments</b>	<b>275</b>	<b>382</b>

As with employees in the section 4.1, *coping and justifying* are linked themes by virtue of moral reasoning. That is, by ensuring that any decision or involvement in euthanasia is justified, employees in animal control and animal shelters feel they are better able to cope with the constant loss of animal lives. The theme coping and justifying ranked second behind stress and distress in animal control employees with an incidence density of 14.2% (39/274) and 31.8% (87/274) respectively. Stress and distress was also ranked highest for animal shelter employees (29.3% incidence density – 112/382), coping and justifying ranked third (15.7% - 60/382) behind that of anger and crankiness (16.5% - 63/382).

A statement from one animal control officer exemplified the critical dependence employees have in being able to justify animal euthanasia as a way of coping; “....*all the animals that were on the*

*list for euthanasia, I could justify the reasons for that in relation to dogs, so I never lost sleep in regards to dogs,.....they should have been going to God, because we don't want them in the community or there's health reasons....Cats....much more difficult, because of the sheer volume".* Employees can be very resourceful in their strategies for coping in this regard as one relays; *"to get through that, part of our process is that we would have animals for selection only two days a week at that time, so we would always pick one, so there would be - even if we were full, we would have one in reserve, so we would always make sure that we could save one life on a Wednesday, one life on a Friday..."*. In contrast to the occupations covered in the section 4.1, there appears to be more emphasis on coping ability and coping mechanisms in the animal control and animal shelter focus groups. The interactions with individual animals and the pleasure that would be derived from this was a recurring comment amongst participants in these focus groups; *"I know going in and cuddling....even patting the Q [quarantine] cats, just to see them come to life, start purring and then eat....it's lovely....10 minutes to go in there and do that, it would make my day...."*

Contrastingly, one male animal control officer expressed a more pragmatic attitude; *"The job is about public safety, first and foremost, so that's the way I approach it...you can't save them all...even when you do re-home...doesn't mean they're going to be responsible pet owners....then end up back here anyway..."* This participant further added that after his first week of performing and being involved in euthanasia, he felt it did not 'bother' him after that. He explained that he felt 'lucky' that he could not remember the dog he impounded the day before and once an animal was euthanased, "it was job done" and "in a way, it was a relief" as he no longer had to interact with "those people" who had owned the dog and not taken care of it properly. The moral reasoning behind this approach according to this participant is best summed up by his statement; *"you could say it was selfish, but you've got to think about what's best for you too and you sitting there stressing about it all and having it build up and get to you, that's not good for you for health wise"*. In rebuttal, a colleague replied; *"Yeah. I used to be like that. It was just that was my job. I just did it and then I didn't think anything more of it, but I think because I've been doing it for so long now, it is starting to build up..."* These contrasting statements reflect the diversity of opinion and methods of coping that exist within animal-related occupations.

Not surprisingly, each of the participants in the animal control focus group indicated that having the opportunity to debrief or "vent" was an important mechanism for coping on a daily basis. One officer stated; *"I think it's kind of, healthy that when you do get back to our inner sanction (sanctum), that we are able to vent and discuss it with each other....I think it's quite healthy that we're able to - God, this just sucks. This person was such an idiot. I think it's good that we're able to talk about that"*.

However, not all participants felt that they had good coping mechanisms or that they were coping in general, an example of this; *“I don’t. I don’t cope. I bottle and I take antidepressants. That’s how I cope”*. Another stated; *“We don’t cope really well. Cope okay when we’re out there, but it’s the drive back here and when we get back here. We have lots of venting sessions....I think if we’re able to vent and we’re not judged about that venting, it’s easier for you to cope and so you don’t just pack it all in there and just one day explode”*. Whilst the benefits of debriefing, regardless of how informal it may be, appeared very important to those working in animal management, they did not feel supported in this by management and felt that this added to their stress and distress. *“There’s no support....except for your peers....management see it like we are whinging and complaining....get into trouble for bitching and it’s not....we vent if something’s frustrating us on that day we’ll vent....”*. Additional support to this theme was added by another animal control officer who stated; *“...you debriefed and it could have just been as management says, a bit of a bitch session. But it’s venting, it’s getting it out and it’s processing....we can’t do that now, because there’s so many things jammed into our eight hour and 36 minute day that there is no time for down. There is no time to let go, to debrief, to do whatever you need to do”*. Participants who worked in animal shelter also conveyed a similar perception in relation to debriefing.

Animal control officers and animal shelter employees found that the ability to re-home animals and the benefits of a volunteer program which saw animals being taken for walks, groomed and interacted with on a more personal level gave them a focus for which they could derive happiness and therefore an ability to cope with the unpleasant tasks associated with their jobs. In having the dogs socialised and walked, participants felt that the mental wellbeing of the animals was much improved; this has a direct impact on the mental wellbeing of the animal control officers. For example, one participant stated; *“it has been awesome with our volunteers, actually, that come in and walk them. I have noticed that the dogs are coping a lot better....it’s good to see them out walking. It makes me smile. It makes me cry, because they’re so happy...”* Similarly, an employee from an animal shelter revealed; *“....we’d be adopting them a lot quicker and euthanizing a lot less....because they’d be stimulated...you’d recognise problems sooner....I have my fingers crossed for this [Volee] program because you know it’s our only hope”*. The importance that re-homing animals has to these employees can perhaps be best described by the following statement; *“We got an email the other day saying, hey, we need some dogs for re-homing and it was like, yes. I’ve just solved the problems for those dogs that were perfect but needed that little bit of work and we were just about dancing on our desks yesterday”*.

One very significant statement that was given by an employee of an animal shelter expressed how a purposeful change in mindset around the relinquishment of dogs was an empowering coping mechanism; that, by choosing to react and respond in a positive manner, you may find a level of ‘OK-ness’. This dialogue is reproduced here; *“This is where my mentality changed... you can sit there and have this negativity towards that customer....because they're surrendering their....you look at it as they don't love that animal enough to find that home so they're better off with us and change your mindset around....close off that door because whoever owned that animal doesn't want them anymore....we're starting this animal's new life....when they come into here it might not be perfect, they might not have a comfy bed down there like in a house....they get new toys, they get new bedding and they might get a playmate....not being so negative towards the why the animal came to us and just think what we now can do for them....this is their home, it's only a temporary one but that's what we're going to supply for them...”*.

Whilst feelings of **anger and crankiness** ranked second for those employees working in animal shelters, it contrastingly ranked fourth for animal control employees with an incidence density of 10.5% (29/274). Much of the employee anger and crankiness within animal control and animal shelter occupations appears to be derived from interactions and perceptions of the public in general; those members of the community who are considered sub-optimal in their care of animals, irresponsible pet owners. One animal control officer explains; *“I don't like the public....they've just got excuses for everything....but the dog is to blame because you're lazy and you're a shit owner...”* Similarly, *“The simple things that are making us go through all of this....it is that education of the public, but it's hard when you think, how do you educate idiots? They don't get to see the stress that we're going through; because of their stupidity....it is....the people that make you angry”*.

Throughout the focus groups held with these occupations, it proved difficult at times to re-direct conversation away from the thoughts and feelings that employees had towards the public. Participants were very passionate about the negative impacts of irresponsible pet ownership and the flow on effects of this. Primarily, the concern was for those animals that came into their care and the fate that would be before them. Discussions were based around the number of animals entering the facilities, owners' reasons for relinquishment, institutionalisation of animals (dogs in particular) and repeat offenders (those who's animals are either continuously being impounded or those who continue to allow their animals to breed). There were also conversations that discussed the flow on affects which they experienced. For example; *“... ridiculous owners that don't be responsible for what they've got, he continued to let [Butters] out and Butters kicked in to kill, until finally we got him*

*again and euthanased him. I found that when I'm starting to get to....that point where I really need to chill out for a bit, because....small things will really make me cranky".*

Further angst for employees working in animal shelter facilities comes from what they consider to be a misrepresentation of the truth. That is, there is such an emphasis on portraying a 'no kill' policy and/or "sugar-coating" the reality when dealing with the public and wider community. "*....I get really angry that it's all so sugar-coated for the community....people out there who own pets have no idea....how many of them are getting surrendered and not getting rehomed*". Often the public appear to either assume their pet will be re-homed or, they will ask employees to verify that this will be the case. The lies that employees feel compelled to tell members of the public when they are surrendering their animal bears a burden for them also; "*...you've just told someone exactly what they want to hear...and I've done a lot of lying in my time since I've worked here which I don't feel 100 per cent content with either but....we sugar coat it*". Similarly, participants expressed anger over the apparent lack of transparency about the number of animals that are euthanased and that they feel compelled to lie to the public to make them feel better about relinquishing their animal. One shelter employee stated; "*My frustration is education....when people surrender their animals and we all say thank you so much for bringing your animal in today, I think it will be well looked after. Great that's good for them to hear. They go home with a happy, nice clear conscience...feeling less guilty*". **Anger and crankiness** in response to behaviour exhibited a member of the public can also manifest from very particular situations or events such as the following as described by an animal control officer; "*....the long term dogs....one of the first main court cases....they're not a drama, but she comes down here and shakes her keys, want to go in the car? Want to go in the car? These dogs fall through their arses to get out of the cage. You want to go in the car? Then, she walks away and doesn't come back for another week and they're just like - Mum. Mum. It's disgusting...disgusting. The damage that she has done in five minutes that we have to spend the next week trying to fix over a 30 second incident, it's just disgusting!*".

Moreover, single comments were made by participants that revealed other causes of **anger and crankiness**. Namely; a perceived bias from animal control management against certain breeds of dogs – employees from one particular facility struggled with an 'edict' placed upon them by a manager to euthanase all dogs of a particular breed because they "didn't like that breed". Participants felt that this showed a somewhat distinct amount of ignorance on this manager's behalf as well as, a lack of confidence in their employee's ability to assess an animal's suitability for re-homing based on approved behaviour evaluation. Furthermore, they felt this creates a divide within

the facility as they feel their own knowledge and skills are underappreciated and as individuals, they feel unsupported. Another contributing factor relates to changes in processes and practices that are not communicated “down the line”. One animal shelter employee described her workplace systems as somewhat disorganised; “...sometimes it seems so slap happy. Like oh yeah weren't you told? .... actually no I wasn't told and that is quite a serious thing that's just been changed...the protocol....so frustration is a very good word”.

In analysing the theme *education and the perception of others* across each of the focus groups in this section, it was evident that this theme held more significant importance to animal shelter employees in contrast to those in animal control (Incidence density of 10.2% - 39/382 and 3.3% - 9/271 respectively). Discussions around this theme related to a number of different contributing factors including; the perceived lack of educated members of the public and the need to educate them on responsible pet ownership, educating and training of staff and, a sense of judgement from others.

The following comments relate to employee opinions on educating the community; “I'm saying there will never be enough money in the world to educate some of the dumb people out there who are just going to continue to keep breeding and they've got to have a fluffy little kitten....how many kittens or cats there are in Australia and this is how many actually got homes last year nationwide. That's there, that would make me feel so happy”. Similarly; “....it's not a negative thing....it's not pessimistic, it's realistic....instead of having all the fluffy happy stories all the time....having something that's really realistic....actually widen people's eyes....”. However, employees are disheartened and cynical themselves as to the likelihood of any bold and transparent education on the plight of homeless animals; “....they say it's too in your face that's why they won't do it....it's like the road accident ads and all those ads, they're graphic ads....the fear is that they attach that negative image to your brand and you lose your philanthropic [donations] ....”

**Hurt, guilt & wastage**, whilst ranking third in order of incidence density for those working in animal control (11% - 30/274), was significantly more notable than for their animal shelter counterparts where incidence density was only 4.1% (9/221). In describing the feelings evoked by having to decide the fate of animals, one animal control officer stated; “God, do they think I'm really bad, because I haven't been able to [save them], if someone does ask me, what happened to such and such, and I'll say, you know, well, I had to....I've disappointed them....I feel really bad because God, I tried”. The causes of feeling hurt and guilty appeared to be very different for those employed in animal shelters. One employee remarked; “....biggest stress would be not feeling like I have the time

*to spend with the animals....I find you have to come in on your day off....or you feel guilty doing it....I was in patting the Golden Retriever....I was kind of looking going I hope someone doesn't see me because....there's a million and one things to do....I feel really bad”.*

Continual exposure to occupational stressors can lead to feelings of being **emotionally drained, tired & worn out**, a recurring theme across each of the focus groups in this section. There was similar prevalence of this theme within both the animal control and animal shelter focus groups with incidence densities of 6.9% (19/274) and 7.6% (29/382) respectively. Inferring from the data, there is a feeling amongst both occupational contexts of being overwhelmed by workload and, a perceived lack of physical, mental and emotional support. A powerful statement from an animal control officer exemplifies this; “*....it feels like we're chucked out on the side of the cliff and it's got - push, push and you're like, you know, swimming backwards trying to hold yourself up, when there's all these pressures from every direction trying to push you over the side of the cliff....*” Another, from the perspective of an animal shelter employee; “*Never ceases to amaze you....there's no emotional attachment there...to animals. It's a sad community really these days....it's just so sad to see. This is such a solitary environment.... - sometimes it just doesn't feel like it's ever enough I guess”.*

**Resentment & empathy towards colleagues** as a theme, ranked sixth and seventh for animal control employees and animal shelter employees, respectively with incidence densities of 6.2% (17/274) and 5.5% (21/382). Interestingly, the majority of comments relating to empathy were directed towards peers of equal standing within the workplace. However, whilst some resentment towards the public and wider community was evident, the majority of comments relating to resentment were directed at management and the perceived lack of support and understanding of the physical and emotional toll that everyday tasks have on employees. This may include interactions with the public, euthanasia and the level of social support employees provide to their peers. Additionally, employees felt strongly about the lack of appreciation of the benefits of debriefing, in particular informal debriefing between employees. Interestingly, employees from the animal shelter expressed a concern for the fact that as an organisation, no one knows nor has any respect for the job that others do. This was particularly true between those who work directly with the animals and those in office and administration roles; “*....we're under the pump, we're all stressed, we don't feel - thank you is what we get. That's nice but it really doesn't help us in our day....being appreciated for all the extra that we give....it's hard for us because I know that we all work really, really hard....the sections down there, I wouldn't even know what those people do....it feels like all of us ground staff are the ones that have to do all the actual...*”

The **attachment and bonding** between employees and the animals with which they work can cause much happiness but can also be a cause of grief. In an animal control or animal shelter environment, participants described how bonding can at times, be instantaneous. This was reported to be more so with animals that have been abused, neglected, are old or as one employee stated “especially the ugly ones”. In general, it is more often the case that animals are held within these facilities long enough for staff to become attached and bond with them on some level and this can impact on mental wellbeing. However, for animal control employees, an incidence density of 2.1% (6/274) and those working in animal shelters, 1.8% (7/382), whilst not conclusive, perhaps indicates that this is not as substantial as other contributing factors which may lead to occupational stress and compassion fatigue.

There were a number of other themes mentioned within either one or both the animal control and animal shelter focus groups that bear mentioning. For those employees working in animal control facilities, the following themes were identified as potential sources of occupational stress and/or compassion fatigue; **method of euthanasia** (3% - 8/274), **training and job preparation** (2.2% - 6/274), **confronting** 1.8% - 5/274), **relief** (1.5% - 4/274), **nightmares & physical effects** (1.1% - 3/274) and, **denial** (0.4% - 1/274). The only theme which animal shelter employees shared with their animal control counterparts was that of **nightmares & physical effects** (0.8% - 3/382). However, an additional theme only identified by those working in animal shelters was that of **desensitisation** (0.3% - 1/382). Again, these figures do not necessarily mean that these themes are less impactful; further targeted research would be required to elicit conclusions around these.

A powerful statement that epitomises the ethos of those who work in animal control and animal shelters was described by one participant as follows; “ *The most stressful....seeing the system in place about where the dogs are at the moment and the processes and not everybody following the same process....when you've got lack of communication you've got confusion. When you've got confusion....mistakes are made and emotional mistakes are made....not having the correct systems and procedures in place and which should be policed....it's like running up a sand dune in fins....you know, but we don't give up*”.

### 5.3 Veterinary Practice

Two focus groups were conducted with employees working in either a specialist veterinary hospital or an emergency afterhours practice. The first focus group (n=7) consisted of six female participants and one male whilst the second comprised five females. Akin to section 4.2, the compositions of the two veterinary practice focus groups were similar and as such, were amalgamated for ease of analysis. The main themes identified during focus group interviews are outlined in Table 3.

**Table 3:** Thematic analysis of themes identified from focus groups held with veterinary practice employees

Themes Identified	FG7&8 Veterinary Practice
Stress & distress	276
Anger & crankiness	129
Coping & justifying	100
Emotionally drained/tired/worn out	116
Role of management	80
Hurt/guilt & wastage	49
Education & perception of others	16
Resentment/empathy towards colleagues	36
Bond & attachment	11
Method of euthanasia	0
Training & job preparation	3
Grief & sadness	26
Nightmares & physical effects	2
Denial	6
Confronting	0
Desensitised	0
Relief	0
<b>Total number of comments</b>	850

Analysis of occupations in sections 4.1 and 4.2 revealed that the theme *stress & distress* was higher in incidence density than all other themes. This is also true for those working in veterinary practices (32.5% - 276/850). The next five highest ranked themes included, *anger and crankiness* (15.2% - 129/850), *emotionally drained, tired & worn out* (13.6% - 116/850), *coping & justifying* (11.8% - 100/850), *role of management* (9.4% - 80/850) and, *hurt, guilt & wastage* (5.8% - 49/850). As the theme *stress and distress* was discussed in great detail in Chapter 4, it will not be covered as overtly in this Chapter.

For employees working in veterinary practice, **anger & crankiness** appears to stem predominantly from workload, in particular, nurse to patient ratio. Nurses described feelings of being 'bitter, 'angry' and 'frustrated' at what they believe is a lack of appropriate staffing, 'sub-optimal management' of resources and a lack of appreciation for the skills and abilities of their staff. An veterinary emergency nurse relays; *"....it's awful, but you're waiting to see which ones aren't going to make it through this tick season....it takes a long time to train in an emergency facility....you really only feel you've found your feet maybe 6-to-12 months of working full-time in what we do specifically. To then lose that person, to have to restart - I don't know why they would want to not retain..."*

In analysing the data, it is an assumption that the themes outlined above are precursory to occupational burnout. This appeared evident in both focus groups where employees engaged in lengthy discussions on physical and emotional tiredness and feeling emotionally drained. These employees not only become emotionally invested in their patients but also in their peers and the work that they do. The potential manifestations of being so mentally exhausted is epitomised by one statement made by an emergency veterinary nurse; *"you just drop your spoon and you cry and you're thinking, this is ridiculous....it's like we're all crazy"*. Others described feelings of being 'isolated', 'on edge' and 'defeated'.

Recurring contributing factors behind this theme were similar to that of anger & crankiness. Employees spoke of the being **emotionally drained and worn out**. Anguish related to **repeated euthanasia** (*"....everything that comes in is just euthanased. The pressure that that puts on the nurses and the vets and the owners, it just builds up....we don't really have anything to do other than just keep going....then you reach a tipping point....not just the euthanasia....little things that will eventually chip away....that one client....one death....one blow up with the boss or a colleague....that tipping point...."*), **owner financial constraints** (*"....angry.... euthanasing because there's cost constraints; either they don't have the money or they don't value the life. When you know the owners have the money but they won't pay for it"*) and, **excessive patient load** (*"....you're sleep deprived....if anything happens in your home life, it's just way more extreme than it probably ever needs to be....coming to work....how bad will it be and what's going to happen....always just at that constant level of tension....feeling like you're losing the battle all the time"*). They also felt that their need for debriefing on an emotional level was not understood and therefore not fully supported by management.

**Coping and justifying**; regardless of the aforementioned stress related factors, some participants working in veterinary practice spoke of feeling 'lucky' in relation to animal euthanasia. That

is, they consider euthanasia a valid treatment option for many of their patients, as it can relieve their suffering. One nurse explains; *“I worked in general practice for 13 years or so and we knew all our clients really well. It was almost therapeutic sometimes euthanasing an old dog with the family.....”* In distinct contrast to each of the other occupations studied in this Chapter, those working in veterinary practices did not reveal a need to justify their jobs nor the tasks they performed on a daily basis, they are very proud and feel privileged to work in the industry; *“we're very lucky with what we do in that we do get to work at this amazing facility, get to do truly pure nursing as well. We get to do what we are trained and choose to do....I do so much more as a tech for the patients than I would do as a vet “.*

However, there was considerably more discussion from these focus groups in relation to how the participants cope with the daily pressures of their jobs. Unfortunately, the majority of coping mechanisms may be considered unhealthy. For example, many emergency nurses revealed sleeping as a coping mechanism. One nurse stated; *“I get caught in the trap of sleeping....just sleep 12 hours when I know I should just get out of bed. But I don't know, those tough weeks, I don't want to deal with anything, I just go to sleep....sometimes that's the only way I can cope”*. Another echoed this; *“I definitely sleep to avoid life in general”*. Over eating, excess alcohol intake and smoking were also mentioned as being valid coping mechanisms for some of the participants. Furthermore, dark humour was considered a normal and important coping mechanism, interestingly more so in very intense and stressful situations such as; *“it's the worst type of humour.... like when we're joking about CPR.... CPR always gets dirty, like dirty talk....CPR is a stressful situation. I think if we don't joke about an animal that's dying right in front of us, we're going to get upset about it and start crying”*.

*“....I left because I was too scared, if I didn't go then and something came in, even though I'd clocked off, I would feel like I had to help. So, I was just like I'm going to be really rude and I'm just going because I want to get the hell out. I've had enough....you just feel so guilty”*. This statement given by an emergency veterinary nurse provides an example of the theme **guilt**. Employees are also exposed to vicarious trauma. That is, absorbing the trauma experienced by others and making it their own. This, coupled with feelings of guilt caused by other means may compound to the point of emotional breakdown if not addressed; *“There's been some weekends where you have to be back within your 10 hours....it's so stressful. I walk out leaving this place and I....you feel so guilty. I just had to leave, knowing that....it's a disaster...everything was going to shit. It was really traumatic, like I went home and cried.”*.

Similar to those working in animal control and animal shelters, **resentment and empathy towards colleagues** was ranked 6<sup>th</sup> with an incidence density of 4.2% (36/850). Furthermore, the apparent trend in resentment being most often targeted towards management is also true for those working in veterinary practice. The recurring reasons behind this that were expressed during the focus groups included a lack of trust and respect for the skills and opinions of the nursing staff, feeling like they were not heard when discussing cases and feeling that their dedication to the job, the animals and the veterinary team as a whole, which sees them stay back after shifts end, is neither acknowledged or appreciated. What is of great interest is that all participants felt 'let down' by their senior vets and management in regard to the perceived lack of interest and support in the emotional wellbeing of their employees. One nurse relayed; *"...especially senior vets and vets that are in management roles have no interest or don't think it's important or think that we're babies or whatever. But don't think it's a valid topic....that bothers me"* Another nurse points out; *"...how many are here...that tells you how important they think this is...."*

Interestingly, there was also a level of resentment felt towards clients who at times would verbally attack employees in moments of shock and grief at the loss of their pet. This was often in response to finalising accounts. One emergency nurse stated; *"....they're just upset, they're just saying it. But yeah a little part of you goes, we don't just do this. We try and make them better, we do everything we can. Then that little throw away comment, maybe they forget about it. But we take it home and we hold onto it and think, it's not fair, you know we tried"*

**Grief & sadness** ranked 7<sup>th</sup> with an incidence density of 3.1% (26/850). Within this theme there were a number of contributing factors identified by the participants and the manifestations of grief and sadness varied between participants. However, there were statements which resonated with all members of the focus group; *"....you just can't have that much death and sadness all the time....try and talk yourself down. But then it just can take one thing to set you off and then you're done...."* And another; *"...just not a lot of outreach systems that people can go to for fall-back....so, I find that my frustration and my sadness and my grief about the situation can then be projected onto, for example, that vet in that situation"*

Further themes that bear mentioning from the veterinary practice focus groups were that of **education and the perception of others** (1.9% - 16/); *"....everybody thought that compassion fatigue was just about euthanasia..... yes, it can and it does, but there are so many other things....yes, it's the euthanasia, but I think if you're in the industry long enough, what's going to get you is other little*

*things on top of a really bad death or something like that”, **bond & attachment** (1.3% - 11/850); “...was one particular patient I couldn't euthanase....I'd been treating it for six months and I was really attached to it. The owner was really understanding. I'm like, I'm sorry I can't do this when the time comes....”, **denial** (0.7% - 6/850), **training & job preparation** (0.4% - 3/850) and, **nightmares & physical effects** (0.2% - 2/850); “....I'm overwhelmed....then you can't sleep to even try and catch up, so you just lay there going, this is just really shit”.*

## **Discussion**

As anticipated, conducting qualitative focus group interviews with employees working in animal-related occupations generated a wealth of experiential information to compliment the quantitative study described in Chapter 3. In the quantitative analyses, occupation was not a significant factor in the risk of burnout or secondary traumatic stress. However, significant differences were apparent in those who had been working for longer in an animal-related occupation. Specifically, those who had been working for between 6-15years reported a greater risk of burnout. Moreover, women reported facing a greater risk of secondary traumatic stress than men. Within this study a number of themes resonated across all groups. However, there were differences in contributing factors in context to the occupation in which a participant was employed. A limitation of this study is that of the low numbers of men. Thus, comparisons were not able to be made with the data described in Chapter 3.

The major themes identified in this study are consistent with the broad conclusions of previous studies conducted on the effects of occupational stress and compassion fatigue. However, this study aimed to extend current knowledge by eliciting the less commonly identified themes and their contributing factors. Furthermore, it explored contextual differences (and similarities) at an occupational level and at an individual level (both inter and intra occupation).

The prevalence of stress and distress amongst those who work in animal-related occupations has been well documented (Arluke 1991, Reeve, Rogelberg et al. 2005, Rohlfs and Bennett 2005, Rogelberg, DiGiacomo et al. 2007, Baran, Allen et al. 2009, Davies and Lewis 2010, Black, Winefield et al. 2011, Baran, Rogelberg et al. 2012) and as expected, this study echoed those findings. Similarly, as reported in Chapter 4, this study provides further evidence that those working in animal-related occupations are an at-risk group for developing mental health concerns.

The cost of work-related mental stress in terms of productivity and the broader economy in Australia is substantial (Safe Work Australia 2008). A study conducted in 2007 (Medibank Private 2008) reported a cost of \$14.81 billion to the Australian economy with regard to work-related mental health claims. This figure is likely to be an underestimation as it does not take into consideration further costs associated with re-staffing and retraining but also because mental stress is known to contribute to a large number of other health conditions (Medibank Private 2008, LaMontagne et al. 2010). Thus, it is not only an important social issue which needs to be addressed but also one of considerable economic importance.

In the study of occupational stress and burnout, human healthcare workers are said to be the most studied of all occupational groups (Halbesleben 2008). With published studies on contributing factors and the impacts of stress and burnout numbering in the hundreds, it remains obvious that there is a deficit in knowledge in relation to those colleagues working in animal healthcare. The nature and definition of stress and burnout have been scrutinised through the literature, primarily as a result of the diversity of perspectives regarding what constitutes stress (either biologically i.e. the body's defence mechanisms to environmental stressors and psychologically i.e. a person's demands relative to their ability to respond to those demands, a person's reaction to extreme events or the mismatch between environment and a person's expected role) (Halbesleben 2008). Similarly, there is debate regarding the appropriate conceptualisation of burnout. That is, rather than extreme exhaustion being the main focus of burnout studies, appreciating the need to expand it to emphasise the physical, emotional and cognitive aspects. However, doing so has caused a proliferation of measuring tools which often creates further confusion. With such diversity of opinion and the often multi-disciplinary input into studies regarding stress and burnout, it is easy to understand the difficulty in translating definitions across disciplines within the human healthcare sector, and even more so when attempting to extrapolate information across to animal healthcare. Whilst a fair proportion of the research and information can be migrated across, there are unique stressors and contributing factors of stress and burnout in animal healthcare that require a more focused and devoted research approach in their own right.

It is understood that sometimes an acute stress response can still be activated by a non-life-threatening event or situation and that it is sometimes the case that a traumatic or distressing event can cause physiological effects for weeks, months or years after the fact (Cannon 1915). There were repeated discussions across this study that stemmed from bygone events, memories of particular animals or difficult situations that had occurred outside of the recent past but were retold with vivid

memory. This chapter aimed to identify contextual differences (and similarities) of contributing factors and unique stressors across animal-related occupations so as to better capture and understand the diversity of personalised and occupational response to stress.

A common theme of concern amongst those employed in the biomedical research sector, in veterinary and animal science higher education, animal management and animal shelter sectors was that of public and community perception of the use of animals in research. History is marred by the lack of consideration for animal welfare and the seeming indifference to the pain and suffering of laboratory animals in decades past. However, regardless of the enormous advancements in animal welfare and ethics over the last 15-20 years, images of ‘barbaric research’ still resonate with many people. What perpetuates this is an apparent reluctance to be proactive in shifting this mindset, something that the participants of these focus groups felt should be championed by management and addressed by government.

Method of euthanasia whilst not ranked highest, is of great concern to both veterinary and animal science higher education technicians and biomedical research technicians, in particular those methods used for laboratory rodents. The preferred method did vary between participants in that some were more comfortable with the CO<sub>2</sub> method as opposed to cervical dislocation, the majority preferred cervical dislocation. However, the unpleasant aesthetics of this method to some people cannot be argued. It may be pertinent to surmise that part of the cognitive reasoning behind this being the preferred method is that it allows an individual a certain amount of control over a highly emotional task. Perhaps it may be a mechanism for self-preservation? Additional to this is the distinct negative impact a ‘bad’ euthanasia may have on an individual person. This scenario is more likely to occur if an individual is not given autonomy and the ability to judge which method of euthanasia best suits their skill set and cognitive comfort. Staff are limited to what methods are approved under an animal ethics approval and this can often result in an individual’s method of choice not being available. Therefore, in order to ensure minimal stress and distress to employees, it is imperative for any protocol to ensure input from all parties likely to be involved, especially those charged with euthanasia. By empowering employees in this way, the outcomes for not only the employee and the workplace are positive but most importantly, the inevitable outcome for the animal is performed with skill, confidence and integrity.

In contrast, angst in relation to euthanasia from the veterinary nurse/technicians perspective was often based on their inability to control when a patient was euthanased. That is, there are many

situations where nurses feel that the decision to euthanase should have been performed much sooner than the patient's owner (or the veterinarian) allowed. Where they believed that a prognosis was extremely poor but surgical or medical treatment was provided (at the owner's request) regardless and, in the nurse's opinion, prolonged pain and suffering, only for the patient to then be euthanased. This scenario links into the perception nurses have of feeling that their skills, knowledge and experience have no value in this decision making process; a process that they are so intricately involved in by way of their intense care and nursing of the patient. However, feeling at arm's length when it comes to the end of life decision can be a painful and traumatic experience, especially if repeatedly exposed to the same situation.

A commonality across each of the occupational groupings in this chapter is that of repeated loss. All employees working in animal-related occupations experience the continual loss of animal life and regardless of the 'why', a person's natural intrinsic ability to feel compassion and empathy exposes them to the first four stages of grief; denial, anger, bargaining and depression (Kübler-Ross 2009). If strategies for healing and education are not instituted then it can often be the case that employees are not afforded the fifth stage, acceptance. This demonstrates the need for further research and the development of effective mental wellbeing programs that are contextually designed for those working in animal-related occupations are paramount.

Mechanisms of coping with the unique stressors of working in animal-related occupations can be varied across each of the occupational groupings and this is assumed to be related to the contextual differences in core business. That is, research versus teaching versus animal welfare versus veterinary care. However, regardless of core business, all occupations are devoted to the care and welfare of animals and are exposed to the death and often trauma, of those same animals. Lazarus & Folkman (1984) describe stress as a relationship between a person and their specific environment, and as a process taking place in a context. How an individual is affected by or manifests their stress depends on how they appraise what is happening. The relationship between a person and their environment or the compatibility between a person and their environment is neither static nor constant over time. Therefore, an individual's psychological state may change over time and across diverse encounters (Lazarus 1991). Similarly, an individual's relationship with or across work tasks or activities may change over time. Thus, stress is a dynamic process (Lazarus 1991), a continuum along which all individuals move back and forth from one end, being a state of eustress, to the polar end, being perhaps for some, a state of extreme distress.

A person's appraisal of a particular situation or event is determined by their own personal philosophy or feelings (which can alter across time and place) and since environments are often complex and obscure, there is often great variation in the appraisal people make in the same environmental context. As such, the coping mechanisms deployed can also be very diverse, even within the person from moment to moment. This is evidenced by the participants from each of the occupational groupings within this chapter. However, a resounding positive link between the literature and the results of this study exists in the importance of social support of like-minded individuals; those who share common goals (caring for animals) and common or similar stressors. Lazarus (1991) suggests that by getting together with others who share a common stress, some of the problems inherent in individual differences in stress dynamics are minimised. Caution must be taken however, when using this evidence to build mental wellbeing initiatives as most stress management programs fail because they are shallow and treat people as if they were all alike.

One of the limitations of this study was the lack of engagement by veterinarians. Whilst every effort was made by the researchers to enlist veterinarians into the focus groups, it proved a difficult task. A lack of time to give to participation was the common reason given for non-engagement. Secondly, there is over representation of female employees on all of the focus groups. The researchers believe this is not indicative of the demographic of animal-related occupations but perhaps a generalised notion of males assuming the utmost professional persona and not being comfortable talking about feelings and emotions. This is somewhat supported by the work of Day and Livingstone (2003) who state that both demographic and organisational differences impact on the use of social support and, that women are more likely to have extensive social networks and to seek social support in times of stress than men.

## **Conclusion**

In exploring occupational stress and compassion fatigue and identifying contextualised sources of stress in animal-related occupations it is evident that there is a need for a wide variety of strategies to address the challenges associated with ensuring employee mental wellbeing. Specifically, strategies that may include attention to workloads and working hours, inclusivity in decision making processes (especially relating to animal euthanasia) and, education on an individual and organisational level as well as across the wider community. These strategies may provide a better sense of control for individuals experiencing stress relating to their occupation and the work that they do.

Furthermore, employing strategies to lift the profile of social support and the benefits it has across all facets of the workplace including increasing moral and ensuring more effective communication must be an initiative in all animal-related workplaces. The researchers believe that by facilitating and encouraging social support networks both inter and intra organisation and, more widely across all animal-related occupations, will provide a more holistic and successful approach to ameliorating strategies to help combat occupational stress and compassion fatigue.

It is easy to surmise from this and previous Chapters that the development and design of preventative programs and strategies for compassion fatigue in animal-related occupations would require a ‘from the ground up’ approach. Employees consistently reported the intrinsic need to have some control over the work that they engage in every day, particularly in relation to animal life, animal wellbeing and euthanasia. This method of design and development would perhaps ensure that there is absolute ‘buy-in’ from employees. However, it is equally important for those working in management and supervisory roles to provide valuable contributions to this process. Chapter 6 is a pilot study designed to elicit initial information from exploring the role of management in addressing occupational stress and compassion fatigue in animal-related occupations. This is achieved through insight gained from the perspectives and perceptions of those working in management positions and, those of individual employees.

*“I am a woman, but I recognise or identify myself as an emergency vet nurse. That is one of my things that is part of my identity, and I don't think we nurture that enough so that people can then become really confident. I think you maybe start out with this idea as being a vet nurse, and oh my God, you're going to cuddle puppies and kittens and it's going to be amazing. Then all this shit happens, and then you don't know if you want to be this thing to identify with anymore, so you just withdraw in the industry. That's why you get that compassion fatigue and that burnout and you just fade away. I don't know if there's any studies out there that show the average for career longevity in techs and nurses, but I don't think there's many that last outside of 10 years”* Veterinary emergency nurse: F25-35

## **Chapter 6**

### **Occupational Stress and Compassion Fatigue: the role of management**

*“That dog died on its own with no one there with it because I didn't have time to do what I needed to do with it because I had all these other patients. We're all under the same situation. I know I couldn't have done anything, but it makes me feel like shit because I know that owner - and I don't know the owner well - if it was me, I would have rather taken my dog home and cuddled my dog to die at home than it just sit in a cage. That's worse to me than going and euthanasing a dog. You get traumatised, absolutely, by those cases”* Veterinary emergency nurse F: 25-30.

#### **Introduction**

Any organisation that seeks to establish and maintain the best state of physical, mental and social wellbeing of its employees needs to have policies and procedures that comprehensively address health and safety (Cooper and Cartwright 2001). These policies include procedures to manage stress, based on the needs of the organisation and its members, and must be regularly reviewed and evaluated (Cooper and Cartwright 2001).

Historically, a high-risk task may have been thought of as, for example, working at great heights, with heavy machinery, working underground and so on. Until relatively recently, emotionally burdensome duties such as animal euthanasia were not formally considered as high-risk tasks. It has been reported that psychosocial risk factors such as high psychological demands, low decision latitude, low social support and low recognition in the workplace contribute to the development of mental and physical health problems (Kivimaki et.al, 2006; Marmot et.al, 1997; Stansfield & Candy, 2006; Ylipaavalniemi et.al, 2005 as cited in: Biron et al. 2012). Typically, the emphasis of research to date has been on describing the effects of individual interventions for dealing with workplace stressors rather than reporting on strategies and interventions to reduce exposure to the psychosocial risk factors and, to promote good health and wellbeing.

Whilst the majority of animal-related occupations recognise the potential psychosocial risks to employee mental health and wellbeing, it is difficult for employers to implement effective strategies that may prevent work-related stress and distress without clear evidence on what

interventions will achieve the intended results (Biron et al. 2012). Thus, it appears that it is a lack of evidence based knowledge that prevents employers from working proactively towards preventing negative emotional experiences and, to actively promote appropriate social support and other structured support mechanisms.

Furthermore, it is suggested by the researcher that a secondary reason for this apparent lack of recognition of the importance of intervention and support may be a learnt behaviour. That is, as professional people we are taught to withhold emotion, to practice ‘controlled empathy’ and as such we learn to suppress feelings and avoid confronting emotional situations in an open way.

Many studies on organisational-level interventions to address workplace stress have been published (Folkman and Lazarus 1988, Dewe and Guest 1990, Havlovic and Keenan 1991, Lazarus 1991, Folkman 1997). However, the complex and diverse nature of organisational interventions does not meet employee needs of having access to practically beneficial and effective interventions (Biron et al. 2012). Interventions often fail not due to their content or design, but because contextual and process factors that might determine the success or failure of their implementation are omitted in evaluation studies (Nytrø et al. 2000, Randall et al. 2005, Cox et al. 2007, Egan et al. 2009, Biron et al. 2010). Therefore, drawing information on both process-related factors and contextual issues uniquely affecting employees working in animal-related occupations and, incorporating this information into the development and implementation of organisational interventions may provide the much needed platform from which effective preventative strategies can be built. This will enable the success and sustainability of targeted interventions to be evaluated in a valid and comprehensive manner.

Preliminary results from the first four focus groups conducted for this thesis revealed a strong theme in relation to the role of management in combating or addressing occupational stress and compassion fatigue in animal-related occupations. Therefore, it was decided to explore these outcomes by conducting a pilot study to look at those employed in managerial roles and make initial investigations in comparing viewpoints from managers and non-managers. This method of triangulation can help facilitate deeper understanding of the qualitative data (Cohen and Crabtree 2006). Using triangulation of sources aims to examine the consistency of different data sources within the same data collection method (Denzin 1978, Patton 1999). Thus, this Chapter aims to interpret and discuss results from two perspectives; the first being those participants working in managerial roles

within an animal shelter and secondly, employees from across all focus groups in which the identified theme 'role of management' has been extracted.

The first objective of this study was to gather information directly from those employed in management positions on their perception of occupational stress and compassion fatigue. Specifically, the response of both employee and employer to euthanasia, perceived workload concerns and other management specific issues were investigated. The psychological and social effects of this were also examined. Additionally, this study aimed to explore participants' experiences of stress and distress and to investigate any coping mechanisms they may use to address this.

The second objective was to report on employee opinions and beliefs regarding the role of management and what mechanisms are needed to manage existing stress and distress, to developing preventative strategies which combat occupational stress and compassion fatigue and, to provide access to appropriate social and structured support systems for employees.

## **Methods**

A qualitative study was set in South East Queensland (SE Qld) in 2010. As this was a pilot study, a single focus group was conducted with employees in various management roles recruited from an animal-related workplace, namely an animal shelter. The researcher had previously presented a seminar on compassion fatigue at this workplace and recruitment was conducted by polling for expressions of interest in participating in the study. Interested participants were then contacted by the researcher to discuss the details of the focus group interview. The workplace chosen for this focus group (an animal shelter) was purely based opportunity and availability of participants.

The focus group took place at the premises of the participating workplace and lasted 1 hour and 18 mins. Participants (n=5 females) were recruited on a voluntary basis and consent was obtained from each participant prior to the start of the interview. The focus group was facilitated by the experienced researcher (RS).

The focus group followed a semi-structured format and was designed around central questions which were based on an initial literature review. Prompting questions derived from the central research questions, personal experience and insight of the researcher (RS) and, expert contribution from a second researcher (DM) were used to stimulate the continuation of discussion if it appeared

to be stalling. This intervention technique was also used to encourage the group to discuss any inconsistencies either between participants or within their own thinking.

Focus groups were audio-recorded using a digital voice recorder and later transcribed verbatim (Pacific Solutions Pty Ltd, Brisbane).

## 6.1 Perspectives from management

As with each of the previous focus groups throughout this thesis, The complete transcripts for each focus group were made available to the second reviewer (DM) and a sample of quotes, selected at random points during the focus group discussions, was then coded by DM independently. At least six quotes were selected from each transcript. The coding was then compared with that of the researcher (RS) and any discrepancies discussed. About 10% of the data required discussion to reach agreement, with most disagreement involving data which could be coded to multiple themes. In theme identification, the researcher was able to identify particular topics, themes, patterns, concerns and responses which were repeated by respondents within the focus group. The themes identified from the focus group interview are outlined in Table 1.

**Table 1:** Content analysis of themes identified from the focus group held with management employees from an animal shelter

<b>Themes Identified</b>	<b>FG5 Animal Shelter Management</b>
Stress & distress	61
Coping & justifying	42
Emotionally drained/tired/worn out	17
Role of management	17
Resentment/empathy towards colleagues	7
Anger & crankiness	5
Hurt/guilt & wastage	5
Education & perception of others	5
Bond & attachment	5
Method of euthanasia	0
Training & job preparation	0
Grief & sadness	0
Nightmares & physical effects	0
Denial	0
Confronting	0
Desensitised	0
Relief	0
<b>Total number of comments</b>	<b>164</b>

Importantly, it is interesting to note that when compared with occupations in each of the other focus groups, the management focus group ranked second highest in incidence density for **stress & distress** (37.2% - 61/164) behind animal shelter attendants & nurses (38% - 84/221) – see Chapter 4, Table 2: page 55. As the theme of stress and distress was described in detail in Chapter 4 it will only be discussed where necessary in this Chapter to add contextual evidence.

Further analysis of incidence density within this focus group identified a ranking of themes behind *stress & distress* in the following order; **coping & justifying** (25.6% - 42/164), **the role of management** and **emotionally drained, tired & worn out** both ranked equal third with an incidence density of 10.4% (17/164), **resentment & empathy towards colleagues** (4.3% - 7/164), followed by **anger & crankiness, hurt, guilt & wastage, education & the perception of others** and **bond & attachment** which all ranked equal fifth with an incidence density of 3% (5/164). As shown in Table 1, minor themes that were evident amongst participants from the other focus groups were not ranked at all by the management group as they are mostly linked to performing euthanasia and therefore are not necessarily experienced by those working in management or supervisory roles.

For those working in management roles, **coping & justifying** appeared to be predominantly related to their involvement in the decisions made regarding the fate of animals. Participants described a need to be able to separate themselves personally from the decisions they make on individual animals in order to ensure they can carry out their organisational responsibilities. For example, one manager states; *“As the managers we have a process with euthanasia....we have to stay quite clinical in a way....we do separate ourselves emotionally. Because....we have personal opinions...and organisational goals....when it becomes personal we can't make that decision”*

Further to this, managers discussed issues relating to responsibilities to their staff and the emotional toll their managerial decisions may have on employees. One manager stated; *“that balance of....decision's made but then you've got to communicate that, because you want to look after the wellbeing and the emotional....we always say if you've got a question, ask....you've talked about it with the staff but....you do also have....Chinese whispers, where you've gone through all of the options but all of a sudden someone's....says you haven't gone through all the options....you have to go over all that again”*. Another manager stated; *“....you get a secondary guilt....because if you have a group of people that....believe that your decision is....not necessarily the right decision....that brings a second amount of guilt....because you're the one that's either making the decision or you have to go through that process of justifying in yourself to make yourself feel okay....that you haven't got it*

*wrong....you may feel bad because people....think you're heartless... ” This statement is evidence of the guilt and hurt managers also feel when having to make the difficult decision to deem an animal for euthanasia, it is the actual decision that haunts those charged with this responsibility; “...for me the difficult part is....that sign off....this is the last chance the animal has, can we do anything and then we decide no, once that decision's made I don't find the act of euthanasia.....the physical doing of it's not the problem....”*

An interesting point made by one manager revealed that they appear acutely aware of maintaining a level of distance from employees so as to ensure that their decisions are based on organisational protocol or procedures as opposed to being influenced by emotion. This is clearly demonstrated in the following comment; “...you're not making decisions that maybe you've got some emotional investment in....I think that's very important...to make sure I keep the separation between me and my team and what I do as a manager....so you're making decisions and you can be confident about the decisions that you make”. This is not to say that certain decisions are not difficult or emotional for managers, as pointed out previously, the data shows that they too are working in animal-related occupations out of a sense of deep care and affinity for animals.

In similarity to their colleagues, those working in managerial roles have also developed coping mechanisms. Primarily, this appears to be by trusting in the system and the policies and procedures in place. However, as a result of not only being tasked as an advocate for the animals within their care, they are also tasked with being an advocate for employees, particularly in relation to mental health and wellbeing. This role can be demanding on those managers who are cognisant of compassion fatigue and stress in animal-related occupations and are often a sought after support person for colleagues. This can have a flow on effect as pointed out by one manager; “*I seem to be one of those “go to” people....which is fine, but you get to a certain stage, which has happened to me this year, where I've kind of gone I can't do this anymore and the wall's gone up. I'm very different now to what I was like in January, because I've got to that stage....where I've gone do you know what, I just can't do this anymore*”. This same manager further explained the importance of coping mechanisms in her role and shared one of her techniques; “...*In my head I draw a little picture of what that thing is and I wrap it up in a box and I post it....sometimes it gets returned to sender but yeah, most of the time it works. Or if it's - I think when you've got a busy life anyway and you're having to deal with a lot of different things you learn to just touch on the surface and detach yourself emotionally.... just to cope, just to get by*”.

As has been noted previously in this research, that employees perceive debriefing as not always being supported by management. However, some managers in this focus group were very supportive and active in facilitating these conversations amongst their employees and themselves. One manager relayed the following points in this regard; *“Informal debriefing is a really good mechanism....for a number of reasons....you get your staff talking and you get your staff talking to you....can help counteract that external feeding off each other’s stress. There’s a fine line between you want your staff to care about each other and know....each other’s okay, potentially learn each other’s stress mechanisms or warning signs of getting to a point where they’re really in a bit of trouble”*.

A serious point of concern was raised during this focus group when one manager stated; *“Just do what I do and take your animal’s medication. I did ring the poisons hotline though and asked, and told them what I’d done....not a good idea”*. This statement epitomises the severity of interruption to logical thinking when people are experiencing mental health issues<sup>1</sup>. This employees attempt to engage a coping strategy would be more accurately described as a serious consequence and as such, further cements the importance of developing awareness and, both preventative and supportive strategies in the workplace.

Regardless of the coping mechanisms people employ, it is evident that occupational stressors for those working in management can be further compounded by the stress and distress of their employees. Much of this was expressed in the theme *emotionally drained, worn out & tired*. Middle management appear to feel that they are often ‘wedged’ between employees, organisational objectives and resource limitations; *“....we’ve got to deem an animal not fixable and then deal with dog staff coming to argue the case, .....[foster carers] coming to argue the case, cat staff coming to argue the case. You’ve already made a very difficult decision and then it gets raked over and you’ve got to re-justify it and re-justify it, and that gets really hard....we’re piggy in the middle”*. In this regard, one manager relayed how important it was to be sensitive to the thoughts, feelings and opinions of others. However, regardless of the need to follow protocol and how at times the protocols are used as a means to cope and justify decisions on animal euthanasia, they also need avenues to ‘save an extra life’. This leniency is certainly employed as a coping mechanism for those engaged at the ‘coal face’ but it also highlights a system failure in that it appears employees feel a need to ‘break the rules’ in order to counteract the negative aspects of their work.

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<sup>1</sup> In following up with this participant, they were provided with information on Lifeline and given the contact details of a psychologist for professional assistance.

Lack of communication appeared to be a common catalyst for *anger and crankiness* experienced by those in management roles. Communicating to employees the limitations of organisational policies and procedures, particularly in relation to animal euthanasia was often both challenging and confronting. One manager commented; “...*communicating what restrictions we have as a manager....you're on the ground, you're looking at this one animal in this situation but we do have to look big picture wise....communicating that we're trying to make the best assessment that we can but it might not be the result they want, whereas sometimes if they are so personally involved that they just see what's right under their nose. We're not coming off as - not heartless but, yeah, there's reasons behind the decisions we're making. It's not because we want to, it's just that this is where we're at*”. Furthermore, in making decisions on individual animals was also a major cause of angst for those in managerial roles, one manager stated; “... *it's such an emotional decision done objectively. That's the part that I can't - how do you get - I get my head space into a lot of things objectively quite quickly but...it's an emotional decision that's made objectively and not a lot of people can actually sleep at night with that. They can live with it but can they sleep, it's different*”.

Written communication is also a cause of concern for managers as they find employees do not often respond to or participate in that communication. Managers feel this creates frustration and compounds pre-existing communication breakdown and may further prevent action on important issues taking place; “...*can delay things happening because we have the slow communication. It gets put up there and someone assumes something's happening but no one's actually actioning....just slows everything down, so I'm a bit pushy with that stuff....I do have goals that I want to drive things for but it can get a little bit frustrating when it seems like you're the only one driving things forward....*”

Communication folded into discussions within this focus group on the theme *education and perception of others*. Whilst there were a few points made on in-house education and ‘toolbox’ sessions, for example, “...*actually this was going to be my toolbox talk for workplace health and safety with the emotional side of things. We all talk about things we can trip over and fall on us and everything but the emotional side of it as well is really important. I guess being able to recognise it in yourself and other people as well, so that you don't crumble*” In the researchers opinion, the most pertinent point was this; “*The big thing that people don't realise when they're talking about compassion fatigue is that it's not just specifically related to the trauma of the animals or the fate of the animals that you're looking after, it's about people even in HR [human resource] and marketing and all those places who are dealing with the people who are on the ground, doing the euthanasia,*

*doing the vet work, making these really hard decisions and the trauma and emotional cost on these people that as a HR [human resources] person you would be interacting and seeing that on a daily basis*". This statement is strong evidence that occupational stress and compassion fatigue not only affect those who perform euthanasia rather, any person employed in a position within an animal-related organisation. Therefore, future research must ensure 'non-euthanasing' employees are represented and, any targeted preventative and intervention programs incorporate tools specific to these employees also.

**Resentment & empathy** was reported as a minor theme in this focus group but statements relating to this were empathy based and quite powerful; "*...not only do you have to make a decision about an animal and the effect that it has on that animal but also you've got this other cohort of people, being your staff, that you have to think about in terms of how that decision about that animal is going to affect all of these people*". Other minor themes which also evoked strong statements included **bond & attachment** ("*...I stopped fostering two, three years ago....with having to give so much in your day to day job and making decisions on animal's lives all the time, after 15 years I just physically can't hand them back any more. I feel - I can't explain to them why I can't keep them....*") and **desensitised** ("*....so sometimes the euthanasia's the easy part of the day and I suppose that's the desensitisation....*").

## **6.2 Employee perspective on the role of management in addressing occupational stress and compassion fatigue**

The **role of management** was a relatively strong theme in each of the focus groups conducted for this thesis. As can be seen in Table 2 incidence density was greatest for those employed as attendants and nurses in the animal shelter facility (16.8%). This was followed by those in biomedical research and veterinary emergency nurses (12.8% and 11.9% respectively). Veterinary emergency nurses and ancillary staff recorded an incidence density of 8% followed by veterinary and animal science higher education technicians (6.8%) and those working in animal control (4%). It is interesting to note that the animal shelter focus group in which participants were from managerial roles had an incidence density of 10.4% (17/164). This was not significantly different from that of most other focus groups. However, the perspective of comments was dissimilar and will be discussed in this section.

**Table 2:** Role of management theme: incidence density from the eight focus groups held with animal-related occupations

Focus Group by Occupation	Incidence density
Animal shelter – attendants & nurses	16.8% (27/161)
Biomedical research	12.8% (28/218)
Veterinary practice – emergency nurses	11.9% (36/303)
Animal shelter - management	10.4% (17/164)
Veterinary practice – emergency nurses & ancillary staff	8.0% (44/547)
Veterinary and animal science higher education institute	6.8% (10/146)
Animal shelter – attendants & ancillary staff	4.8% (11/221)
Animal Control	4.0% (11/274)

\*values in ( ) indicate the number of comments made

During analysis of the theme *role of management* a number of sub-themes became apparent. That is, there were a number of comments and statements which were similar in nature that was echoed across each occupational focus group. These sub-themes were extracted by content analysis in order to attempt to fully understand the opinions and perspectives of employees in relation to what they believe are important management issues and responsibilities in relation to occupational stress and compassion fatigue. The sub-themes can be seen in Table 3.

**Table 3** Sub-themes identified from the non-management focus groups on the role of management theme

Sub-themes Identified	FG1 Vet&AnSc	FG2 Biomed	FG3 AnControl	FG4&6 AnShelter	FG7&8 VetPractice
Workload (and resources)	0	0	0	18	22
Recovery support (workload related)	0	0	0	0	9
Education & training	0	11	0	11	6
Acknowledgement of compassion fatigue	0	6	0	0	23
Support (internal)	6	1	8	0	0
Support (external)	3	1	0	0	0
Job appreciation	0	0	4	2	0
Not feeling heard/listened to	0	0	0	3	13
Recognition & Value	0	0	1	0	6
Approachable/open	0	6	0	0	0
Decision process (euthanasia)	0	0	0	2	0
Integration between organisation sections	0	0	0	2	0
Pre-employment screening	1	0	0	0	0
Communication	0	0	0	0	0
<b>Total number of comments (N/165)</b>	<b>10</b>	<b>25</b>	<b>13</b>	<b>38</b>	<b>79</b>

As can be seen, those employees working in veterinary practice appeared most concerned with the **role of management** (47.9% - 79/165) followed by those working in animal shelters (23% - 38/165) and biomedical research (15.2% - 25/165). Those employed in animal control and as veterinary & animal science technicians appeared less concerned by management practices and associated issues with incidence densities of 7.9% (13/165) and 6.1% (10/165), respectively.

In contrast to Table 3, the sub-themes extracted from the management focus group have been summarised in Table 4.

**Table 4:** Sub-themes identified from focus group 5 (animal shelter management) on the role of management theme.

Sub-themes Identified	FG5 AnShelter Mgmt.
Workload (and resources)	7
Support (internal)	3
Job appreciation	3
Education & training	0
Acknowledgement of compassion fatigue	0
Recovery support (workload related)	0
Support (external)	0
Not feeling heard/listened to	0
Recognition & Value	0
Approachable/open	0
Decision process (euthanasia)	0
Integration between organisation sections	0
Pre-employment screening	0
Communication	6
<b>Total number of comments</b>	<b>19</b>

In further analysing the sub-themes behind employee opinion on the role of management (Table 3), it is evident that whilst concern about **workload** was reported in only two of the five occupational groupings, it did represent the greatest overall concern (24.2% of all comments). In discussions on workload and management, participants often related their experiences of being overwhelmed and burdened by workload due to a lack of staffing resources. One animal shelter employee stated; “.... unless they....did my work day they don’t appreciate how hard it is and the workload that it is....and that’s where there’s the big vicious circle. We work at our full capacity, were not slack arses....we have a team that works really hard and if we’re still stressed and we’re still under the pump....we’re all cracking, we’re all bitching....when you get in trouble....and nothing gets done ....” Another example came from a veterinary nurse who directed the following comment to her

colleagues in the focus group; *“Every single one of you, everything you said that was your biggest stressor, was directly related to staff, number of staff, directly related....we had management there on the weekend and we were telling them our concerns. I don't know if it was denial....but we're like, patient care is the lowest it's ever....it's non-existent today. They were like, no, no everyone's getting looked at, and everything's getting its treatments. I was like....it's not. How are you not seeing how awful this is? I don't know how to get through to them...”*

Similarly, an emergency nurse revealed her struggles with management in her capacity as a senior supervising nurse; *“....a struggle to say to them, I understand what you're saying in terms of we know it's not our fault, but you can't deny us the feeling that we still feel terrible for it. They try to brush over it....not dismiss it....patronising. They're like, you didn't do anything wrong. It's not your fault. We know we can perform a lot better, but we need more support....support and resources.... It's not our fault, but it affects us, and I really wish that management could see that.”*

It appears that those occupations which are relatively non-structured in their animal intake, where there is little to no control over the animals that come in on any given day, are the ones faced with the greatest imbalance of staff: workload. That is, animal shelters and veterinary clinics (in particular, emergency clinics).

Employees also considered that it was important for management to **acknowledge occupational stress and compassion fatigue**. This sub-theme ranked second with an incidence density of 17.6%. This was particularly important for those working in veterinary practice and biomedical research. A statement made by one of the participants from a veterinary practice conveyed a powerful insight; *“They're scientists. Until there's something scientific....until there is literature out there that says this is what needs to happen....they find it hard....lots of people find mental health issues really difficult to be tangible. It's not one of those things that's really easy to - if an animal is in pain, you can say, yes, I can see that, or if it's got a disease....whereas mental health issues of any scale or any range are really difficult for a lot of people to grasp”*. There was succinct evidence that employees believe that management, in particular veterinarians, fail to see the importance of addressing occupational stress and compassion fatigue, evidenced by the following statement; *“Something that still really bothers me is that there were no vets, apart from [one female], at the last session, and here again....especially senior vets and vets that are in management roles have no interest or don't think it's important or think that we're babies or whatever. But don't think it's a valid topic....that bothers me”*.

There were similar statements from those working in biomedical research where they believe that management are not invested in the psychological health and wellbeing of their employees. One participant described the attitude of management in the following way; “...sometimes it's easy to say well, we could write up a protocol for checking that people are okay....and everyone is emotionally sort of stable and dealing with this type of work. But I think a big copout is that they say well, the research hasn't been done. So what would we write?”

**Education and training** ranked third as a sub-theme in **role of management** with an incidence density of 17%. This sub-theme was of equal importance to those working in biomedical research and animal shelters. However, the contributing factors or reasoning behind this sub-theme were vastly different. Participants employed in biomedical research facilities related much of their negativity towards management to a lack of education and information about compassion fatigue and the effects of euthanasia on the psychosocial health of employees. One technician stated; “It's like you do fire station training before you're even told that you are going to kill an animal. Part of that job is killing animals....education towards its technicians is a vital part and it helps you care for your animals a lot better”. Another remarked; “I never got told there is such thing as compassion fatigue existed or that I might start to feel emotionally overwhelmed....”.

Focus for these employees also related to education regarding the purpose behind research protocols, ethical approvals, the possible effects experimental protocols might have on individual animals and, the expected outcomes and benefits of projects. One technician stated; “Being informed about something is the best way....to put everything out and answer their questions....you need to be informed of what's approved and expected.... see all these tumours or - with the grafting mouse being wrapped like sushi rolls and stuff like that....they don't necessarily know what's going on....”.

In contrast, those employed in animal shelters are more concerned with management putting more resources into educating the public and in training employees so that they are better able to educate the public in their occupational roles. Discussions centred on the possible benefits of targeted educational programs aimed at school aged children and, training staff to counselling those considering relinquishment of their pet. The benefits of having a dedicated employee as the point of contact to liaise with members of the public who want to relinquish their pet; a person to assist by offering advice and possible solutions to prevent relinquishment, was echoed by all participants in this focus group.

Many employees across the focus groups conveyed feelings of *not being heard or listened to* (9.7% - 16/165). This sub-theme was particularly evident amongst veterinary nurses and those working in animal shelters. For veterinary nurses comments related to feeling dismissed by management when discussing issues of workload, nurses being burnt out and showing signs of compassion fatigue. One nurse explains; *“I don't know how to get through to them....there's a level of frustration about not being heard, not being listened to....probably they don't see - I don't know, maybe if everyone cried....just drop stuff and start crying....multiple nurses have broken down this weekend. They go, yeah, no one's crying, everything's fine. I'm like....I cried....maybe it is denial. They just don't see it as serious as what it is maybe”*. Similarly, those employed in animal shelters felt equally dismissed when approaching management about workload, lack of staff resources and deficiencies in system processes. The perspective of animal shelter employees conveys a strong link between these three areas of concern and of greater concern to them is the perception that management do not value their opinion nor suggestions for improved work processes. This perceived attitude has a negative impact on morale which affects employee productivity.

Typically, employees in animal-related occupations look for social support within their place of employment. This is primarily due to the fact that colleagues have a contextual understanding of the emotional difficulties which arise from animal care-giving which can make discussion or informal debriefing a very valuable coping mechanism. However, employees from three of the five occupational groupings did not feel that management were always supportive in facilitating social or structured support mechanisms. This was particularly the case for those working in animal control, veterinary & animal science and biomedical research where the sub-theme *support (internal)* ranked fifth with an incidence density of 9.1%. Animal control employees felt particularly aggrieved as their propensity to informal debriefing during breaks was believed to be frowned upon by management and considered unhelpful. However, employees value the constructive nature of this type of debriefing as a powerful coping mechanism or pressure release after any emotionally difficult event or interaction. One animal control officer stated; *“....we talk amongst ourselves, but that's seen by management as us bitching. As a negative thing....rather than debriefing....or we're not doing work”*. Consensus was echoed amongst participants on having *“...like a first aid area that you can just chill out...”* or for management *“....even just to listen more”*.

The importance of debriefing was echoed by those working in veterinary and animal science higher education where 60% (n= 6/10) of the comments made regarding the role of management were allocated to the sub-theme of *support (internal)*. One technician explained; *“....and we get together*

*once a month and can say well, I haven't had a good month....you understand because you're doing it as well....have a group discussion about it. You are talking about it....you bounce it off each other....it lightens your load”* Employees also feel that it is important that they are able to approach management on issues of emotional fatigue; “*....if you can't go home and talk to somebody or can't talk to somebody at work, even in the work environment you can't sit and talk to somebody and say I've had a shit of a day, for this reason. Then I think your work colleagues or such or management or whatever are not fulfilling their part....that you should be able to go up and knock on the door and say can I talk to you, I've got a bad day. We need to talk about this”*

**Recovery support**, which is workload related, had an incidence density of 5.5%. However, it was identified as an issue only for those employed in veterinary practice, specifically emergency practice. Employees voiced a belief that management appeared to be incognisant of the physical and mental toll that night shift can have on personnel. One nurse stated; “*...if they see that you've just had a couple of really crazy nights, you've just done 12 and 14 hours, maybe they can try and organise for you to have a day off next week....just try and give you some sort of relief, knowing that you've done, now, 50 hours in four days and you're really a bit stuffed.*” This perceived lack of support flows into the next sub-theme of **recognition & value**. With an incidence density of 4.2% (7/165), this sub-theme was reported to be of most concern to those in veterinary practice and those employed in animal control. A powerful statement made by one emergency nurse describes her perception towards management thus; “*....just being a survivor - not only just in emergency but in the industry. It's not a very well-paid industry, and it's not something anyone does for financial reward or little incentives. The token, you guys are doing a great job, pat on the back thing, I guess that does help a little bit. But we're in it because we absolutely love it. I think that's the real heartbreaking thing to see management almost taking advantage of people that really just put their heart and soul into everything they do. Waking up ridiculous o'clock to go to work and help the puppies and the kittens and things like that....and just really knowing that people know that this is going on. You're just taking advantage of it and not putting things in place to help that. I think it is getting better, but there's still a very long way to go.*”

Similarly, **job appreciation** was an identified sub-theme (incidence density of 3.6% - 6/165) which was closely linked to **recognition & value**, particularly for those employed in animal control where employees felt that management were reticent in understanding the tasks that they are charged with and the emotional difficulties associated with those tasks. Conversation on this sub-theme revolved around being “*part of the process*”, one animal control officer spoke of perhaps swapping

roles for a day or having management immerse themselves in the working day of an officer; “...*being part of that process...not going in and doing the euthanasia...coming with us and doing our walk through in the morning, to see - decide who’s going where. Sitting down and going through the numbers and see who’s going on to what list and making that list and seeing that it’s not as easy as just going, yes, you can go, you’re on the list...done.....you have to sit there and think about things....*”. A colleague continued; “*That’s where the hard part with...upper management, some members of management have been out on the road, they know...they’ve done all the steps up to get there. They know what we’re dealing with and there’s others that haven’t been on the field side. They don’t know. You can sit there...and tell someone over and over again what you do, but until they actually experience...*”

These statements lead to the importance of management being ***open and approachable*** with their employees. This was mentioned by those working in biomedical research where they believed that a supervisor or manager needs to be accessible, particularly to more junior staff who are perhaps less confident in their questioning and ability to approach their managers.

Other minor sub-themes that were identified in the theme ***role of management*** were; ***support (external)***, ***decision process (euthanasia)*** and integration between organisation sections and ***pre-employment screening***.

## **Discussion**

Job stress is universal. Even ordinary jobs can become traumatic, often due to unforeseen events or situations that are out of the ordinary; a workplace accident, an aggressive client, a store robbery. Conversely, there are many jobs that can simply be traumatic in nature for example, paramedic, social work, oncology nursing, to name a few – occupations which exist to help others, care givers (Miller et.al. 1994). Therefore, it is not surprising that this study revealed that those working in management roles in animal-related occupations are equally susceptible to stress and distress as those who work under them. Much research has been conducted regarding stress, but not many studies have looked specifically at stress among managers (Farbrot 2014). In general terms, it is understood that the stress associated with managerial roles is predominantly caused by workload, time pressures, and financial responsibilities, resourcing issues and personnel management. Although a clear majority of the managers experience time pressure at work, there are relatively few who have role stress at work (Farbrot 2014). In comparison, those managers who work in animal-related

occupations have the added pressure and responsibility of animal life. That is, often being intrinsically involved in life or death decisions. It has been affirmed throughout this thesis that the angst and turmoil this responsibility can bring, is significant.

This thesis has further substantiated that employees working in animal-related occupations, tasked with specific animal care duties, including euthanasia in particular, are an at-risk group for developing occupational stress and compassion fatigue. However, this study has revealed that those in managerial roles also represent an at-risk group.

Evidence gathered here suggests that managers' stress is predominantly caused by or related to their own personal involvement in the decision making process surrounding the (negative) fate of animals and, the effects these decisions have on the emotional wellbeing of staff within the workplace. Managers alluded to a dangerous link between the responsibilities of making good management decisions and in providing a duty of care to their staff. There appears to be a fine balance in maintaining both of these without feeling 'secondary guilt'; a compounding factor whereby managers are adversely affected by the emotional reactions of their staff and, often feel torn between organisational objectives and employees emotional needs.

Interestingly, some managers were adamant in their belief that maintaining a level of personal distance between them and their staff was paramount to reducing inter-personal effects on decision making, and hence protecting their own mental wellbeing. However, Richardsen and Glaso (2014) suggests that managers experience significantly less stress when they feel they have good relationships with their employees. The down-side to this type of relationship in animal-related occupations is the heightened potential for being over-burdened by the trauma of others, that is, emotional contagion. The concept of emotional contagion includes the influence of one person's words, actions and/or emotions on another (Glaser 2013) Whilst emotional contagion can be a positive occurrence (i.e. employees taking on the positivity and enthusiasm of a good leader), it can also become a very negative experience. Therefore, it is important for those in managerial positions to develop emotional intelligence; the ability to identify and manage one's own emotions and the emotions of others, be able to harness those emotions and apply them to work orientated tasks and problem solving, in a regulated and positive manner (Goleman 1996). Similarly, facilitating the development of emotional intelligence in employees is likely to also have positive effects on staff.

Results indicate that those working in veterinary practice appeared most concerned with the **role of management** followed by those working in animal shelters and biomedical research respectively. Perhaps these are indicative of the level of management training in each of the occupational contexts? That is, managers working in the top three ‘concerned’ occupations may not have the necessary training in human resource and management skills as those employed in animal control or the higher education sector (which both reported less concern over management practices and associated issues). Veterinarians and those managers who are engaged through altruism rather than as professionally trained managers are perhaps not equipped to address the often highly emotive and confrontational issues that exist in all animal-related occupations and therefore, they remain unattended and continue to accumulate. This hypothesis warrants future investigation.

An apparent recurring catalyst which evoked a number of themes in this study was that of communication. Perhaps there is some connection between this and the notion of maintaining personal distance? In analysing the data, you could argue that some of the themes identified are likely to have been caused by a lack of communication. Perceived problems with communication featured in the themes of **anger and crankiness, education and the perception of others and, resentment and empathy**. A lack of human connection will ultimately hinder inter-personal communication and, in a situation or occupational scenario where emotions are often fluctuating, this may have serious adverse outcomes for the animals, and the people who care for them.

The benefits of debriefing (both formal and informal) cannot be ignored. The desire of employees and managers alike to be able to talk and discuss animals, events and situations and, their thoughts, feeling and actions surrounding the same, in a safe environment, with like-minded people is paramount in their minds. Education and the facilitation of the development of staff, at all levels, in emotional intelligence and resilience could provide a strong mechanism for promoting this and, in combating workplace negativity, complacency and low morale. Being able to harness emotions and express thoughts, feeling and emotions in a purposeful and constructive manner can only serve to aid communication between colleagues in occupational environments that can sometimes be extremely emotive and mentally taxing. Furthermore, the development of this area could see improvements in the perceived lack of acknowledgement by (some) management and also veterinarians.

## Conclusion

It is evident from this pilot study that operative and successful communication is the fundamental basis on which individual and organisational wellbeing and effectiveness can be measured. Connecting with others and actively pursuing emotional intelligence may prove it more likely that those who appear ambivalent to the importance of occupational stress and more specifically, compassion fatigue might begin to engage in endeavours of prevention. Ensuring open and transparent communication between employees and management (in both directions) and actively and constructively engaging in the workplace to acknowledge and address the unique stressors attributed to working in animal-related occupations will ultimately enable a united front against compassion fatigue.

Investigations designed to elicit a deeper understanding of the manager-employee relationship in animal-related occupations and, the impacts this relationship may have on occupational stress and compassion fatigue need to be conducted. Further exploration of the organisational psychology and human resources literature will ensure that such future studies are designed within the framework of that literature and are well executed.

*“Yeah every now and then you stop and you think, man this actually was someone's pet 20 minutes ago. Yeah. Every now and then it just pops up and I just think, oh this is not good.... But I didn't have - like I couldn't bag them all, fill out the stuff, take them to the freezer because I had so many others. It was like, just add it to the cage and I'll deal with it at the end. Just had them lined up and I ended up just having to put a blanket over it because I couldn't look at them, just all lined up dead” Veterinary emergency nurse F: 25-30.*

## **Chapter 7**

### **General Discussion**

The overarching aim of this thesis was to investigate the incidence of occupational stress and compassion fatigue in those working in animal-related occupations in Australia. Of particular interest was the status of existing research and the wide range of terminology and definitions used to describe the thoughts, emotions, and behavioural responses of animal health care workers to occupational stress and compassion fatigue. While a relatively small number of prior studies, conducted outside of Australia, has explored these issues within an animal-related context, there still remained much ambiguity in terminology and minimal evidence on specific occupational variation in noxious stimuli that are specific and contextual to individual occupational categories and workplaces and, individually associated stress responses. Much of the evidence in regard to compassion fatigue is anecdotal, particularly in Australia. In the time since this project was devised, only two studies which looked at occupational stress in animal-related occupations have been published in Australia. One study specifically explored whether workers who are required to euthanase nonhuman animals were at risk of developing Perpetration-induced Traumatic Stress (Rohlf and Bennett 2005), whilst the second study examined occupational stress and workplace environmental factors which may compromise the well-being of veterinary nurses (Black, Winefield et al. 2011). No study had attempted to identify or measure *all* of the specific and contextual contributing factors of occupational stress and compassion fatigue across multiple animal-related occupations. This three series study comprising a systematic review of current literature, a survey study and focus group work, explored previously un-researched areas and included not only those who work directly with animals but also ancillary staff who are often affected by the core business of their workplace but whom are overlooked in relation to the emotional toll it may have on them. Some findings of this research add to the current literature. However, there are also novel findings that provide the foundations from which to conduct further research.

In order to attain these novel findings, baseline information was obtained through a comprehensive PRISMA systematic review (Chapter 2) in order to assess the current knowledge and understanding of occupational stress and in particular, compassion fatigue. Chapter 3 explored the incidence of compassion fatigue, compassion satisfaction and burnout in those working in animal-

related occupations in Australia using a validated measure of life quality. To facilitate greater interpretation of these results, qualitative methods were then used to explore the experiences of animal health care workers specifically; experiences of stress and distress in working in animal-related occupations (Chapter 4); identifying contextual differences in response to working in various animal-related occupations (Chapter 5) and lastly, investigating specific opinions and perceptions from both a management perspective and employee perspective on the role of management in addressing occupational stress and compassion fatigue in animal-related occupations (Chapter 6).

The implications of this research are discussed below, followed by an outline of limitations and a summary of recommendations for future research.

### ***Reviewing the effects of euthanasia and occupational stress in personnel working with animals***

Chapter 2 reported a systematic review of current literature on occupational stress and compassion fatigue in a variety of animal-related occupations. This review was pivotal in assessing available evidence regarding the prevalence and incidence of compassion fatigue, contributing factors and associated mental health issues. The use of varied terminology and associated definitions was also reviewed in order to gain further current understanding of what compassion fatigue is and the apparent complex relationship between animal health care employees and the work which they do every day.

Whilst there was a wide range of research design and methods used in each of the studies reviewed, the key findings were consistent across each. That is, there is a high incidence of occupational stress and euthanasia-related strain in animal health care personnel which is of considerable concern to all animal-related occupations. Working with animals, and performing euthanasia, can evoke traumatic stress responses and compromise the wellbeing of animal health care employees. Most studies in the review surmised that exposure to continual occupational stress appeared to foster coping strategies and whilst perhaps this is accurate for those who have higher resiliency, it would not account for those who do not, and subsequently resign from their place of employment. Workplace social support was reported as being crucial to minimising job stress by perhaps counteracting the negative effects of working with animals in providing a positive outlet for those who are feeling stressed, distressed or burnt-out. The disparity of terminology proved challenging in the review when trying to ascertain whether occupational stress equated with compassion fatigue.

### ***Investigating the prevalence of compassion fatigue, compassion satisfaction and burnout in those working in animal-related occupations***

There are a great number of articles and published research which examine compassion satisfaction, compassion fatigue and burnout and in human healthcare occupations. Chapter 3 aimed to investigate the prevalence of these in those working in animal-related occupations using the Professional Quality of Life (ProQoL) Scale - to bridge the gap in literature where there is little focus on those working in animal healthcare and other animal-related occupations.

This chapter demonstrated that whilst most people who work in animal-related occupations experience average or above average compassion satisfaction from the work that they do every day, they also report experiencing the negative aspects of caring such as burnout and secondary traumatic stress. Veterinarians and animal research technicians reported the lowest level of compassion satisfaction. However, occupation was not a significant factor in the risk of secondary traumatic stress or burnout. A greater risk of burnout was shown by those who had been working in an animal-related occupation for longer (6-15 years) and women were reported as facing a greater risk of secondary traumatic stress than men. Interpretation of combined scores indicated 'at-risk' occupations for compassion fatigue thus identifying those who require vigilant monitoring. This may allow for targeted risk assessments of individuals employed in these occupations in order to prevent or address factors which contribute to the adverse mental wellbeing of employees.

### ***Stress and Distress: Scoping the Issue of Occupational Stress and Compassion Fatigue***

This Chapter further aimed to address the need for a standardised approach to research and analysis in the area of occupational stress and compassion fatigue in animal-related occupations so that a further body of evidence-based knowledge can be built. Where quantitative methods alone prevent obtaining the diverse perspectives, feelings and thoughts of animal care personnel, the more qualitative approach of focus group interviews allowed for highly contextualised, emotive expression to be captured.

In gathering information directly from those working in five defined animal-related occupations 17 themes associated with working with animals were identified. Stress and distress was overwhelmingly identified as a factor most associated with working with animals by five out of eight focus groups conducted. Animal attendants and nurses working in animals shelters reported the highest level of stress and distress followed closely by those in management roles in animal shelters

and veterinary nurses working in emergency practice. Further analysis revealed that whilst there were many similar contributing factors causing the stress and distress between the occupations, there was also specific contextual differences. For example, for those working in veterinary and animal science higher education and those working in biomedical research, contributing factors were clustered around euthanasia (including methods of euthanasia used and, the sheer numbers of animals being euthanased). Whilst those working in veterinary practice expressed greater angst in relation to workload, resource limitations (both physical and personnel) as well as euthanasia and death in general. In comparison, for those working in animal management & control and animal shelters the contributing factors, whilst also bearing a cluster of concern around euthanasia, identified a comparatively even spread of concern across a number of identified contributing factors including workload, lack of support /resources and public ignorance.

As this study revealed considerable variation in contributing factors between individuals as well as occupational context, it is evident that programs or strategies developed to support employees must be able to be adapted to account for workplace core business variation and individual differences in response to noxious events or situations. Ensuring transparent and safe communication within the workplace to allow for identification of stressors is pivotal to successfully combating occupational stress and compassion fatigue.

### ***Contextual differences in response to working in various animal-related occupations in Australia***

Chapter 5 further deduced from the focus group interviews discussed in Chapter 4. Analysing and reporting on the contextual differences and similarities in individual responses to working with animals across a variety of animal-related occupations, this study aimed to gain an understanding of contributing factors associated with occupational stress and the ways in which occupational stress may commonly manifest in different people across different occupations.

Euthanasia was also reported in this study as being a substantial contributing factor to occupational stress. However, the occupational differences are best illustrated by the contrasting thoughts of veterinary and animal science higher education technicians and biomedical research technicians who convey great concern regarding the method of euthanasia used for various species (i.e. cervical dislocation versus carbon dioxide), and those of veterinary nurses who show greater concern regarding their inability to control when a patient is euthanased (for example; in their opinion, treatment is extended with minimal chance of patient improvement and therefore the decision to euthanase is prolonged and the patient ‘suffers’ for longer than they believe necessary).

A common theme across all occupations in this study was that of repeated loss and exposure to feelings of grief, feelings which are not able to be fully acknowledged and processed before the next traumatic event or situation arises. There were repeated discussions across this study that stemmed from bygone events, memories of particular animals or difficult situations that had occurred outside of the recent past but were retold with vivid memory. It must be considered that this is not only related to compassion fatigue but also to the potentially more debilitating post-traumatic stress disorder.

A key finding of this Chapter was the resounding positive link between engaging in social support and communicating with like-minded people; those who share common goals and similar stressors. Thus, facilitating both formal and informal debriefing would perhaps assist in amelioration of mental health symptoms and manifestations.

### ***The role of management in addressing occupational stress and compassion fatigue***

In this final (pilot) study, data which pertained specifically to the role of management in combating or addressing occupational stress and compassion fatigue in animal-related occupations were extracted from the focus group interviews. Furthermore, a separate focus group was conducted with people employed in managerial roles to obtain perspectives and perceptions of occupational stress and compassion fatigue from a management viewpoint.

When comparing the sub-themes identified from the theme role of management from each of the employee focus groups (FG's 1-3, 4, 6, 7 and 8) with those identified from the management focus group (FG 5), there is some overlap. Specifically: workload, support (internal), job appreciation and communication were common stressors for both managers/supervisors and employees. Therefore, those working in management roles in animal-related occupations are equally susceptible to stress and distress as those who work under them. This would suggest that the perceived divide between managers and employees is neither great nor insurmountable.

Moreover, managers' report feelings of 'secondary guilt' whereby they are adversely affected by the negative emotional response of their staff to decisions regarding animal life and euthanasia. Thus, those working in managerial roles also represent an at-risk group for developing occupational stress and compassion fatigue. In analysis of occupations, those working in veterinary practice appeared most concerned by the role of management followed by those working in animal shelters and biomedical research, respectively. Communication and the importance of formal and

informal debriefing were again mimicked in this study as strong defence mechanisms against compassion fatigue as well as educating and facilitating the development of emotional intelligence and resilience in all staff.

### ***Limitations***

The review was limited by the need to exclude some words from the key word search (e.g. suicide) in order to keep it within a reasonable and manageable scope. However, these limitations also inform future research needs. For instance, recognising that many other animal-related occupations (i.e. personnel caring for captive animals, zoo animals, and native wildlife) which are similarly exposed to occupational stressors requires exploration. The emerging literature relating to increased risk of suicide within animal-related occupations (especially in veterinarians) and the mechanisms underlying a person's propensity to commit suicide are a complete area of study within itself and requires targeted investigation.

The small number of focus groups within each of the occupational categories could be seen as a limitation of the research. A greater number of focus groups per occupational context may have elicited further contributory factors to occupational stress and compassion fatigue and perhaps strengthened the qualitative results.

In recognising that there was little known about compassion fatigue in Australia at the outset of this thesis, the researcher felt it worthwhile to provide a seminar to potential participants. Regardless that the focus groups were typically conducted a number of months after the seminar, this could have posed potential bias and as such warrants noting as a limitation to this study.

The researchers relied on frequency of comments in the thematic analysis of the focus group work in this thesis in order to determine impact and prominence. Whilst this was critical in providing background and understanding of the importance of various negative aspects of individual occupational contexts and also individual nuances, this does present limitations to the study and there should be consideration given to alternative methods of determining these issues in future research endeavours.

A further limitation of this research was the lack of engagement by veterinarians. Whilst every effort was made by the researchers to enlist veterinarians into the focus groups, it proved a

difficult task. A lack of time to give to participation was the common reason given for non-engagement.

Furthermore, there is over representation of female employees on all of the focus groups. The researchers believe this is not indicative of the demographic of animal-related occupations but perhaps a generalised notion of males assuming the utmost professional persona and not being comfortable talking about feelings and emotions. This is somewhat supported by the work of Day and Livingston who state that both demographic and organisational differences impact on the use of social support and, that women are more likely to have extensive social networks and to seek social support in times of stress than men (Day and Livingstone 2003).

### ***Recommendations for Future Research***

The systematic review revealed the need for future research in a number of key areas including; longitudinal studies of individual facilities and individuals which evaluate currently employed coping mechanisms and strategies that may prevent clinical symptoms of occupational stress or compassion fatigue. Investigations which incorporate physiological measures of stress symptoms as well as psychological measures over time will inform the development of preventative programs designed to assist employees in animal-related occupations in managing occupational stress and compassion fatigue.

Future research should also include those who have left the animal care field so that a full understanding of the effects of the unique stressors associated with working in an animal-related occupation can be mapped. Comparing this data with studies which examine the attributes and characteristics of those who remain in the industry for greater than 15 years will aide in understanding how individual construct might have an impact on occupational success and longevity in animal-related occupations. This information, along with effective consideration at both an organisational and individual level, would provide a beneficial, contextualised resource to inform the development of tools and resources available to support employees within animal-related work environments. Furthermore, it would contribute to the development of resilience training programs and preventative strategies specifically targeted towards those working in animal-related occupations. Research which implements and investigates the effects of these structured prevention and intervention programs would also be a priority. Thus, ensuring mental wellbeing and a positive work/life balance for all employees is paramount.

A strong and resounding positive link between the literature and the results of this research exists in the importance of social support of like-minded individuals; those who share common goals (caring for animals) and common or similar stressors. Lazarus (1991) suggests that by getting together with others who share a common stress, some of the problems inherent in individual differences in stress dynamics are minimised. Caution must be taken however, when using this evidence to build mental wellbeing initiatives as many stress management programs fail because they are shallow and treat people as if they were all alike (Lazarus 1991). The inclusion of mechanisms for both formal and informal debriefing should form part of any program design and its implementation to address mental health and wellbeing of those working in animal-related occupations. These would provide a contextual platform from which alterations and adaptations of programs can be made based on specific individual needs.

Investigations which explore methods of improved education and awareness of the positive impacts of animal health care workers on the community including those working in biomedical research, animal control and higher education training should be prioritised. Combating and correcting negative misconceptions about both occupations and individual employees personal character may alleviate what is often a considerably negative focus for those employed in animal-related occupations. Additional research is required in education and facilitation of the development of staff, at all levels, in emotional intelligence and resilience. Development of this area could see improvements in the perceived lack of acknowledgement and understanding of those still yet to be convinced that occupational stress and compassion fatigue are tangible concerning issues for those working in animal-related occupations.

## **Conclusion**

Every occupation has its own intrinsic sources of stress. Euthanasia-related strain and compassion fatigue are synonymous with animal-related occupations as is evidenced throughout this thesis. In any organisation, institution or facility there is an expectation that there will be forward thinking, proactive and supportive management of all issues that relate to the core business of that enterprise. Occupations in which high-risk tasks and duties are identified warrant particular occupational health and safety policies and protocols to be put in place to prevent, minimise or control adverse events from occurring as a result of having to perform these tasks.

A noteworthy point from this thesis was the recurrent expression of gratitude towards the researcher in allowing the participants to talk about these topics. The majority of participants relayed feelings of relief and being 'less burdened' by being able to discuss their thoughts, feelings, emotions and experiences with like-minded people. It provided them tangible evidence that they are not alone in their feelings and, that their reactions, both emotional and behavioural are often mirrored by their colleagues. Perhaps they may not be evoked by the exact same events or situations, but by many and varied factors that may fall into the related categories reported in this thesis. For those working in animal-related occupations, the importance of participating in both formal and informal debriefing sessions proved very apparent in this thesis.

Mental health is still very much under-represented or considered a taboo subject in society today. This is changing for the better. However, the process is slow. There are a number of interventions that may be beneficial in addressing the divide between management and employee mutual expectations and these should be explored and evaluated at ground level.

Future research should include programs that incorporate 'mental health ergonomics'. A term penned by the author of this thesis that describes the process of consciously selecting and arranging pre-designed cognitive tools to help combat occupational stress and compassion fatigue.

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\*\* Acknowledgement to Cheyenne Warfield for her commissioned artwork on page 8.

## Appendices

### Human Ethics Approval I



**THE UNIVERSITY OF QUEENSLAND**  
**Institutional Approval Form For Experiments On Humans**  
**Including Behavioural Research**

---

**Chief Investigator:** Ms Rebekah Scotney

**Project Title:** The Effects On Animal Industry Workers Of Euthanasing Companion And Laboratory Animals

**Supervisor:** Helen Keates, Deirdre McLaughlin

**Co-Investigator(s)** None

**Department(s):** School of Veterinary Science; School of Population Health

**Project Number:** 2011000281

**Granting Agency/Degree:** PhD

**Duration:** 30th April 2017

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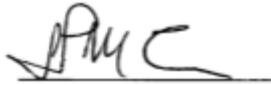
**Comments:**

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**Name of responsible Committee:-**  
**Behavioural & Social Sciences Ethical Review Committee**  
This project complies with the provisions contained in the *National Statement on Ethical Conduct in Human Research* and complies with the regulations governing experimentation on humans.

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**Name of Ethics Committee representative:-**  
**Associate Professor John McLean**  
**Chairperson**  
**Behavioural & Social Sciences Ethical Review Committee**

Date 8/4/2011 Signature 

Human Ethics Approval II



THE UNIVERSITY OF QUEENSLAND  
**Institutional Human Research Ethics Approval**

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**Project Title:** Compassion Fatigue: The Effects On Animal Industry Workers Of Euthanasing Companion And Laboratory Animals

**Chief Investigator:** Ms Rebekah Scotney

**Supervisor:** Dr Helen Keates, Dr Deirdre McLaughlin

**Co-Investigator(s):** None

**School(s):** School of Veterinary Science and School of Population Health

**Approval Number:** 2013001201

**Granting Agency/Degree:** PhD

**Duration:** 30th September 2019

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**Comments:**

Expedited Review - low risk.

Note: if this approval is for amendments to an already approved protocol for which a UQ Clinical Trials Protection/Insurance Form was originally submitted, then the researchers must directly notify the UQ Insurance Office of any changes to that Form and Participant Information Sheets & Consent Forms as a result of the amendments, before action.

---

**Name of responsible Committee:**

**Behavioural & Social Sciences Ethical Review Committee**

This project complies with the provisions contained in the *National Statement on Ethical Conduct in Human Research* and complies with the regulations governing experimentation on humans.

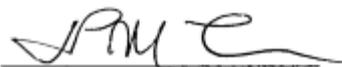
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**Name of Ethics Committee representative:**

**Associate Professor John McLean**

**Chairperson**

**Behavioural & Social Sciences Ethical Review Committee**

Signature 

Date 20/9/2013



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CXCOB PROVIDER NUMBER 000258

## Gate Keeper Consent

### Agreement to Participate in Focus Group and Survey by Animal Facility

#### Title of study

Compassion fatigue: The effects on animal industry workers of euthanasing companion and laboratory animals.

Behavioural & Social Sciences Ethical Review Committee number: 2011000281

#### Questions or Queries

If you would like to know more about the study or would like to discuss your participation, please contact Rebekah Scotney on 54 601 866. This study has been cleared by one of the human ethics committees of the University of Queensland in accordance with the National Health and Medical Research Council's guidelines. If you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Officer on 3365 3924.

#### Consent Agreement

- I understand that the participation of any employees within this facility in this research is voluntary and that they are free to withdraw at any time and that the facility may withdraw from this research participation at any time
- I have read and understood the participant information sheet regarding this research project
- I acknowledge that this research is separate from the employee's work at ..... and that participation in this study will not affect their employment
- I am aware that all participants' results and records will be maintained in a confidential manner
- All data will be locked in a filing cabinet at the University of Queensland
- Only the researchers involved in the project will have access to any information collected from participants at .....
- The researchers will not reveal identities or personal details of participants or the participating facility if information about this project is published
- I have received a copy of this consent form and the information sheet to keep

Facility Name:  
Name and position of person signing on behalf of facility

.....

Signature Date

Name of Witness Signature.....

Signature Date

Researcher's Name.....

Signature Date

**Note: All parties signing the consent form must date their own signature**



## Focus Group

Ethical Review Committee number: 2011000281

**Clinical Studies Centre**  
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**Compassion fatigue:  
The effects on animal industry workers of euthanasing companion and laboratory animals**

Dear Participant,

Thank you for your time in supporting research into compassion fatigue within the animal industry. Your involvement is highly valued by all of us. Your responses and experiences are important and will serve to increase awareness of this issue and create tools and processes that will be available for animal industry workers to access in the future.

**Who is conducting the study?**

Researchers working in both the School of Veterinary Science and the School of Population Health at the University of Queensland are conducting this study.

**What is the study about?**

Compassion fatigue or secondary traumatic stress is described in people who are exposed to the trauma experienced by those in their care. However, there is limited literature relating to workers within animal industries, particularly those who participate in the euthanasia of healthy animals. For these workers, compassion fatigue is described frequently as a response to recurrent euthanasia and other workplace stressors. We would like to discuss aspects of working in the animal industry including euthanasia and, explore the impact on the well-being of people who work regularly with animals.

**What do I have to do?**

If you are willing to help, please complete and sign the attached consent form and return to the researcher using the supplied stamped envelope. We will then contact you and arrange a suitable time for you to participate in a small group meeting. The meeting will last for about 1 hour and will be recorded with your consent and you will be free to review and edit your contribution at any time.

**Do I have to participate?**

Your participation is completely voluntary. If you do not wish to take part you are under no obligation to do so. You are entirely free to discontinue your participation at any

time without reason or to decline to answer particular questions. Participating in this study is completely voluntary.

**Are there any risks?**

While we do not anticipate any problems, if you become distressed the focus group session can be stopped. You are not obliged to answer a question if you do not wish to. If you do require assistance and emotional support please contact the UQ Staff Support and Rehabilitation Advisor on (07) 3365 1146 (Ext 51146) or Lifeline on 131114 (local call).

**How confidential is the information I give?**

All the information you provide to us will remain confidential and will only be made available to the researchers. We do not require your name or any personal details that might identify who you are. All information collected in this survey will be stored at the University of Queensland in locked filing cabinets or on a password protected computer database.

Information will be securely retained until 2021 in accordance with the ethical requirements of the study entitled Compassion fatigue: The effects on animal industry workers of euthanasing companion and laboratory animals.

**How can I find out about the results of the study?**

The results of the study will be published in a peer reviewed journal.

**Who can I contact about the study?**

If you have any questions about the study, please call Rebekah Scotney on 54 601 866 or Dr Deirdre McLaughlin on 3365 5335.

This study has been approved by the Human Research Ethics Committees of the University of Queensland (2011000281). If you have any complaints about this project and would prefer to discuss these with an independent person, you should feel free to contact the University of Queensland's Human Research Ethics Officer on (07) 3365 3924 or write to them at the University of Queensland, St Lucia, QLD, 4072.

Thank you for your consideration.

Yours sincerely,



**Rebekah Scotney**  
School of Veterinary Science

Example Focus Group Consent Form



Ethical Review Committee number: 2011000281

Clinical Studies Centre  
School of Veterinary Science  
Outer Ring Road  
Gatton Campus  
Gatton Qld 4343  
T +61 54 601 868  
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CHICOS PROVISION NUMBER: 000285

**Compassion fatigue:  
The effects on animal industry workers of euthanasing companion and laboratory animals**

**Consent Form – Focus Group**

**Researcher: Rebekah Scotney  
School of Veterinary Science  
The University of Queensland**

I agree to participate in a Focus Group for the project, Compassion fatigue: The effects on animal industry workers of euthanasing companion and laboratory animals

I have read and understood the *Information for Participants* statement that was sent to me. By completing this form:

- I understand that participating in the survey is voluntary.
- I understand that the interview will be voice recorded and transcribed
- I understand that my personal information will remain confidential to the researchers.
- I agree that information gathered from the project may be published, provided that I will not be identified.

Signed ..... Date .....

NAME: 

<i>TITLE</i>	<i>GIVEN NAME/S</i>	<i>SURNAME</i>
--------------	---------------------	----------------

DATE OF BIRTH: 

		1	9		
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ADDRESS: 

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<i>SUBURB</i>	<i>STATE</i>
<i>POSTCODE</i>	

PH (HOME): 

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MOBILE: 

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## Focus Group – Guide Prompters

1. How do you feel about having to perform euthanasia?
2. What aspects of performing euthanasia do you find most distressing?
3. Have you received any training to help you perform euthanasia?
4. Do you feel you were prepared for having to euthanase animals?
5. Has anyone spoken to you about coping with euthanasia?
6. Do you know your warning signs with regard to stress and anxiety?
7. What things do you think would help you cope/heal/deal?
8. Do you think everyone feels the same?
9. How do you currently cope?
10. What role do you think management should play in helping you address compassion fatigue and euthanasia burnout?

### Thematic Analysis - Theme Codes

Theme	Definition	Example
Stress & distress	Any comment or quote which reflected a feeling of stress or distress experienced by the participant. Often the word stress or distress was used by the participant.	<i>"...biggest stress would be not feeling like I have the time to spend with the animals....I find you have to come in on your day off....or you feel guilty doing it....I was in patting the Golden Retriever....I was kind of looking going I hope someone doesn't see me because....there's a million and one things to do....I feel really bad" (pg. 98)</i>
Coping & justifying	Any comment or quote which reflected a coping or justification mechanism used by the participant. Often the words cope/coping or justify/justifying were used by the participant. Recognised (healthy and non-healthy) coping mechanisms which were relayed by the participant (without the use of the word 'cope/coping') were also categorised into this theme i.e. shutting out feelings as a way of getting through the day.	<i>"...Some people will go home and get themselves drunk....everyone copes differently....some will go home and have a big cry....they reach that breaking point....it's very difficult. They'll eventually crash" (pg.82) "...they can either learn from this to be a better vet, to possibly stop this willy nilly breeding of animals and try to control it a bit better....justify it....that's one of the ways that I cope...." (pg82)</i>
Anger & crankiness	Any comment or quote which depicted feeling of anger and/or crankiness within a participant and provoked by any work related issue. Often relating to the plight of individual or groups of animals.	<i>"...where I see a perfectly good animal that you think could be re-homed ... - but you know for a fact you can't do anything but euthanase....that's the part that I get really cranky about" (pg. 88) "The simple things that are making us go through all of this....it is that education of the public, but it's hard when you think, how do you educate idiots? They don't get to see the stress that we're going through; because of their stupidity....it is....the people that make you angry" (pg. 96)</i>
Emotionally drained/tired/worn out	Any comment or quote which either directly or in the context of the immediate discussion within the focus group which divulged or strongly suggested a participant felt emotionally drained, was physically and/or mentally tired and/or worn out.	<i>"...it feels like we're chucked out on the side of the cliff and it's got - push, push and you're like, you know, swimming backwards trying to hold yourself up, when there's all these pressures from every direction trying to push you over the side of the cliff...." (pg. 99)</i>

Role of management	Any comment or quote which made mention of the impact and/or responsibilities of management in addressing the occupational stress associated with and/or contributing to compassion fatigue.	<i>"Something that still really bothers me is that there were no vets, apart from [one female], at the last session, and here again....especially senior vets and vets that are in management roles have no interest or don't think it's important or think that we're babies or whatever. But don't think it's a valid topic....that bothers me" (pg. 122)</i>
Hurt/guilt & wastage	Any comment or quote which reflected a sense of guilt or hurt experienced by the participant. This theme also included comments and quotes which mentioned wastage of animal life which produced feelings of hurt and guilt in the participant.	<i>"...these animals you've looked after for seven weeks, seven months, whatever, all of a sudden within a phone call someone says no, we're not doing that....just killing animals regardless it seemed like. It's just heartbreaking..." (pg. 89)</i>
Education & perception of others	Any comment or quote that eluded to the lack of, or need to, educate others. The perception of others was included in this theme as the majority of quotes and comments which mentioned perception came hand-in-hand with a lack of education. 'Others' primarily included; colleagues, staff peripheral to the participant and their job, clients, researchers and the public.	<i>"I think it's the attitude of people who aren't involved, the way they just sort of put up their barriers straight away when you try to explain..." "...then it's like oh well, I want your research, but I don't want anything to do with it...I couldn't do it. But I'll take all the benefits that come with it" (pg. 84)</i>
Resentment/empathy towards colleagues	Any comment or quote which portrayed a feeling of resentment towards 'perceived contributors' to the adverse plight of animals which then in turn has a negative emotional impact on a participants colleague for whom they feeling great empathy. Thus, in turn having a negative impact on a participant. This theme could also relate to comment or quotes which directed resentment towards colleagues and management.	<i>"...we're under the pump, we're all stressed, we don't feel - thank you is what we get. That's nice but it really doesn't help us in our day....being appreciated for all the extra that we give....it's hard for us because I know that we all work really, really hard..." (pg. 99)</i>
Bond & attachment	Any comment or quote which mentioned a bond or attachment to an animal or animals with whom a participant interacted with.	<i>"...was one particular patient I couldn't euthanase....I'd been treating it for six months and I was really attached to it. The owner was really understanding. I'm like, I'm sorry I can't do this when the time comes..." (pg. 104)</i>

Method of euthanasia	Any comment or quote provided by a participant which referred to a method of euthanasia.	<i>"...I think one of the factors that would help me deal with it....that would help me justify it to myself more is improving the methodology of the euthanasia. Carbon dioxide is often a method used...I hate it. I cannot stand it...I don't think it's a humane method of death" (pg.86)</i>
Training & job preparation	Any comment or quote which referred to the level of training, lack of training and/or lack of mental/emotional training for themselves and/or colleagues in euthanasia and/or emotional intelligence.	<i>"It's like you do fire station training before you're even told that you are going to kill an animal. Part of that job is killing animals....education towards its technicians is a vital part and it helps you care for your animals a lot better" (pg.123)</i>
Grief & sadness	Any comment or quote which reflected feelings of grief and/or sadness experienced by a participant. Often the word grief or sad was used by the participant.	<i>"...when you talk about euthanasia in a pound situation or an animal control situation, you're dealing with your own grief in terms of euthanasing the animals. But in working as a nurse or a veterinarian in a clinic, you're not only dealing with that side of things, but also the grief of the clients" (pg. 69)</i>
Nightmares & physical effects	Any comments made by a participant that relayed experiences of having nightmares and/or any physical effects which a participant felt were associated with the job that they do.	<i>"After doing it for so many years I found that I couldn't do it anymore....picking up these animals....and doing it all....I was actually having nightmares....of actually putting old people to sleep" (pg. 62) "What? I can't breathe properly, still? Day after day after day doing euthanasia and....walking into that room would trigger those same physical signs for me. So I stopped doing it for a while...." (pg. 90)</i>
Denial	Any comments or quotes provided by a participant that used the word denial and/or portrayed a sense of denial.	<i>"....a lot of people just sort of kid themselves and think they're doing okay and say they're doing okay and it's part of the job and it may surface after weeks, months or even years..." (pg. 63)</i>
Confronting	Any comments or quotes provided by a participant that used the word confronting and/or portrayed a sense of feeling confronted.	<i>"It is confronting....how quickly it can change within a day of bringing it in, spending that time with it, cleaning it, looking after it, giving a warm bed and a bowl of food and the next day it's your best friend and 72 hours later you're going to be using that animal for a non-recovery surgery...." (pg. 92)</i>

Desensitised	Any comments or quotes which reflected a sense of desensitisation experienced by a participant towards a particular job or task.	<p><i>"...So sometimes the euthanasia's the easy part of the day and I suppose that's the desensitisation..." (pg. 71)</i></p> <p><i>"I think anyone who can with their bare hands or syringe or with gas can stand in front of an animal and by your own hands kill it and have no emotion, that's scarier than having emotions. They're the people that should really be looked at" (pg. 91)</i></p>
Relief	Any comments or quotes provided by a participant which referred to feelings of relief. Often the word relief was used by the participant.	<p><i>"...But when you feel the relief of yes, he's finally gone, it highlights the difference between the really - the euthanasia's that you don't what to do, but have to do..." (not included in text)</i></p>

Approval to use the ProQOL Scale Survey (revised) for this study

**Permission for Use of the ProQOL (Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue) [www.proqol.org](http://www.proqol.org)**

Accompanied by the email to you, this document grants you permission to use for your study or project

*The ProQOL (Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue) [www.ProQOL.org](http://www.ProQOL.org)*

Prior to beginning your project and at the time of any publications, please verify that you are using the latest version by checking the website. All revisions are posted there. If you began project with an earlier version, please reference both to avoid confusion for readers of your work.

This permission covers non-profit, non-commercial uses and includes permission to reformat the questions into a version that is appropriate for your use. This may include computerizing the measure.

Please print the following reference or credit line in all documents that include results gathered from the use of the ProQOL.

Stamm, B. H. (2010). The ProQOL (*Professional Quality of Life Scale: Compassion Satisfaction and Compassion Fatigue*). Pocatello, ID: ProQOL.org. retrieved [date] [www.proqol.org](http://www.proqol.org)

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Author, ProQOL  
ProQOL.org  
[info@proqol.org](mailto:info@proqol.org)

*Help us help all of us. Please consider donating a copy of your raw data to the data bank. You can find more about the data bank and how you can donate at [www.proqol.org](http://www.proqol.org) and [www.proqol.org/Donate\\_Data.html](http://www.proqol.org/Donate_Data.html). Data donated to the ProQOL Data Bank allow us to advance the theory of compassion satisfaction and compassion fatigue and to improve and norm the measure itself.*



## Professional Quality of Life Scale (ProQOL)

### Clinical Studies Centre

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CRICOS PROVIDER NUMBER 00629

### Compassion fatigue: The effects on animal industry workers.

Dear Participant,

Thank you for your time in supporting research into compassion fatigue within the animal industry. Your involvement is highly valued by all of us. Your responses and experiences are important and will serve to increase awareness of this issue and create tools and processes that will be available for animal industry workers to access in the future.

#### Who is conducting the study?

Researchers working in both the School of Veterinary Science and the School of Population Health at the University of Queensland are conducting this study.

#### What is the study about?

Compassion fatigue or secondary traumatic stress is described in people who are exposed to the trauma experienced by those in their care. However, there is limited literature in Australia relating to workers within animal industries, particularly in shelter and rescue. We would like to research various aspects of shelter practice and explore what areas might impact on the well-being of people who work regularly with animals.

#### What do I have to do?

If you are willing to help, completion of the ProQoL scale will act as informed consent.

#### Do I have to participate?

Your participation is completely voluntary. If you do not wish to take part you are under no obligation to do so. You are entirely free to discontinue your participation at any time without reason or to decline to answer particular questions. Participating in this study is completely voluntary.

#### Are there any risks?

While we do not anticipate any problems, if you do become upset by any of the questions you can call UQ Staff Support and Rehabilitation Advisor on (07) 3365 1146 (Ext 51146) or Lifeline on 131114 (local call).

**How confidential is the information I give?**

All the information you provide to us will remain confidential and will only be made available to the researchers. We do not require your name or any personal details that might identify who you are. All information collected in this interview will be stored at the University of Queensland in locked filing cabinets or on a password protected computer database.

Information will be securely retained until 2023 in accordance with the ethical requirements of the study entitled Compassion fatigue: The effects on animal industry workers of euthanasing companion and laboratory animals.

**How can I find out about the results of the study?**

The results of the study will be published in a peer reviewed journal.

**Who can I contact about the study?**

If you have any questions about the study, please call Rebekah Scotney on 54 601 866 or Dr Deirdre McLaughlin on 3365 5335.

This study has been approved by the Human Research Ethics Committees of the University of Queensland (2013001201). If you have any complaints about this project and would prefer to discuss these with an independent person, you should feel free to contact the University of Queensland's Human Research Ethics Officer on (07) 3365 3924 or write to them at the University of Queensland, St Lucia, QLD, 4072.

Thank you for your consideration.

Yours sincerely,



**Rebekah Scotney**  
School of Veterinary Science

*Compassion Satisfaction and  
Compassion Fatigue  
(ProQOL) Version 5 (2009)*

Gender: \_\_\_\_\_ Age: (please circle) 18-25 26-35 36-45 46-55 over 55

Occupation: (Please list job title/type e.g. foster carer, behaviour technician, veterinarian, vet nurse, reception (front of house), animal attendant, management)

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Number of years in the industry: (please circle) <1 1-5 6-10 11-15 16-20 >20

What would you consider to be the most stressful aspect of your job?

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What would you consider to be the most rewarding aspect of your job?

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***Please continue over the page***

When you shelter animals you have direct contact with their lives. As you may have found, your compassion for those you help can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as an animal caregiver.

Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

**1=Never**

**2=Rarely**

**3=Sometimes**

**4=Often**

**5=Very Often**

1. \_\_\_ I am happy.
2. \_\_\_ I am preoccupied with more than one animals and/or person I [help].
3. \_\_\_ I get satisfaction from being able to [help] animals and/or their owners.
4. \_\_\_ I feel connected to others.
5. \_\_\_ I jump or am startled by unexpected sounds.
6. \_\_\_ I feel invigorated after working with those I [help].
7. \_\_\_ I find it difficult to separate my personal life from my life as a [helper].
8. \_\_\_ I am not as productive at work because I am losing sleep over traumatic experiences of an animal or person I [help] or have [helped]
9. \_\_\_ I think that I might have been affected by the traumatic stress of those I [help].
10. \_\_\_ I feel trapped by my job as a [helper].
11. \_\_\_ Because of my [helping], I have felt "on edge" about various things.
12. \_\_\_ I like my work as a [helper].
13. \_\_\_ I feel depressed because of the traumatic experiences of animals and/or people I [help].
14. \_\_\_ I feel as though I am experiencing the trauma of an animal or someone I have [helped].
15. \_\_\_ I have beliefs that sustain me.
16. \_\_\_ I am pleased with how I am able to keep up with [helping] techniques and protocols.
17. \_\_\_ I am the person I always wanted to be.
18. \_\_\_ My work makes me feel satisfied.
19. \_\_\_ I feel worn out because of my work as a [helper].
20. \_\_\_ I have happy thoughts and feelings about those I [help] and how I could help them.
21. \_\_\_ I feel overwhelmed because my case [work] load seems endless.
22. \_\_\_ I believe I can make a difference through my work.
23. \_\_\_ I avoid certain activities or situations because they remind me of frightening experiences of the animals and/or people I [help].
24. \_\_\_ I am proud of what I can do to [help].
25. \_\_\_ As a result of my [helping], I have intrusive, frightening thoughts.
26. \_\_\_ I feel "bogged down" by the system.
27. \_\_\_ I have thoughts that I am a "success" as a [helper].
28. \_\_\_ I can't recall important parts of my work with trauma victims.
29. \_\_\_ I am a very caring person.
30. \_\_\_ I am happy that I chose to do this work.

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## Example Presentation from a conference

# COMPASSION FATIGUE

## CARING AT WHAT COST?

Rebekah Scotney (PhD Candidate)  
School of Veterinary Science  
Gatton Campus

# We are part of an elite force of helpers!

- Our work can be difficult, demanding and quite emotional
- Every helping profession experiences these types of feelings and emotions ;
- It is known by many and varied terms;
  - vicarious trauma
  - secondary traumatic stress
  - secondary stress
  - second-hand shock
  - burnout, and
  - compassion fatigue

### Compassion Fatigue

Compassion Fatigue:

- Negative** aspect of working as a caregiver - the 'cost' of caring
- Described in people who are exposed to the trauma and suffering of those in their care
- Reach a point where we care too much;
  - Overcome with explosive or irrational feelings
- Reach a point where we care too little;
  - Become cynical and/or apathetic

### Compassion Fatigue

Compassion Satisfaction:

- Positive** aspects of working as a caregiver - the 'payment' for caring
- Is about the pleasure you derive from being able to do your work
  - What did I do well during this shift?
  - It felt good when.....

### Compassion Fatigue

Burnout:

- One component of the 'negative effects' of caring
- Associated with feelings of hopelessness, inefficiency and feeling overwhelmed
- Gradual onset of feeling ineffective, or that your work makes no difference
- Can be associated with a very high workload, or a non-supportive work environment

### Compassion Fatigue

Work-Related Traumatic Stress:

- Another component of the 'negative effects' of caring
- Primary** traumatic stress - we are the direct target of event
  - Aggressive animal or client
- Secondary** traumatic stress - exposure to event due to a relationship with the primary person/animal
  - Long-term patient
  - Vicarious Trauma ('second-hand shock') - feel compelled to help
- Post Traumatic Stress** - persistent emotional stress caused by an either isolated event or a cluster of events

### Compassion Fatigue

'Burnout' results from the stresses that arise from the clinicians or nurses interaction with the workplace

- Can change the work environment
- Can change policies/procedures
- Can change jobs

Compassion Fatigue evolves specifically from the relationship between the clinician or nurse and the patient (client)

- Can change jobs but CF will follow you

### Compassion Fatigue & Compassion Satisfaction

NEGATIVE	POSITIVE
<ul style="list-style-type: none"> <li>Helplessness and feelings of futility around the work we do</li> <li>May be related to;                             <ul style="list-style-type: none"> <li>Provision of care</li> <li>The system</li> <li>Colleagues</li> <li>Belief about self</li> <li>Burnout</li> <li>Work-related trauma</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Pleasure and satisfaction from working as a care giver</li> <li>May be related to;                             <ul style="list-style-type: none"> <li>Provision of care</li> <li>The system</li> <li>Working with colleagues</li> <li>Clients</li> <li>Belief about self</li> <li>Altruism</li> </ul> </li> </ul>

### Compassion Fatigue

Why are we susceptible to CF?

- Natural human compassion and empathy
  - Compassionate and empathetic toward animals
  - An affinity for animals
  - 'Love' animals
- Human-Animal Bond
  - Refers to the strong positive interaction and connection that exists between humans and animals
  - Can have emotional, psychological, physical, and spiritual benefits
  - Enhances both human and animal quality of life

### Compassion Fatigue

Veterinarians/Nurses

- Main focus is to ensure the health and welfare of all animals who come to us for care
  - Ensure physiological health
  - Minimise pain, distress and anxiety
  - Ensure psychological health
  - Behavioural medicine and intervention

Charles Figley (2006) - Only compassionate, empathic, loving and caring people suffer from compassion fatigue - the very people who are so vital to the animal - care field.

## Compassion Fatigue

Veterinarians/Nurses

- This expression of empathy is what convinces pet owners to trust us with the care of their animals
- We have a job to do;
  - Must show clients we can handle severity of a given event
  - We employ 'controlled empathy'
  - Push feelings aside to get through the day

→ Leads to the tearful drives home.....

13 \*

## Emotional Effects of Caring

14 \*

## Physical (and other) Effects of Caring

15 \*

## Emotional & Physical Effects of Caring

CF and Burnout are cumulative

If not addressed will lead to physical and emotional exhaustion

16 \*

## Compassion Fatigue

So what do we do about CF?

- Awareness & Acceptance
- Organisational Responsibility
- Support Colleagues
- Self-Care

17 \*

## Combating Compassion Fatigue

- Know our warning signs
- Build relationships with our colleagues
- Know our level of OK-ness
- Recognise traumatic situations - limit trauma input
- Focus on compassion satisfaction - what we did well at the end of a shift

18 \*

## Organisational Responsibility

- Provide Education
- Risk Assessments
- Ensure safe and open communication
  - supervisor : staff member
  - staff : staff
  - external professional : staff (group or individual)
- Opt 'out' clause

19 \*

## Combating Compassion Fatigue

Three parts:

- Coping - the quick fix
- Healing - a process with long term benefits
- Prevention - long term strategies

20 \*

## Coping V's Healing

- Both are needed to help with compassion fatigue

**Coping:** what we do when we take a much needed caffeine hit!

**Healing** is when we take the time to think about why a particular situation or event affects us the way it does

- how can we change it or our reaction to it, rather than merely escaping the pain and tension it brings....

21 \*

## Coping V's Healing

COPING	HEALING
Builds resilience to buffer the cycle of stress	Breaks the cycle of stress
Band aids	Solves problems
Maintains status quo	Creates a state of wholeness
What we do to get by, <b>survive</b> stressful situations	What we do to <b>resolve</b> , to come to terms with stressful situations (at least our reactions to them)
Helps reduce tension	Replaces tension with acceptance and serenity
Expresses feelings simply to vent	Expresses feeling with intent to understand, let them go, move on
Temporary measure	Long lasting measure
Alleviates symptoms	Alleviates root cause
Helps to escape stress	Requires us to fully face issues surrounding stress

22 \*

## Coping V's Healing - examples

COPING	HEALING
Sharing feelings with family, friends and co workers <b>as a form of venting</b>	Sharing feelings with family, friends and co workers with an <b>intent to understand</b> them
Listening to music <b>to get away from it all</b>	Choose music to intentionally match your mood to <b>legitimise your feelings</b> , and allow full emotional expression
Write in a journal <b>to let it all out</b>	<b>Reflect</b> on what you write in your journal, see the patterns, <b>learn and grow from</b>
Talking on everything in order to feel you are making a difference (and only giving half the attention each requires)	<b>Accept your limitations</b> - no one person can save all animals

23 \*

## Strategies for coping, leading to healing

- Learn about Grief and Mourning
  - Education is power
- Focus on successes
  - Saving a life
  - Educating the public
- Have a positive attitude
  - You can make a difference.
  - Consistently work at being positive and involved

24 \*

## Strategies for coping, leading to healing

- Work/Life balance
  - Interests outside of work
  - Time with friends and family
  - Spiritual life
- Be able to say "NO"
  - Set limits on what you will do
  - Protect your home life
  - Leave work at work
- Be realistic
  - Can't do it all - know your limits
  - Can't solve all the problems
  - Do your best - it is good enough

25

## Strategies for coping, leading to healing

- Initiate workplace communications
  - Participate in formal and informal debriefings
  - Don't be afraid to put your hand up and say "I can't do this today"
  - Understand that not everyone copes in the same way
- Get help when we need it
  - Medical
  - Emotional
  - Spiritual

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## Strategies for coping, leading to healing

- Take a break!
  - Few minutes ("cool off")
  - Lunch break
  - Few days
  - Holidays!
- Work together as a team
  - Strong defence against Compassion Fatigue
  - Help each other with tasks that can be traumatic (euthanasia) or workload in general
  - Support each other emotionally, listen, praise
  - Debrief, decompress
  - Focus on goals

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## Summary

- Accept that grief is a potential outcome of working with animals
- Continue to (re)-evaluate the reasons we chose to work with animals
- We can prevent compassion fatigue and burnout
- Take pride in the skills you have:
  - learn them to the best of your ability
  - be competent and caring
- Support each other and take care of ourselves so that we may continue to care for animals
- CELEBRATE SUCCESSES!

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"One of the biggest favours any veterinarian or veterinary nurse can do for his or her patients, and family, is to take self-care and stress control seriously"

Dr. Lisa Miller, 2004

## QUESTIONS?

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