

A PSYCHO-EDUCATIONAL INTERVENTION PROGRAM FOR VETERINARY  
PRACTITIONERS:  
LEARNING TO COPE WITH BEING A VETERINARIAN

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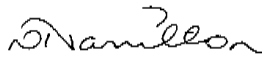
### Abstract

This study examined the phenomenology of being a veterinarian, and in particular, the factors relating to aspects of the job that are stressful and potentially life-threatening, particularly performing euthanasia. It also introduced the concepts of positive psychology, acceptance and commitment therapy, and career construction theory, and their subsequent roles in identifying and addressing these issues. There were two separate, but related, studies in this research project. Firstly, it was expected that by interviewing veterinarians one-on-one, further insight into the contributing factors of veterinarian stress, depression, burnout, and suicide could be identified. Therefore, Study 1 comprised face-to-face and telephone interviews with practicing veterinarians in Australia where they were asked a series of questions pertaining to the reported demands of their job, and subsequent factors believed to be affecting their level of wellbeing. The results from Study 1 were analysed via thematic analysis, identifying and reinforcing a multi-faceted range of factors including, but not limited to, performing euthanasia. Subsequently, these results led to the development of a one-day psycho-educational intervention program. Participant's reactions to the psycho-educational intervention program were the focus of Study 2. It was expected that veterinarians would demonstrate a negative emotional response to performing euthanasia on animals, as well as experience enhanced wellbeing and coping by attending the psycho-educational intervention program. Participants ( $n = 12$ ) were taught evidence-based psychological strategies based on the principles of acceptance and commitment therapy and positive psychology, as well as skills in assertiveness, communication, stress management, time management, relaxation, and goal setting. Results from Study 2 returned statistically significant results when addressing depression, anxiety, stress, and negative affect. As a result of this research project, it is evident that more needs to be done to address the reported negative aspects of being a veterinarian, and in particular, there needs to be more intervention programs available to help our veterinarians learn key psychological strategies to enable them to cope more effectively. It is recommended that the psycho-educational intervention program used in this research project be one of them.

Keywords: veterinarians, veterinarian wellbeing, pet euthanasia, psycho-educational intervention program, stress, acceptance and commitment therapy, positive psychology, career construction theory, stress management, resilience.

**Certification of Thesis**

I certify that the ideas, experimental work, results, analyses, software, and conclusions reported in this thesis are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.



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Signature of Student

20 January 2016

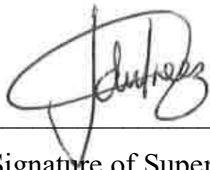
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## ENDORSEMENT



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Signature of Supervisor/s

20 January 2016

Date

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## CHAPTER ONE: LEARNING TO COPE WITH BEING A VETERINARIAN

### Objective of Research Project

This research project addresses veterinarian wellbeing, the phenomenology of euthanasing animals, and the use of *positive psychology* and *acceptance and commitment therapy* as a psycho-educational intervention for veterinarians, who, as a profession, are reported to be four times more likely to commit suicide than the general community, and twice as likely as other health care professionals (Kinsella, 2006; MedicineNet.com, 2010; Schultz, 2008; Whitcomb, 2010). At the commencement of the research project it was expected that euthanasing animals was perhaps the biggest contributing factor towards the lack of wellbeing experienced by some veterinarians, however, as the project progressed it soon became apparent that euthanasia was just one of many stressors for this profession.

Additionally, the research project aimed to design and test the effectiveness of a professional development psycho-educational intervention program based upon the conceptual principles of positive psychology and acceptance and commitment therapy that targets the enhancement of coping with the trauma associated with veterinary work, particularly euthanasia.

In earlier times, veterinarians were required to work in professional isolation at all times of the day and night, and expected to work with all species of animals. It is now reported that veterinarians have increasingly been required to become more diverse in their role as guardians of animal health and welfare, which has brought with it reported hardships such as working long hours, dealing with distressed clients, and performing euthanasia on animals. These factors are said to relate to loneliness, relationship issues, stress, anxiety, depression, and suicide risk (Kinsella, 2006; Schultz, 2008). Their rates have been shown to be twice as high as other health professionals, and four-times higher than the wider community (Kinsella, 2006; MedicineNet.com, 2010; Schultz, 2008; Whitcomb, 2010). Clearly, there is a significant emotional cost to working in this field. One aspect of this emotional cost pertains to the euthanasia of companion animals, a process that can be highly distressing for pet owners. Such emotional reactions are not psychopathological - they are 'normal' responses to extraordinary circumstances. Veterinarians must retain a visage of professional objectivity during the process of euthanasia, despite

the emotional charge of the situation. To what extent the actual process of euthanasing a pet in this emotive context impacts upon veterinarians is not a well-researched phenomenon, and similarly, relevant and specific professional development programs that support coping in this nature were unable to be sourced.

Positive psychology is referred to as a branch of applied psychology that essentially considers people's character strengths, and builds on those strengths to enhance a healthy and balanced lifestyle. It looks at what is 'right' with people, as opposed to the traditional clinical approach that looks at what is 'wrong' with people. Positive psychology assumes that 'healthy' and 'normal' people can also benefit from its interventions, and that one does not have to be mentally ill to benefit from its principles (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). A more detailed discussion of positive psychology is provided in chapter two.

Acceptance and commitment therapy focuses on therapists assisting clients to move forward in line with their values, while supporting them in relating their thoughts and feelings in the here and now, inclusive of their automatic reactions and all their history (Hayes, 2004). It utilises the processes of mindfulness, cognitive defusion, and values-guided action in order to assist with gaining and maintaining a level of wellbeing (Harris, 2009).

Career construction theory proposes a model for understanding an individual's life-cycle in relation to their vocational behaviour, together with assisting in the comprehension of how people choose and use work. The theory of career construction also helps in explaining how a person constructs themselves through both interpretive and interpersonal processes (Savickas, 2013).

The concept of resilience can be described as one's ability to bounce back, and although closely related to tough-mindedness, it is actually different (Lees, 2014). For example, tough-mindedness can include such qualities as being strong-willed, determined, or even avoiding seeing situations through the eyes of others, whereas resilience can be found in both the brashest, and quietest, people (Lees, 2014). Unfortunately, it only became apparent after studies 1 and 2 had been completed, by way of the researcher's professional work-related research into another occupation's high suicide rates, that resiliency was perhaps a key factor in wellbeing. As such, it was not tested as part of this research project, but is believed to be a significant concept that should be duly noted.



### **Research Objectives**

1. It is expected that veterinarians will demonstrate a negative emotional response to performing euthanasia on animals. Study 1 of the research project will investigate the phenomenology of that response.
2. It is expected that veterinarians who participate in a psycho-educational intervention program will have enhanced wellbeing and coping, as indicated by a set of measures to be validated as a part of the research project. Study 2 of the research project will address this question.

In relation to veterinarian wellbeing, no research was able to be sourced that specifically identifies positive psychology and acceptance and commitment therapy as an intervention that may have a beneficial impact on this issue. The lack of literature and research on this topic indicates the need for further research into this area, although on the other hand, the lack of literature and research could also prove somewhat limiting due to the unavailability of comparable information. It was therefore suggested that the mechanisms of positive psychology may protect veterinarians by way of implementing the five pillars of positive psychology reported to enhance wellbeing - those of positive emotion, engagement, relationships, meaning, and accomplishment. It was also suggested that the benefits of acceptance and commitment therapy would provide veterinarians with appropriate psychological coping strategies in order to deal with unhelpful thoughts and behaviours, and instead, choose more appropriate and helpful behaviours in line with their values.

Given the purported potential of positive psychology in contributing to wellbeing, this research project explored the phenomenology of being a veterinarian using interviews and questionnaires, and then implemented a psycho-educational intervention program based on the concepts of positive psychology and acceptance and commitment therapy to ascertain if the reported benefits of these modalities had a beneficial outcome with veterinarian wellbeing.

Furthermore, it is envisaged that this study will extend current theoretical knowledge by identifying current contributing factors to veterinarian wellbeing within the Australian population, extend the scientific research and validity into positive psychology and acceptance and commitment therapy, and identify a valid and reliable psycho-educational intervention program that addresses the negative aspects of veterinarian wellbeing.

**Organisation of Thesis**

This thesis will be organised in the following manner:

Chapter Two – Theoretical Frameworks. This chapter reviewed the existing literature covering the major theories in relation to veterinarian wellbeing, positive psychology, acceptance and commitment therapy, career construction theory, and resilience. This literature thus informs the research project.

Chapter Three – Methodology. This chapter will outline the methodology of the research project, including ethical guidelines, the significance of the research project, and the expected contribution of this research to the field of education.

Chapter Four – Study 1. This chapter includes a full discussion of the first study, which entailed face-to-face interviews with veterinarians. The method and results are also detailed.

Chapter Five – Study 2. This chapter includes a full discussion of Study 2, the psycho-educational intervention program. The method and results are also documented.

Chapter Six – Discussion. This chapter provides an overall discussion of all aspects of the research project, including limitations and recommendations for further research.

## CHAPTER TWO: THEORETICAL FRAMEWORKS

### **Veterinarian Wellbeing**

Veterinarians have long been considered the guardians of animal welfare and health, however, their role has increasingly become more diverse, which is reported to increase pressure on this occupation. Additionally, the hardships of working within the veterinary profession can place stress on the veterinarian's family as a result of working long hours, and dealing with distressed clients. These in turn have been related to feelings of loneliness, depression, relationship issues, and suicide risk (Kinsella, 2006).

It is reported that the cause of death for up to 43% of veterinarian deaths was suicide, with an alarming 41.8 to 52.6 veterinarians per 100,000 worldwide taking their own life (Platt, Hawton, Simkin, & Mellanby, 2010b). Within the United Kingdom alone, rates of suicide were reported at least three times the general population rate, with the most common methods used being firearms and self-poisoning (Platt et al., 2010b).

There are a number of major challenges reported within the veterinary profession, such as dealing with owners of pets who are upset or difficult, professional issues such as long work hours, and in particular, the emotional issues surrounding euthanasia of animals (Fritschi, Morrison, Shirangi, & Day, 2009). However, despite the issues reported, there have been few psychological wellbeing studies conducted within the veterinary profession (Fritschi et al., 2009). Veterinarians may also experience conflict between their longing to preserve the life of animals and subsequently being unable to successfully treat an animal, which is perhaps another factor attributing to their attitudes to preservation of life, and seeing euthanasia as a positive conclusion. Unfortunately, these conflicts could be responsible for veterinarians possibly lowering any reservations they may have with respect to suicide being a solution to their own problems, which could be providing self-justification for them to take their own life (Bartram & Baldwin, 2010). Additionally, veterinarians have knowledge of, and ready access to, medicines for self-poisoning, and are also under less supervision than doctors with their use of medicines, which could be contributing towards their high risk of suicide (Fishbain, as cited in Bartram and Baldwin, 2010).

In comparison to the general population, veterinarians are up to four times more likely to suicide. While the total number of veterinarians as an occupation is relatively small and the actual number of suicides within this profession are low, when compared with the general population and other occupations, veterinarians are at higher risk of suicide (Bartram & Baldwin, 2010). One hypothesis for this high suicide rate is the effect that performing euthanasia may have on veterinarians. When compared to the general population, veterinarians were more likely to appear in the moderate, severe, and very severe ranges for symptoms of depression. Their suicide risk is higher than medical doctors and dentists, and having access to lethal medication as a means of suicide can translate thoughts of suicide into actual behaviour (Tran, Crane, & Phillips, 2014). Goldney (as cited in Bartram and Baldwin, 2010) reports the risk factors for suicide are inclusive of undesirable life events, certain personality traits, chronic major difficulties, alcohol and drug abuse, and depression. Sadly, within Australia, a veterinarian will commit suicide approximately every 12 weeks (Martin, 2014).

DeGioia and Lau (2011) reported on research conducted by the Centre for Suicide Research at Oxford University, where there were significantly elevated rates of veterinarian suicide in Australia, Belgium, Norway, the United Kingdom, and the United States. The results of this research suggest a very real link between the veterinary profession and high risk of suicide. Possible explanations for this high suicide rate are: individuals accepted into veterinary school have traits which may include conscientiousness, perfectionism, neurosis, and be high achievers; social isolation of solo practitioners; working in an environment that often requires long hours with potentially little support from managers; high demands on them psychologically, and high expectations from clients; ready access to medications and knowledge of how to use them; exposure to colleagues' suicides which could result in copycat suicides; and acceptance of euthanasia as a philosophical way of alleviating suffering. Furthermore, factors such as overwork, substance abuse, compassion fatigue, burnout, relationship distress, and depression are all potential factors contributing to psychological distress.

In England, veterinarians are four times more likely to commit suicide than the general community, and twice as likely as other health care professionals (Anonymous, 2010; Kinsella, 2006; Schultz, 2008; Whitcomb, 2010). Although the

reasons for their higher suicide risk are not immediately clear, some studies suggest that veterinarians commit suicide because they are more exposed to euthanasia, and therefore may have different attitudes towards life and death. Bartram (as cited in Schultz, 2008) confirmed these statistics, and set out to perform mental-health studies within the veterinary profession in the United Kingdom. He reported that such research would be important for a number of reasons, including the wellbeing of individual veterinarians, the impact that veterinarian mental ill health could have on the welfare of animals under their care, and the benefit of gaining insight into suicidal influences that could then be related to other occupations. According to Bartram (as cited in Schultz, 2008), a major factor impacting veterinarian suicide was depression, and he reports that people in this profession have a predisposition that may lead to depression. Further factors having a potential impact on suicide within the veterinarian profession include stress, working long hours, working on-call and after-hours, expectations of clients, relationships with peers, clients, and managers, unexpected clinical outcomes, emotional exhaustion, inadequate professional support, lack of resources, personal finances, making professional mistakes, and the possibility of litigation or client complaints.

Gardner and Hini (2006) report that in New Zealand, a survey was developed in 1999 to identify self-reported levels of depression and stress, the sources of stress faced by veterinarians within their profession, and what forms of social support are used by veterinarians. The results of this survey revealed that younger veterinarians were more likely to experience higher levels of stress than older veterinarians, women experienced more depression and stress that was work-related than men, and those working in small animal and/or mixed practices reported more depression and stress than did those in other fields of veterinary work. Sources of stress that were highlighted were client expectations, hours worked, and unexpected outcomes. Additionally, participants in this study reported they were also stressed by finances, personal relationships, relationships with managers, peers, and clients, lack of resources, performing euthanasia, work-life balance, health, concerns relating to their career path, their expectations of themselves, and requirements to keep their technical skills and knowledge updated.

Similarly, Kahler (2014) reports that sources of stress for veterinarians that create stress include managing adverse events, working in teams, giving bad news,

interacting with difficult clients, balancing home/work life, and the worst – dealing with ethical dilemmas. Kahler (2014) also reports that within an animal shelter environment, dealing with animal cruelty, dealing with the public, the intensity and frequency of euthanasia, conflict within the workplace, and the constant influx of animals, are also contributing factors to stress. While it is noted that some stress can be necessary for optimal performance (eustress), stress that is not managed effectively (distress) can have negative repercussions such as depression, anxiety, substance abuse, burnout, relationship issues, a work/home life environment that is negative, and suicide. Furthermore, links between suicide and compassion fatigue, hours worked, workplace relationships, moral stress, and difficult life events that are co-occurring were all contributing factors. Kahler (2014) also stated that students of veterinary medicine found their continued exposure to euthanasia was related to a sense of fearlessness about death. In their systematic review of suicidal behaviour and psychosocial problems in veterinary surgeons, Platt, Hawton, Simkin, and Mellanby (2010a) explain that most of the studies conducted related to occupational difficulties and stress experienced by veterinary surgeons, and the most common occupational stressors included poor work-life balance, long working hours, managerial aspects of the job, heavy workload, difficult client relations, and performing euthanasia. They also note that few of the studies they reviewed actually investigated mental health difficulties and suicidal behaviour. In addition, there were suggestions that the veterinarians at greatest risk were females and young veterinarians, with these individuals at higher risk of job dissatisfaction, mental health difficulties, and suicidal thoughts. In their review of studies relating to the methods and rates of suicide within the veterinary profession, Platt et al. (2010b) maintain that the veterinary profession generally has a higher rate of suicide than populations they are compared with. Rates were reported at least three times that of the general population within these studies, which reaffirmed this profession is an occupation whereby successful strategies in suicide prevention should be developed.

Fritschi et al. (2009) reported there was a clear age-related trend with younger veterinarians being more likely than their older counterparts to be anxious, depressed, or distressed. Mixed practice and small animal veterinarians were also found to experience more depression and anxiety than other practitioners. However, veterinarians who had been practicing in a particular job for a longer period of time,

or the earlier they graduated, were less likely to report symptoms of depression, distress, and anxiety. It may be that this could in part relate to the fact that older veterinarians who had survived the industry have already left the profession, and the younger veterinarians are not able to draw on their more experienced peers for support and guidance. Interestingly, veterinarians who graduated prior to 1970 were less likely to experience psychological distress than those who graduated after 1990. Furthermore, Fritschi et al. (2009) found that it was quite common for veterinarians to experience poor psychological health, however, their levels of distress, depression, and anxiety were found to be similar to other professional or managerial positions in the United Kingdom. They also found that recent graduates and those working long hours had worse psychological health.

These suicides obviously have a tremendous impact on the friends, family, and colleagues of those left behind, often being described as being a huge blow - as with the 2013 suicide of veterinarian Caitlin Logan (Fawcett, 2013). Such suicides demonstrate that even the most qualified, passionate veterinarians are at risk – as was the case with Caitlin.

Jones-Fairnie, Ferroni, Silburn, and Lawrence (2008) reported that within the United Kingdom for the period 1993 to 1998, pharmacists, farmers, physicians, and dentists had up to twice the expected rate of suicide (using the proportional mortality ratio, or PMR) as the general population, whereas the highest rate was attributed to veterinarians at more than three times the PMR. When making comparisons between the rate of deaths in the general population and within different occupations, the standard method used is by way of calculating the PMR. PMRs subsequently make a comparison between the proportion of deaths from a specific cause in an occupation to the proportion of deaths in the general population from the same cause. Although the measure is widely used, PMR is affected by the frequency of death from other causes – that is, an increased PMR can indicate higher mortality from the cause under investigation, as well as lower mortality rates from other causes (Bartram & Baldwin, 2010). Additionally, Platt et al. (2010b) report the PMR is an alternative statistical method which is used when denominator data of the population is not available. They assert the PMR makes the assumption that the relative risk of causes of death are the same within two populations, and therefore it is a relatively crude measure of the prevalence of suicide. Instead, they suggest that if the use of a PMR

is necessary, it can be advantageous to make comparisons with the socio-economic status of the occupational groups in question.

The lower rates of mortality from other causes could explain the inconsistency between high PMRs recorded for some high-social-class occupational groups who commit suicide, and evidence suggesting relationships to the contrary in relation to risk of suicide and occupational social class, which indicate that the lower the class, the more they are at risk (Platt & Hawton, as cited in Bartram & Baldwin, 2010). Among these rates, male suicides reportedly had a PMR of 361 whilst for females this rate was 414. Within the specific age ranges, for males the most suicide deaths occurred in the 30 to 49-year old age group, and for females this was within the 25 to 39-year old age range. In Australia, the comparative rates of suicide per 100,000 for professionals reported within the period 1968 to 1981 were by male medical doctors with a rate of 34.5, and dentists with a rate of 15.5. There were no rates reported for their female counterparts.

According to Kinsella (2006), statistics reported from England and Wales found that for the period 1979 to 1990, 35 out of 383 veterinarian deaths were as a result of suicide. Gender differences were reported whereby one in every four female deaths was the result of suicide. For the period 1991 to 2000, there was reportedly approximately one suicide for every 11 deaths in male veterinarians, and one in every six deaths for female veterinarians. Similar statistics have also been reported in New Zealand, with the New Zealand Veterinary Association (as cited in Kinsella, 2006) stating that the veterinarian profession worldwide were one of the leading professions in suicide rates. Again, many potential stressors were identified, including long hours, busy days, emotional and physically challenging duties, and coping with both the animals and their owners.

Charlton (as cited in Bartram & Baldwin, 2010) investigated the characteristics of the electoral ward of the usual residence of deceased individuals with linked data from death certificates. It is asserted that relative to death from natural causes, the risk of suicide among 16 to 44-year old male veterinarians, 45 to 64-year old male veterinarians, and 16 to 64-year old female veterinarians, is increased by 4.6, 5.6, and 7.6 times respectively, when compared to people within the general population that have similar demographical characteristics.



Unfortunately, within Australia the Australian Bureau of Statistics do not identify veterinarians as a separate group of professionals, and therefore this results in their profession being included with other professional groups that are relatively small (Jones-Fairnie et al., 2008). This does not enable coding to be specific enough to obtain statistics on death that are reliable, and in addition, there are also reservations regarding the quality of data taken from death certificates from state coroners' offices in relation to occupational data. Additionally, official sources (including government agencies and coroners' courts) frequently have different ways of recording deaths, which can lead to misclassification of deaths as suicide (Jones-Fairnie et al., 2008).

Jones-Fairnie, et al., (2008) report that in the period from 1990 to 2002, 11 veterinarians in Victoria and Western Australia had committed suicide. The rates of suicide for veterinarians in Victoria and Western Australia are estimated to be respectively 3.8 times and 4.0 times the age-standardised rate for suicide in the adult populations of their respective states. Furthermore, it was reported that for two states within Australia, veterinarians had a suicide rate of 45 per 100,000 person years, which is roughly four times the general population rate within these two states. However, Jones-Fairnie, et al., (2008) do caution that deaths by suicide could be as much a result of individual cases as to the factors affecting the profession as a whole.

Despite thoughts that may suggest otherwise, individuals from high socioeconomic classes, professionals, and those who are very high functioning, can experience events such as relational crises, depression, anxiety, and life events which can create pathways to suicidal behaviours and thoughts. When such events occur and mental health issues become problematic, feelings of helplessness, hopelessness, and worthlessness may be experienced, leaving the individual feeling immeasurable psychological pain. Once a person has taken extreme measures and completed suicide, the effects are far-reaching – that is, it affects friends, family, teachers, co-workers, counsellors, and acquaintances, to the extent that oftentimes these individuals may experience reactions that are severely emotional for many years after the suicide. Not to mention the loss of the intellectual gifts and talents of the individual who has taken their own life (Popadiuk, 2013). It is fair to say that suicide does not discriminate.

The stress-diathesis model postulated by Mann, Waternaux, Haas, and Malone (1999) suggests that an individual's vulnerability or predisposition and stressful life events results in suicidal behaviour. Such vulnerability has an influence on how the person interprets, perceives, and reacts to adverse life events, and is a product of past life events, psychobiological factors, and genetic predisposition. This model is consistent with the cry of pain model of suicidal behaviour identified by Williams and Pollock (as cited in Bartram & Baldwin, 2010) which posits that suicidal behaviour is the cry, or response, to situations an individual finds stressful and whereby they may feel defeated, humiliated, trapped, or needing to escape. Psychological variables such as the ability to think about the future positively, as well as problem solving abilities, can affect such judgements.

In relation to current professional development interventions available to veterinarians, Kinsella (2006) states that cognitive-behavioural based therapies are suggested as a potential intervention for dealing with many issues faced by this profession. Within Australia in particular, it is recommended that professional veterinary bodies consider the provision of training for veterinarians in dealing with work-related distress, depression, and anxiety (Fritschi et al., 2009). Clearly, there is need for a professional development psycho-educational intervention program to educate veterinarians on how to develop protective attitudes, enhance wellbeing, and subsequently increase their coping skills.

Many people have the perception that being a veterinarian is a great job because they get to work with animals all the time. There is also a perception that becoming a veterinarian means you will be very well paid. Sadly, these assumptions are not always correct, and there is a 'dark side' to this profession.

### **Changes Affecting the Veterinarian Profession**

Macwhirter (2002) calls for a life course approach to veterinary science to identify potential crisis points and key issues facing vets who desire balance with other, and professional, goals. Macwhirter (2002) notes changes to the veterinary profession over the past 30 years, particularly with the massive gender shift from traditionally being a male discipline, to now nearly having two-thirds of graduates as women.

Additionally, Macwhirter (2002) discusses the drop in income levels and status when compared to other disciplines. She states some influences to this are an

individual's ability to recognise changing expectations with clients and the community, and aiming to promote themselves and working within those communities they serve. Macwhirter (2002) reports, however, differences between women and men's financial responsibilities, attitudes, interests, and family care, and goes on to suggest these factors should be researched to identify where they are most likely to occur during a veterinarian's professional career so that appropriate strategies to enable harmonisation can be identified.

Heath (2002, 2004) documented some changes over the last five decades in veterinarian's initial career experiences. In the first year these were identified as

- increases in female graduate percentages;
- changes from government service to private practice employment;
- an increase in the amount of veterinarians within their workplace;
- decreases in after-hours duty and work hours;
- an increased emphasis on lifestyle;
- average caseload changes with more cats/dogs and less farm animals and cattle;
- level of support has changed and increased;
- breadth of competence expected at graduation has decreased;
- an increase in bureaucratic red tape and decrease in respect from clients;
- a decrease in perceived levels of stress more recently;
- changes (and improvement recently) in the overall attitude to the first year as veterinarians;
- changes (and improvement recently) in attitudes to being a veterinarian and having done the course;
- changes in the work done as a veterinarian;
- in the first 10 years, the changes have included:
  - decreases in the percentage of veterinarians serving rural industries;
  - in more recent decades there has been a decrease in the percentage of farm animals;
  - increases in the percentage of small animal practice;
  - gender differences in type of work;
  - decreases in practice ownership;
  - differences in practice ownership between genders;

- a change in the location of work.

### **Traits of Veterinarians**

Research demonstrated that depression and certain personality traits are common predictors of suicidal ideation and behaviours, together with mental health problems, among young doctors and medical students, which demonstrated the usefulness of being able to identify a subgroup of medical students in their final year of study who might benefit from some intervention (Tyssen, Hem, Vaglum, Grønvold, & Ekeberg, 2004; Tyssen, Vaglum, Grønvold, & Ekeberg, 2001a, 2001b). It is suggested in this research project that such interventions extend to veterinarians.

According to the Australian Veterinary Association (n.d.-a), veterinarians need the ability to adapt to the advances in technology and changes within their field. In some states within Australia it is also compulsory for veterinarians to update and refine their skills due to the constant changes in veterinary science.

There are eight character traits of successful veterinarians, as asserted by Anonymous (n.d.-a). These are

**Sales focused.** Veterinarians who are successful understand that 99% of failure or success in any type of vet practice is related to their ability to successfully sell their service or product.

**Strong belief.** The most successful, or top, practice owners believe in themselves, their services, their clients, and their products. Furthermore, they also believe in changing lives for the better through the power of information.

**Results oriented.** Successful veterinarians realise there are no failures in telephone conversion or marketing – only results, which is why they monitor progress, learn from everything they do, and test new ideas continually. In addition, they understand each phone call, advertisement and correspondence sent draws them closer to a winning sales formula.

**Persistence.** Successful veterinarians persist with marketing and telephone conversion, making a solid commitment to continue on until they succeed.

**Fun and friendly.** The more fun you have, the more likely you are to have more success from increased sales – this is due to people loving to buy from those they have fun with and trust.

**Have a purpose.** Having a purpose, a reason why, or a grand quest that motivates you daily.

**Honesty and trust/dependability.** Earning trust helps to build trust with clients, and one way to do this is to deliver on promises.

**Activity focused.** Successful veterinarians tend to put their focus into sales-related activities, including correspondence and follow-up phone calls.

### **Qualities of Thriving Veterinarians**

Education.org Veterinary Schools (2014) have identified the following list of the top 10 qualities of a thriving veterinarian. They include

- business acumen – possessing sharp skills with business and managing the demands of a veterinary clinic;
- communication skills – having excellent communication skills as to effectively talk with clients about a range of issues;
- compassion – being compassionate and putting owners and animals at ease;
- customer service skills – being able to satisfy clients’ needs of animal care;
- dedication – having a sense of dedication to the profession;
- good manual dexterity – ability to restrain animals of all sizes and performing procedures with ease;
- passion for animals – being passionate about animals and having a commitment to the provision of best care for them;
- quick decision making skills – responding and making decisions efficiently and effectively;
- thorough knowledge – possessing a thorough knowledge of behaviours, anatomy, and ailments of different animals;
- time management skills – balancing the demands of a busy appointment schedule. The type of person who becomes a veterinarian is likely to have consideration for the owners of animals and be genuinely committed to animal wellbeing.

### **Essential Skills and Attributes**

In relation to being successfully admitted to the Doctor of Veterinary Medicine (DVM) degree, Cornell College of Veterinary Medicine (n.d.) outline some of the essential skills and abilities required for acceptance. These are

- high level of compassion for both animals and people;
- high levels of ethical and moral standards;
- excellent communication and interpersonal skills;

- expectations to effectively interact with people of all religious, cultural, ethnic, and social backgrounds;
- a motivation to serve.

Throughout candidature at Cornell College of Veterinary Medicine, individuals must be able to demonstrate skills and abilities in communication, motor, observation, social and behaviour, and intellectual activities (Cornell College of Veterinary Medicine, n.d.).

Schull, Morton, Coleman and Mills (2012) report that employers who are looking to employ new graduates place greater importance on interpersonal and personal attributes over academic capabilities. Teamwork, self-confidence, interpersonal skills, reliability, punctuality, initiative, and cheerful personality are all deemed to be highly desirable by employers. Unfortunately some new graduates revealed mismatches between the reality of veterinary practice and expectations of students – with most generally reporting their work was more money-oriented, stressful, and emotional than expected (Schull et al., 2012).

### **Risk Factors and Stressors**

Unfortunately, there are noted risk factors associated with working as a veterinarian, and recent research has found there may be a direct link in terms of depression, anxiety, and mental health stemming from long working hours having a direct effect on the health of veterinarians (Shirangi, Fritschi, Holman, & Morrison, 2013). Furthermore, research has found that female veterinarians who are childless or never been pregnant have higher anxiety than those women with two or more children (Shirangi et al., 2013).

Dickinson, Roof, and Roof (2011) maintain that euthanasia of animals is a stressful aspect of veterinary medicine, especially when the euthanasia involves companion animals. One possible reason for this is that the veterinarian has to be able to relate to both the grieving client as well as the suffering animal. According to Dickinson et al. (2011), the majority of veterinarians believe veterinary schools should have more emphasis on necessary communication skills to assist them in dealing with owners of animals that are terminally ill. How a veterinarian views euthanasia can make a difference in the experience of the grief that results, and whether they perceive euthanasia as something they physically do to a pet, or something they are able to give to a pet. Often euthanasia can result in significant

levels of stress for both the veterinarian and the client, and is also just as challenging emotionally for the client as it is for the veterinarian. Dickinson et al. (2011) also report that many veterinarians are not trained adequately in how to deal with pet loss and client emotion, and as recently as twenty years ago veterinary schools usually did not address factors concerning emotionally distressed clients, or issues around euthanasia – nor did they provide effective instruction in how to deal with pet owners who were grieving.

According to Vetlife (n.d.), some of the factors causing stress within the profession are working long hours, working at a fast pace, the complexity of the work, and the volume of work. It is noted that veterinarians sometimes work within organisations that are poorly managed, with many veterinary practices being small businesses with little skills in management and expertise in being clinically focused – not to mention having little understanding of people's needs within a team of veterinarians.

Veterinarians also have to frequently deal with the emotional and physical distress of both clients and patients, many times without their own emotional support. Added to this is the psychological and physical isolation, lack of compliments and/or positive feedback, and bureaucratic changes in rules of practicing as a veterinarian – requiring them to remain vigilant and up-to-date (Vetlife, n.d.). Furthermore, veterinarians tend to be very independent, and as such often find it difficult to ask for help or even see the benefits of asking for help.

Having access to controlled substances – and potentially a euthanasia solution – is another risk factor for this profession. With the majority of veterinarians tending to be perfectionists, there is also the risk of many of these practitioners being workaholics and without strong support systems. There is also a tendency for veterinarians to hide things that are bothering them, and continue to push on and ignore their symptoms (DeGioia & Lau, 2011).

Other stressful factors for veterinarians are the unsocial and long hours that are generally required of them, juggling the emotional involvement with their patients but also being able to detach from them emotionally, together with the need to be self-critical but balancing this with the ability not to be too critical and risk the onset of depression (Vetlife, n.d.).

Vetlife (n.d.) report that failure to cope with stress can lead to emotional problems, including depression and suicide; physical problems such as psoriasis and being vulnerable to infection; and behavioural alterations such as responding to others with irritability, anger, and so-forth.

Similarly, Bartram and Boniwell (2007) suggest possible explanations for veterinarian's high suicide rate which include

- coping styles and personality traits of applicants to veterinary school;
- knowledge of which doses and drugs are likely to cause death by self-poisoning intentionally, and ready access to these medicines;
- professional and social isolation;
- a 'culture of death' (such as an acceptance of slaughter and animal euthanasia);
- student debt;
- increasing client expectations;
- stigma involved with seeking help;
- long work hours.

Statistically, the percentage of females working in the veterinary profession has increased from 15% in 1981, 46% in 2006, to almost 76% in 2016, and effects on occupational stress exposure and its resultant effects (like burnout), has received additional focus, particularly among female veterinarians (Australian Bureau of Statistics, 2016; Shirangi et al., 2013). Further, stress, depression, and burnout have been reported as a result of organisational, personal, and interpersonal factors (Shirangi et al., 2013). In addition, a Western Australian survey reported addiction and death occurs in veterinarians, together with drug abuse. Subsequently, other research has estimated a three-to-four-fold rate of suicide compared to the general population in Western Australia and Victoria (Shirangi et al., 2013). It has also been found that it is common among veterinarians to have poor psychological health, with females fairing worse than males on mental health measures (Shirangi et al., 2013).

From the perspective of a veterinary student, it was found that managing potential conflict between human and animal interests, together with juggling the different work-related, academic, professional, or interpersonal demands were likely to lead to an increased level of stress (Shirangi et al., 2013).



Hatch, Winefield, Christie and Lievaart (2011) stated that new graduates are initially full of enthusiasm, but gradually suffer a loss of commitment, energy, and idealism over time, which tends to shorten their veterinary career. They suggest the curricula of veterinary schools should be modified to incorporate teaching of individual coping and cognitive skills to undergraduates, coupled with the possibility and opportunity to enhance such skills during their career as a veterinarian, as well as to enable them to cope with changes within the workplace, in an attempt to increase work satisfaction, job engagement, and improved mental health.

Fawcett (2014) discusses burnout and depression in the veterinary profession, and reports that while the actual number of veterinarians who commit suicide is not that high, when this is compared to the general population's average rate of suicide, it is high – in fact, four times more likely in comparison to non-veterinarians. She reports that in terms of what factors are thought to predispose veterinarians to burnout, the volume and nature of their work has been identified as a major contributor. Interestingly, there has also been an indication that due to the nature of some admission procedures for veterinary degrees only favouring those who are high achievers, it is possible that some of these individuals do not know how to fail and cannot cope with failure. Unfortunately, many people feel embarrassed or ashamed at somehow being perceived as weak, and suffer from burnout because of choices they have or have not made. Again, stressors that have been highlighted are client expectations, being exposed to patient death and client grief, and high levels of responsibility. One recommendation reported by Fawcett (2014) was the benefits of mentors, which are believed to help prevent tragedies within this profession.

It has also been suggested that other contributing factors to lack of veterinarian wellbeing includes pets having shorter life-spans, resulting in strong attachments being formed with animals who they tend to treat from infancy to death. Further, compassion fatigue, differing of attitudes of pet owners, pets seen as possessions versus family members or children, and availability of drugs and other narcotics are also said to contribute to veterinarian stress, depression, and suicide (Rasmussen & Robertson, 2014).

Another risk factor is the expectation of a fast diagnosis and complete resolution of the animal's condition. For example, if an animal is treated for a papilloma and it regrows, where does the responsibility lie? Would the veterinarian

be responsible for not performing the procedure correctly in the first place, or would the tumour be blamed for re-growing (i.e., biology)? In medicine with humans, generally the blame would go to the biology of the tumour, whereas in veterinary medicine, the veterinarian would likely be blamed (Anonymous, 2009).

Yet another risk factor identified by one veterinarian is speaking with clients about money (Teyler, 2013). This has been reported as being an issue as most veterinarians come into their career in veterinary medicine to do their best for each patient, however, when financial issues become involved it can be heart-wrenching and very tricky to say the least. This leaves the veterinarian trying to weigh the best interest of the animal, the demands of their business, and the financial circumstances of the client – resulting in the veterinarian often being in a terrible dilemma. One veterinarian explained how she was taken advantage of by a client who brought his pet in for treatment, and left without paying a cent. A few months later, the same client came in expecting free treatment for another pet, and subsequently blamed the veterinarian for being uncaring and heartless (Teyler, 2013).

Gardner and Hini (2006) detail the findings of survey results from a study of veterinarians conducted in 1999, which reported the following

***Levels of stress.*** While levels of stress did not significantly vary between type of work, gender, or number of people within the workplace, the levels of stress connected with general life events was inclined to decrease with age. It was also found that female veterinarians reported feelings of depression more so than men, and were more likely than men to feel stressed by the most demanding situations at work. However, females were not considerably more stressed than their male counterparts by a typical day at work or life in general. In addition, those working in large organisations were found to be more stressed than those in smaller organisations in a typical work day, and those working in small animal practice found the most demanding situation at work more stressful than did those working in other fields. Also, more females were reported as having been diagnosed with depression and thoughts of suicide when compared to males, and similarly, those working in small animal practice reported having more suicidal thoughts and depression.

***Stressors.*** The three greatest factors of work-related stress were client expectations, hours worked, and outcomes that were unexpected. It was found that

older veterinarians were less stressed by hours worked, client communication, client expectations, unexpected outcomes, and lack of support from senior colleagues than were younger veterinarians. Male veterinarians were also less likely than females to report an increase in stress due to colleague and/or employer expectations, hours worked, communication with clients, resources, support from senior colleagues, expectations from clients, unexpected outcomes, and professional support. Further, veterinarians in clinical practice appeared to experience lower stress levels by expectations from their colleagues and employer, support from senior colleagues, and lack of resources than those not working in clinical practice. However, they did report feeling more stress from unexpected outcomes and expectations from clients. Similarly, those working in larger organisations were found to experience more stress than their counterparts in smaller organisations from workplace relationships and colleague and/or employer expectations, but not so much from professional support, client expectations, or lack of resources. Veterinarians also reported stressors related to their requirement to keep up with their level of technical skills and knowledge, and being able to keep in step with technology. Finally, personal factors were reported as another stressor, with the greatest source of stress identified as being able to live up to their own expectations. Other stressors related to personal factors included personal relationships, financial aspects such as loans and debts, family needs, self-esteem, disposable income levels, finances, type of workplace, addictive behaviours, and finding suitable employment.

The coordinator of the OneLife Suicide Prevention Project for the Western Australian division of the Australian Veterinary Association (AVA), Dr Brian McErlean, addressed depression and suicide prevention in veterinarians at an AVA conference in Cairns approximately three years ago (Australian Veterinary Association, 2013). During his address, he reported the following statistics for veterinarians within Australia – a comparison to the general population figures are provided in brackets

- depression – mild to severe = 25% (20%);
- depression – extremely severe = 3.9% (2%);
- work-related burnout = 35.8% (20%).

Further, McErlean (as cited in Australian Veterinary Association, 2013) reported the six biggest stress factors in veterinarians are

- long working hours;
- heavy workload;
- performing euthanasia;
- managerial aspects of the job;
- poor work-life balance;
- difficult client relations.

In addition, McErlean (as cited in Australian Veterinary Association, 2013) states the suicide risk for veterinarians begins at graduation, and remains across the rest of their lifespan. This is particularly prevalent in veterinarians who graduate and relocate to a remote location for work, experiencing isolation and relationship breakdowns, which are high risk factors for severe depression in veterinarians. Further, depression can lead to substance abuse, which is subsequently exacerbated by veterinarians having 24/7 access to drugs.

### **Support Mechanisms**

Mellanby (2013) acknowledges progress in studies taken to better understand the mental health and wellbeing of veterinarians, but highlights there are still numerous gaps in understanding veterinarian mental health and wellbeing. Mellanby (2013) suggests the largest achievement in the expansion of literature into this issue is that it may reduce the stigma veterinarians feel with disorders of mental health.

According to Bartram (Anonymous, 2012), mental wellbeing is a dynamic state, and is more than satisfaction or happiness. With mental wellbeing a person can contribute to their community, build positive and strong relationships with other people, develop their potential, and work creatively and productively. When mental wellbeing is enhanced, they achieve a sense of purpose within society, and are thus able to fulfil their social and personal goals. Within the United Kingdom, there are various sources of support such as

- a 24-hour helpline with is staffed by trained volunteers from within the veterinary profession;
- a health support program for treatment and support of mental health related issues and addiction;
- a benevolent fund to provide financial assistance in times of hardship to veterinarians and their families;

- a dedicated website ‘Vetlife’ for support information available to veterinary professionals;
- a graduate support scheme supporting graduates up to eight year’s post-graduation.

Within Australia members of the Australian Veterinary Association can access a free, confidential telephone counselling service for support (Australian Veterinary Association, n.d.-a)

In addition, support is gathering for the use of positive psychology in enhancing and sustaining wellbeing. Bartram and Boniwell (2007) suggest the following in order to assist in achieving wellbeing

**Developing and maintaining close personal relationships.** Stay connected to your colleagues, family, partner, and friends. By doing so, this is said to affect happiness more than any other factor alone. Such relationships also form a ‘support network’ in order to avoid isolation emotionally.

**Looking after your physical health and getting enough sleep.** While diet and exercise are important, it is equally important to plan time for relaxation and rest each day –as little as 15 minutes per day can make a difference.

**Keeping a sense of perspective.** Does everything really matter? While experience shows that the negative feelings in our lives tend to pass, it is beneficial to see these as a learning curve and being able to enjoy life again. We should aim to avoid becoming trapped in a state of perfectionism, and instead be satisfied with ‘good enough’.

**Regularly engage yourself in activities that create ‘flow’.** By being in a state of flow, this indicates we are fully immersed in a task we find rewarding, and therefore forget everything else going on in our lives. In doing so, we become focused on the present moment, rather than getting caught up in the past, or worrying about the future – both of which cannot be controlled.

**Savour, be grateful for, and reflect upon the good things in life.** No matter how small they may be, it is important to be able to acknowledge things in your life for which you can be grateful. Activities such as keeping a gratitude journal, or jotting down three good things each day, can assist in this regard.

**Do not expect money to bring you happiness.** Beyond basic subsistence, material wealth fails to produce long-lasting happiness. Unfortunately, we can

become habituated, with rising aspirations and continual envy of those who are even better off than ourselves.

**Engage in meaningful activities.** That is, activities you find challenging, offer security, motivating, and which you can undertake with some autonomy and a feeling of pride.

**Be yourself, and be content with who you are.** You will forever feel like someone else's prisoner if you solely care about getting the approval of other people. Focus on your own personal strengths and talents, and live your life in a way that enables you to fully utilise them.

**Develop a sense of control.** Having a sense of control has been linked to both psychological and physical health, and it is important to realise you have some influence over what happens to you.

**Learn to be optimistic.** But remain realistic while being positive.

**Give yourself regular treats.** However, do not become stuck in the sole pursuit of pleasure purely by only doing those things that bring immediate feelings of pleasure and gratification.

**Simplify.** Learn how to say 'no' without feeling guilty, and try not to squeeze more and more activities into less and less time.

**Only take time to choose carefully when the decision is important.** If the decision you need to make is relatively inconsequential, try to settle for a 'good enough' option rather than making sure your choice is perfect.

**Be good to others.** A key ingredient of happiness is that of being kind and of service to other people regularly. Such an activity incorporating this recommendation would be a random act of kindness, which is said to enhance your own level of wellbeing.

In order to see an improvement in the mental state of veterinarians, there needs to be a provision of support and encouragement of work-life balance, together with addressing the isolation and financial hardships faced by veterinarians (Australian Veterinary Association, 2013). Additionally, it is suggested by McErlean (as cited in Australian Veterinary Association, 2013) that you can enhance your happiness by engaging in the following

- having a job that you enjoy;
- having a hobby;

- engaging in voluntary work;
- having the support of family and friends;
- using your top five character strengths daily;
- acknowledging and accepting gratitude.

There is little information known about what strategies veterinarians use to cope, with veterinary students in Australia not being consistent in the range of coping strategies they effectively use to handle the stressors experienced throughout their veterinary studies (Williams, Arnold & Mills, as cited in Bartram & Baldwin, 2010). However, within New Zealand, veterinarians were shown to seek assistance and information as well as making good use of their social networks when encountering periods of work-related stress. These social networks tended to be from informal sources like family, colleagues, and friends as opposed to those from more formal sources such as counsellors, telephone helplines, and health professionals (Gardner & Hini, 2006).

Bartram and Gardner (as cited in Bartram & Baldwin, 2010) emphasise the importance of emotion-focused and problem-focused strategies to assist veterinarians with coping with the stressors of their work. Likewise, Platt et al. (2010b) suggest the veterinary profession be encouraged to develop effective strategies that can help prevent its members from committing suicide. Similarly, Platt et al. (2010a) maintain that an evaluation of interventions seeking to improve veterinarian wellbeing could be beneficial for future research. Platt et al. (2010a) also advocate that teaching veterinarians more effective behavioural and cognitive coping strategies could be effective, and given the multiple factors contributing to suicidal behaviour in this profession, a holistic approach to suicide prevention could be warranted.

One more approach to tackle suicidality is that advocated by Popadiuk (2013), who suggests career counsellors could be adequately trained and competent in being able to assess suicide risk in their clients. She argues that this specialised group of people could have an impact on being able to assist their clients who may be battling with suicidal ideation, as she believes that due to their less stigmatised position within the field, they are positioned uniquely to assess clients for suicidal ideation effectively, given the right tools and support. Popadiuk (2013) suggests that career counsellors can gain knowledge of whether clients are experiencing transitory, passive ideation, or listening to whether their suicidal ideas are more imminent or

serious, by asking them about suicide. Career counsellors may become more confident and competent in asking the client directly about their suicidality, or conducting in-depth assessments, or even having a discussion with the client that may alleviate the stigma surrounding suicide, by acquiring adequate supervision and knowledge. Popadiuk (2013) also maintains there is a strong connection between suicidality and employment, and many individuals struggling with issues relating to work are liable to be experiencing depression, anxiety, isolation, or substance misuse, which all have associated risk factors with suicidal ideation. Furthermore, this connection emphasises disruption in employment, learning disabilities, socioeconomic status, sudden unemployment, interpersonal conflicts, difficulties at work, and occupational stress.

### **Summary**

As has been demonstrated, veterinarians work in high-stress environments with a multitude of factors demanding their attention and focus. They tend to be high-achievers with many expectations from both themselves and other people. Sadly, these issues contribute to high levels of suicide within this profession, and little has been done to provide adequate, appropriate, and well-researched intervention strategies that are readily accepted and making a difference. Given the high suicide rate of veterinarians, it is imperative that the health professions take this issue seriously and look at ways to minimise stress for veterinarians, and/or at the least, provide them with essential coping skills to equip them with the ability to deal with the demands of their job more appropriately. While these aspects of the veterinary profession have been identified and addressed in this research and other literature, it is important to note that not all veterinarians are suffering unduly. Therefore, it is essential to look at why some veterinarians are seemingly able to cope with their job, while others falter. The field of positive psychology could provide some answers to this question.

### **Positive Psychology**

Seligman and Csikszentmihalyi (2000) introduced the concept of positive psychology, stating that at the subjective level, the field of positive psychology is about wellbeing, satisfaction, and contentment (in the past), flow and happiness (in the present), and hope and optimism (for the future). They also purport that at the



group level, positive psychology is about civic virtues, and at the individual level, it is about positive individual traits.

Seligman and Csikszentmihalyi (2000) explain that positive psychology is not just the study of weakness, damage, and pathology, but also the study of virtue and strength. They assert that treatment is not just about fixing what is wrong, but also about nurturing what is best. Furthermore, they state psychology is much larger than just a branch of medicine concerned with health and illness – it is also about education, work, love, insight, growth, and play. One other point raised by Seligman and Csikszentmihalyi (2000) is that pleasurable positive experiences should be distinguished from enjoyable positive experiences, as it is enjoyment, rather than pleasure, that leads to personal growth and long-term happiness.

According to Seligman, Steen, Park, and Peterson (2005), positive psychology is an umbrella term used to describe the study of positive character traits, positive emotions, and enabling institutions. It is intended that research findings from this approach are not to replace, but to supplement, what is known about human suffering, disorder, and weakness. The intent of positive psychology is to have a more balanced and complete scientific understanding of the peaks, valleys, and in-betweens of the human experience.

The scientific discipline of positive psychology incorporates wellbeing, with its focus on an improvement in functioning, rather than the usual negative viewpoint of traditional psychology which focuses on the disease model (Bartram & Boniwell, 2007).

Linley, Joseph, and Boniwell (2003) state that positive psychology is about happiness, and that in positive psychology, wellbeing and happiness are the desired outcomes. Linley et al. (2003) discuss what Seligman describes as the three desirable lives, which he calls the “pleasant life”, the “good life”, and the “meaningful life”. They assert that wellbeing and happiness are used interchangeably in relation to the pleasant life, and as overarching terms in describing the entire positive psychology enterprise goals. Seligman et al. (2005) report that in the past few years it has emerged that happiness is causal and can bring many more benefits to people than just feeling good. It is reported that happy people are found to be more successful, healthier, and socially engaged – this causal direction was also found to run both ways. Seligman, Ernst, Gillham, Reivich, and

Linkins (2009) point out that positive psychology divides happiness into three different realms. These are described as hedonic (which are positive emotions such as joy, contentment, pleasure, and love), the state of flow - that is, about being engaged with an activity and losing self-consciousness throughout, and the meaningful life – feeling like you have a sense of belonging and are serving something you believe is bigger than oneself (Seligman, 2011).

Research conducted by Tucker et al. (2013) demonstrated both optimism and hope weakened the relationship between suicidal ideation and rumination, together with relationships between subscales of suicidal thinking and rumination. Their research also suggests that in the absence of optimism or hope, a ruminative thinking style may be most harmful when controlling for symptoms of depression.

Gable and Haidt (2005) state that positive psychology is the study of the processes and conditions that contribute to the optimal functioning or flourishing of people, institutions, and groups. Other theories of psychology have typically focussed on mental illness, and an apparent lack of research into other fields of psychology is where positive psychology had its genesis (Gable & Haidt, 2005). Positive psychology has also been described as “the scientific study of optimal human functioning that aims to discover the factors that allow individuals and communities to thrive” (Gersch, 2009, p.13). According to Gersch (2009), it is important that the profession of educational psychologists recognises the potential that positive psychology has in providing assistance in meeting future challenges.

Positive psychology adopts character strengths and virtues (CSV), and from this perspective, it is envisaged the CSV will “do for psychological wellbeing what the DSM of the American Psychological Association does for psychological disorders that disable human beings” (Seligman, Park, & Peterson, 2005, pg.2). The CSV classifies and describes virtues and strengths that enable humans to thrive, and refers to six overarching virtues that virtually every human culture worldwide endorses: wisdom, humanity, courage, justice, transcendence, and temperance. Under each of these virtues, particular strengths are identified, with a total of 24 strengths of character identified (Seligman, et al., 2005). Each of these virtues and strengths will be discussed further in this dissertation.

Gable and Haidt (2005) report there has been persuasive evidence that psychological and physical health can be protected by factors such as believing in a

sense of personal control and optimism. They suggest there have been criticisms arising around the assumption that if there is such thing as ‘positive’ psychology, then all other psychology must be ‘negative’ psychology. Another criticism they report was that those who study positive psychology prefer a Pollyanna view of the world and fail to recognise the negative aspects of life (Gable & Haidt, 2005).

In contrast to Gable and Haidt’s (2005) report, Miller (2008) presents a somewhat scathing view on positive psychology. In his article, Miller (2008) states that research in this field is fraught with methodological difficulties and is notoriously unreliable, and that arguments for positive psychology are highly questionable. Miller (2008) goes on to discredit the notion of goal setting and goal achievement, and suggests instead that people should limit goals to practical everyday situations. He asserts that goal achievement, goal setting, and motivation are concepts of explanatory value that are dubious (Miller, 2008). Miller (2008) further reports that problems arise when accounts of happiness (determined by way of an optimistic and positive attitude) are used to describe mental health which can be achieved by ‘re-crafting’ one’s attitude, and labels this model of mental health not much more than an extravert’s caricature (Miller, 2008). Instead, Miller (2008) refers to drug treatments and being “simply drugged” through advances in genetics and molecular biology as ways in which people can be more optimistic, relaxed, and cheerful. Finally, Miller (2008) concludes that positive psychology ultimately has no substance at all. As a practising registered psychologist working with individuals experiencing psychological distress, the researcher does not agree with Miller’s criticisms and suggestions of simply drugging people to become more optimistic, relaxed and cheerful. The researcher has directly experienced (and witnessed with clients) the benefits of using the above positive psychology interventions, and believes that to rely solely on medication is only masking the symptoms and not treating the cause of the issues at hand.

### **Authentic Happiness Theory to Wellbeing Theory**

Seligman (2011) refined positive psychology in his book “Flourish”, and concluded that happiness alone does not give us meaning, although it is still part of wellbeing. He states that in able to flourish, wellbeing takes centre-stage, and five pillars of positive psychology become the permanent building blocks for a fulfilled life. In particular, Seligman (2011) details how the original authentic happiness

theory, which was formerly the topic of positive psychology, was about happiness. He reports that the traditional gold standard for measuring happiness was life satisfaction, and increasing life satisfaction was the goal of positive psychology.

Since he wrote his book *Authentic Happiness* in 2002, Seligman (2011) has researched positive psychology even further, and now believes wellbeing is the topic of positive psychology, with the gold standard of flourishing being the measurement for wellbeing, and increasing flourishing being the ultimate goal in positive psychology. Seligman (2011) has renamed authentic happiness theory and now refers to it as wellbeing theory. He reports there are three inadequacies in authentic happiness theory.

Firstly, Seligman (2011) states authentic happiness theory is inadequate, as the popular connotation of happiness which has been the dominant focus is ultimately tied up with being in a cheerful mood. At the bottom of happiness is positive emotion. It has also been contended by critics that authentic happiness theory redefines happiness by including the desiderata of meaning and engagement in order to supplement positive emotion. While neither meaning nor engagement actually refers to how one feels, and while they may be desirable, they are not, nor can they ever be, part of what is denoted by happiness.

Secondly, Seligman (2011) reports that life satisfaction is held in too privileged a place when measuring happiness. In authentic happiness theory, happiness is operationalised as the gold standard of life satisfaction, which is measured by a self-report scale that has been widely researched. The ultimate goal of positive psychology follows on from that gold standard, which is to increase life satisfaction universally. However, as Seligman (2011) reports, the level of life satisfaction people feel is actually determined by how good they were feeling when they were asked that question. Therefore, when averaged over a number of people, 70 percent of how much life satisfaction is reported is determined by the mood they are in, and at less than 30 percent is how well that person will judge their life at that particular moment. Seligman (2011) claims the original gold standard view of positive psychology is tied to mood disproportionately, and this form of happiness was previously considered vulgar by the ancients.

Thirdly, Seligman (2011) states positive emotion, engagement, and meaning, do not deplete aspects that individuals choose for their own sake.

An entity, or real thing, is directly measurable, and this entity can be operationalised. That is to say, it is defined by a highly specific set of measures. Happiness is a thing, and wellbeing is a construct. Authentic happiness theory was an attempt to explain happiness, with life satisfaction being its defining feature, as a real thing. Those who have the most meaning, the most positive emotion, and the most engagement, also had the most life satisfaction and were deemed the happiest. In contrast, wellbeing theory disputes the topic of positive psychology as a real thing, but instead asserts it is actually a construct which has several elements that are measurable, each making a contribution to wellbeing, and each a real thing - but nevertheless, none of which define wellbeing. Therefore, it is not the entity of life satisfaction that is the focus of positive psychology, but the construct of wellbeing (Seligman, 2011).

According to Seligman (2011), there are several contributing factors to wellbeing, and there are five elements which comprise what individuals will choose for their own sake, and without un-coerced choice. In order to count as an element, each of these pillars of wellbeing must have three properties: it must make a contribution to wellbeing; it must be pursued by many people for its own sake rather than to escape any other elements; and it is measured and defined independently of any of the other elements. Within wellbeing theory there are five elements, each of which contains three properties. These elements are positive emotion, engagement, meaning, positive relationships, and accomplishment – referred to as the acronym PERMA, discussed in turn below.

### **PERMA**

This acronym identifies the five elements of wellbeing theory, as reported by Seligman (2011), each of which contains three properties.

**Positive emotion.** Positive emotion is the first element in wellbeing theory, and essentially represents the pleasant life. While this element is included in the original authentic happiness theory, it is also a cornerstone of wellbeing theory, but does have two changes that were deemed crucial. The subjective measures of life satisfaction and happiness were demoted from being the theory's main goal, to now just being factors included under this element. Encompassed in positive emotion are the normal subjective wellbeing variables such as comfort, ecstasy, warmth, pleasure, and so on (Seligman, 2011).

**Engagement.** As with positive emotion, engagement remains an element and is only assessed subjectively. Engagement is viewed subjectively, but retrospectively, unlike the present moment for the pleasure states (Seligman, 2011).

**Positive relationships.** This element is ultimately about other people, which Peterson (2006) reported was the basis of positive psychology. When thinking about things that are positive, very little of this is solitary. For example, when you think about laughing uncontrollably, or experience immense joy, meaning, or purpose, or feel incredibly proud of something you have achieved, these events all take place around others. Similarly, the best antidote to life's downers and reliable uppers are other people (Seligman, 2011).

**Meaning.** Meaning could be included as a positive emotion due to its subjective component, however, it is not only a subjective state. A subjective judgement can be contradicted by a more objective and dispassionate judgement of coherence, history, and logic (Seligman, 2011).

**Accomplishment.** Achievement, or accomplishment, is often sought just for the sake of achieving or accomplishing something, even if it does not bring meaning, positive emotion, or anything in the way of positive relationships. This addition, also referred to as the achieving life, emphasises that positive psychology is about describing, rather than prescribing, what it is that people do to get wellbeing (Seligman, 2011).

In his book "A Primer in Positive Psychology", Peterson (2006) highlights some of the exercises used in positive psychology. These include writing a gratitude letter, planning your perfect day, identifying signature strengths, using signature strengths in different ways each day, savouring, writing your own legacy, completing your happiness profile, writing a letter of forgiveness, changing a habit, giving the gift of time, letting go of grudges, letting others shine, writing an apology letter, being a good teammate, and making a daily list of three good things. Many of these exercises were included in the psycho-educational intervention program, discussed in chapter five.

### **Positive Education**

With respect to positive psychology and education, Seligman, Ernst, Gillham, Reivich and Linkins (2009) assert more wellbeing is synergistic with improved learning. Therefore, if wellbeing is increased, likely outcomes are to be an increase

in learning, which is seen as one of the traditional goals of education. It is thought that a positive mood results in broader attention, and improves creative and holistic thinking. This is in contrast to negative moods, which are said to produce narrower attention, and more analytical and critical thinking. Furthermore, Seligman, et al. (2009) state that wellbeing can be taught, and should be taught, in school on three levels – firstly as an antidote to depression, secondly as a vehicle for increasing satisfaction in life, and thirdly as an aid to more creative thinking and better learning.

There is a growing scientific basis for the understanding of meaning, positive emotion, and engagement, and these are each valuable in their own right as they assist with promoting learning, fighting depression, and engendering more life satisfaction (Seligman, et al., 2009). With this in mind, the Penn Resiliency Program (PRP) was created to promote optimism by teaching students how to be flexible and think more realistically about their problems. The PRP also teaches students how to make decisions, brainstorm creatively, be assertive, and adopt several other problem solving and coping skills. The major goals of the PRP are to assist students in identifying their character strengths, and increase the use of these strengths in students' day-to-day lives. The PRP uses the values in action (VIA) classifications to target students' strengths, and in addition, strives to promote positive emotion, resilience, and a sense of purpose or meaning (Seligman, et al., 2009).

In support of positive psychology in the education sector, Steinberg (2007) reports that hope and optimism have gained increasing attention as important variables in positive psychology, particularly in the field of education as they are variables that can be malleable to the influence of teachers, as well as having an effect on academic achievement. Within Australia, in addition to the implementation of the Penn Resiliency Program at Geelong Grammar School, other high schools have reported the integration of positive psychology, such as Hornsby Girls' High School (Sleeman, Booth, & Phillips, 2009), Riverside Girls' High School (King, 2009), and Scotch College in Adelaide (Scotch College, 2009).

### **Core Virtues**

Peterson and Seligman (2004) assert there are six core virtues, and 24 character strengths, which have revealed an amount of similarity across cultures, indicating

strongly a cross-cultural and historical convergence of the six core virtues. The six core virtues and respective character strengths are as follows

Table 1

*Core Virtues and Character Strengths as outlined by Peterson and Seligman (2004)*

Virtue	Character Strengths
Courage	Bravery (valour), persistence (perseverance, industriousness), integrity (authenticity, honesty), vitality (zest, enthusiasm, vigour, energy)
Justice	Citizenship (social responsibility, loyalty, teamwork), fairness, leadership
Humanity	Love, kindness (generosity, nurturance, care, compassion, altruistic love, niceness), social intelligence (emotional intelligence, personal intelligence),
Temperance	Forgiveness and mercy, humility/modesty, prudence, self-regulation (self-control)
Transcendence	Appreciation of beauty and excellence (awe, wonder, elevation), gratitude, hope (optimism, future-mindedness, future orientation), humour (playfulness), spirituality (religiousness, faith, purpose)
Wisdom and knowledge	Creativity (originality, ingenuity), curiosity (interest, novelty-seeking, openness to experience), open-mindedness (judgement, critical thinking), love of learning, perspective (wisdom)

Each of the core virtues and character strengths will now be discussed in more detail, and are based on Peterson and Seligman's (2004) definitions.

**Courage.** There are said to be three types of courage – moral, psychological, and physical. Moral courage involves being able to maintain ethical authenticity or integrity while at the risk of losing employment, prestige, privacy, or friends. Psychological courage is that required to be able to confront a destructive situation or habit or illness, and being brave in the face of one's demons within. Physical courage involves overcoming the fear of death or physical injury in pursuit of saving



oneself or another person. Courage is not only seen externally, but also has an inner life. This is to say that it is not just the observable acts that comprise courage, but also the decisions, emotions, motivations, and cognitions that bring them about.

**Justice.** This core virtue generally refers to those things that make life fair. While we are aware that life is not fair and there are some animals more equal than others, we need the more pragmatic approach whereby the laws provide a fair shot for everyone. Justice exemplars are civic in nature, such as leadership, citizenship, fairness, and teamwork.

**Humanity.** Humanity and justice are separated, despite both involving the improvement of another's welfare. In this respect, humanity is referred to as the virtues involved in how we relate to others – that is, the interpersonal strengths. Within psychology, virtues of humanity are rendered as prosocial or altruistic behaviour, and there are many species (not just primates) whose behaviour appears to reflect altruism. These strengths also include the positive traits which are manifested when one is in a caring relationship with others.

**Temperance.** This virtue is the control over excess, or commonly described as everything in moderation. While it is used to signify abstinence, especially from activities such as smoking, sex, drinking, and eating, in this regard it is termed more generally to incorporate any aspect of auspicious self-restraint. As an example, within psychological terminology, temperance becomes translated into self-regulation or self-efficacy, which is the ability to manage and monitor one's emotions, behaviour, and motivation without the input of outside assistance. Failure to do so can then lead to all kinds of social and personal problems.

**Transcendence.** Within the context of the core virtues, transcendence is defined in the broad sense as the belief that there is a purpose or meaning larger than ourselves, or a connection to something higher than ourselves. It is the opposite of the contention that life has no meaning, known as nihilism.

**Wisdom and knowledge.** Wisdom can be defined as an exceptional depth and breadth of knowledge about factors of human affairs and the conditions of life, and subsequent judgement in relation to applying this knowledge. Further, it can also be described as good advice and judgement about uncertain, but important, matters of life. Peterson and Seligman (2004) define wisdom as knowledge that is hard fought

for, and then used for good, and is a form of intelligence that is noble and where everyone is appreciative in its presence.

### **Character Strengths**

In order to be classified as a character strength, Peterson and Seligman (2005) assert each must meet the following criterion. That is, they must be

- fulfilling;
- morally valued;
- does not diminish others;
- nonfelicitous opposite;
- traitlike;
- distinctiveness;
- paragons;
- prodigies;
- selective absence;
- institutions and rituals.

The following character strengths are incorporated under the core virtue of wisdom and knowledge, and each will be described in further detail

- creativity;
- curiosity;
- open-mindedness;
- love of learning;
- perspective.

**Creativity (ingenuity, originality).** There are two essential components of creativity – firstly, a person who is creative must produce behaviours or ideas that can be recognised as unusual, novel, or surprising. These ideas or behaviours must also be adaptable, and their originality must contribute to the individual's, or another's, life in a positive manner. It is to be noted, however, that originality on its own does not signify a person has creative ability. For example, individuals who suffer from severe mental disorders (such as personality disorders) can display behaviours and express ideas that can seem to be very original. This is why the second criteria of adaptability is a crucial component of this character strength. For those individuals suffering personality disorders and the like, their delusions and

hallucinations lack this feature. They simply make life more problematic for the individual, rather than solving life's problems.

**Curiosity (openness to experience, novelty-seeking, interest).** Curiosity can be defined as an individual's intrinsic interest in ongoing experience. Challenge, experiential novelty, and variety are all pursued by curious people. While all individuals experience curiosity, they do differ in respect of their threshold and willingness to experience it, together with the depth and breadth of their experience. Interest and curiosity are occasionally used interchangeably, and when these positive motivational-emotional states are experienced individually, they can initiate and maintain goal-directed behaviours responding to incentive cues. Novelty-seeking can reflect a person's tendency for pursuing exciting and novel experiences in which they elevate stimulation to optimal levels, which can include high levels of risk in order to benefit from acts of novelty. Openness to experience is defined as a higher order personality dimension which incorporates a receptiveness to novel feelings, values, ideas, and fantasies.

**Open-mindedness (critical thinking, judgement).** This character strength can be described as the way an open-minded person works at the style of thinking that is open-minded – that is, in a way that actively searches for evidence against their normal plans, goals, or beliefs, and when available, weighs that evidence fairly. They are not wishy-washy, nihilistic, permissive, or indecisive, nor do they bring this style to bear on all issues. The individual who is open-minded engages this style when they are faced with a complex judgement whereby the evidence for and against a particular belief needs to be weighed and examined.

**Love of learning.** This character strength can be described in different ways. One viewpoint is that it is inherent in all of human nature, particularly in the very young, who are motivated to learn about the world they have come into, but can also be seen across the life span as the drive to competently interact with the world. It is a strength that therapists encourage in their clients, that parents want to inspire in their children, that teachers would love to see their students possess, and which employers endeavour to adopt in their staff. Another viewpoint sees this character strength as a contextualised individual difference, which can be seen in regard to certain subject matters. Individuals who possess the trait of love of learning generally tend to be

positively motivated to build on existing knowledge and skills, or acquire new knowledge and skills.

**Perspective (wisdom).** While this strength is generally described by psychologists as wisdom, it has instead been called perspective as it is used to label this virtue class entirely. Perspective refers to the ability to look at life and take stock in large terms that make sense to the individual and others. It is the product of experience and knowledge, but more than accumulating information. That is, it is the deliberate use of the coordination of this information to improve wellbeing. Socially, it enables a person to hear what others have to say, make an evaluation of what they have said, and then offer good advice.

The following character strengths are incorporated under the core virtue of courage, and each will be described in further detail

- bravery;
- persistence;
- integrity;
- vitality.

**Bravery (valour).** Typically, bravery is viewed historically as the physical valour displayed by warriors doing battle on the battlefield. The bravery displayed when faced with imminent death is not the equivalent of fearlessness, as the person in this situation certainly experiences fear. Viewing bravery in this way allows the strength to be used beyond the domain of battle to doing or saying the correct, but unpopular thing, resisting peer pressure when it comes to a shortcut that is morally questionable, and facing a terminal illness with composure. It has also been described as the disposition to act voluntarily, and potentially fearfully, in dangerous situations when risks are appraised reasonably, while endeavouring to preserve or obtain something that is perceived good for others or one self, and understanding that this perceived good may not be realised. Its essence is that it speaks across cultures, disciplinary divides, and social settings.

**Persistence (industriousness, perseverance).** This character strength involves taking care of business, keeping on despite any obstacles, finishing what has been started, staying on track, and getting things out the door and off one's desk. It is defined as the continuation of action that is voluntary and goal-directed, despite discouragement, obstacles, and difficulties. Perseverance and persistence are used

interchangeably in this regard, although perseverance is regarded a little more narrowly. Perseveration can be described as an action that is continually repeated action that is basically a default response.

**Integrity (honesty, authenticity).** This character strength is regarded in broader terms than the person who speaks the truth being honest. It involves being truthful, but additionally, taking responsibility for what one does, and how one feels. It also includes genuinely presenting oneself to others, and the internal sense of being a morally coherent individual. Authenticity, honesty, and integrity all capture a character trait whereby individuals are true to themselves, and represent accurately their intentions, commitments, and internal states publicly and privately. These people are able to own and take responsibility for their behaviours and feelings, and by doing so, reap substantial benefits. Whilst these three characteristics have a common meaning, they do have different connotations. For example, integrity refers to self-unity and moral probity. Honesty is referred to as interpersonal sincerity and factual truthfulness, and authenticity is seen as psychological depth and emotional genuineness.

**Vitality (vigour, energy, zest, enthusiasm).** This is a different sort of strength as it is just as much a part of the mind as it is the body. Vitality is regarded as being full of zest, displaying enthusiasm for all and any activities, and feeling alive – it is a dynamic aspect of wellbeing which is indicated by the experience of aliveness and energy subjectively. People with this character strength are normally described as energetic and vigorous, bouncy and perky, high on life and peppy, and bright-eyed and bushy-tailed. It is noted, however, that vitality in this regard is different to nervous energy, tension, mania, or hyperactivity. It is described as enthusiasm about, and zest for. An individual who is vital can be described as fully functioning and energetic.

The following character strengths are incorporated under the core virtue of humanity, and each will be described in further detail

- love;
- kindness;
- social intelligence.

**Love.** This strength, in its most developed form, happens when there is a reciprocal relationship with another person. It excludes crushes, stalking, worship,

unrequited love, hero worship, and being a fan of someone, as these feelings fall outside the parameters of this character strength as they are only one-sided. Rather, this strength incorporates romantic friendship and love, mentoring relationships, the love between children and parents, and emotional connections within co-workers and teammates. Three prototypical forms of love can be seen – one is the love we have for those who are our primary source of care, affection, and protection – those who make us feel safe, such as a child’s love for a parent. Another type of love is for those who are dependent on us to make them feel cared for and safe, such as a parent’s love for a child. The third form of love is romantic love, which is the type that involves passionate desires for emotional, physical, and sexual closeness with someone who makes us feel special and someone we consider to be special.

**Kindness (compassion, care, nurturance, generosity, altruistic love, niceness).** This strength is described as the inclination to be compassionate and concerned about other people’s welfare, being nice, performing good deeds, taking care of, and doing favours for other people. It can include a brief encounter directed towards a stranger, such as giving up our seat for someone else, or a significant gift within a relationship that is established, such as donating a kidney to a close friend or relative. The terms used in this character strength are networked closely and related to terms that indicate a common orientation of the self toward someone else. Kindness and altruistic love both require the affirmation there is a humanity that is common where others are worthy of affirmation and attention for no other reason but their own sake.

**Social intelligence (personal intelligence, emotional intelligence).** Individuals high in emotional intelligence, display capacities that are special in relation to strategising and experiencing about emotion. They are able to perceive emotions in relationships, and display a good understanding of the relationships they have with others emotionally, together with what those meanings in those relationships equate to emotionally. Intelligence is referred to as being able to think in an abstract manner – that is, being able to understand the differences and similarities between things, seeing other relations, and being able to recognise patterns.

The following character strengths are incorporated under the core virtue of justice, and each will be described in further detail

- citizenship;
- fairness;
- leadership.

**Citizenship (loyalty, social responsibility, teamwork).** The strength of citizenship incorporates a sense of, and identification with, obligation to a common good that stretches beyond an individual's personal interests where they are a member, such as members of their family, colleagues, fellow tenants in apartment buildings, others that share the same ethnic heritage, possibly the entire human race, as well as themselves. Individuals that possess this character strength equally contribute, and have a strong sense of duty, to the group in question because they believe this is what should be done as a group member. Rather than working for personal gain, individuals with this strength work for the good of the group.

**Fairness.** Relating to a person's treatment of others in identical or similar ways is what this character strength refers to, and not letting their own issues or personal feelings bias their decisions. A product of moral judgement, fairness is the process by which individuals ascertain what is morally right and wrong, as well as what is prescribed morally. Desirable developmental outcomes of a commitment to fairness in a person's social relations is the ability to come to embody caring and compassion for others, being sensitised to issues of social injustice, and having the perceptiveness required for relational understanding.

**Leadership.** As individuals, we belong to numerous social groups, many of which are structured hierarchically with an informal or formal leader, who directs and dictates the activities of its followers. There are two tasks of any leader that have been distinguished by theorists concerned with leadership, which are: preserving and creating good relationships and morale amongst its members, and having the members of the group do what they should be doing. As a personal quality, leadership refers to an integrated constellation of temperament and cognitive attributes which adopt an orientation toward motivating and directing others' actions toward collective success, and influencing and helping others. People with the strength of leadership are comfortably able to manage their own activities, together with those of others, in an integrated system.

The following character strengths are incorporated under the core virtue of temperance, and each will be described in further detail

- forgiveness and mercy;
- humility and modesty;
- prudence;
- self-regulation.

**Forgiveness and mercy.** An individual who has never been wronged by anyone else is very fortunate, and because there has been no offense, there is no need to forgive. Likewise, the person who has never been able to exact revenge on others who have done wrong is also fortunate. There is no need to be merciful because no punishment can suspend, cancel, or minimise. However, most people find themselves in situations where forgiveness and mercy can, or cannot, be enacted, as the above qualities are very rare. Those who display forgiveness and mercy are those who are able to consistently let things be – not out of fear, guilt, permissiveness, or shame, nor out of incentives that come externally such as bribes, threats, or being awarded damages in civil suits – but rather from a positive strength of character.

**Humility and modesty.** This character strength is referred to as a quiet strength, as people who are modest do not seek the limelight, and are able to let their accomplishments speak for themselves. They are able to acknowledge any imperfections and mistakes, and regard themselves as being fortunate enough that something good has happened to them, rather than taking undue credit for their accomplishments. To be modest and humble does not relate to self-humiliation or self-derogation, but instead lead to a presentation of oneself in an important, but accurate way that deflects the attention from themselves and onto other circumstances or people. A person who is humble or modest is necessarily authentic and humble, although an authentic and honest person is not necessarily modest and humble.

**Prudence.** Occasionally prudence has a bad reputation, as labelling a person prude is not really praising them. Prudes are labelled as uptight, overly cautious, timid and boring. As a character strength, the prudent person keeps in mind what will eventually develop the most satisfaction, and they will not sacrifice long-term goals for short-term pleasures. They make smart choices rather than no choices at all. It is a cognitive orientation to the future in a personal manner, in a type of self-



management and practical reasoning which helps the individual to effectively achieve their long-term goals. The person who is prudent shows deliberate and farsighted concern for the consequences of their decisions and actions, and are able to resist other choices and impulses which satisfy short-term goals at the expense of their long-term goals successfully, as well as demonstrating a moderate and flexible life approach.

**Self-regulation (self-control).** The person who exercises self-regulation exerts control over their own responses to enable them to pursue goals and live up to standards. Such responses included those which could be occasioned by emotions and impulses that are extreme. Sometimes self-control is referred to as a synonym for self-regulation, and other times it is used more finely to specifically refer to behaving in a moral fashion and controlling one's impulses. The responses included in self-regulation can include emotions, performances, thoughts, impulses, and other behaviours. The standards incorporate moral injunctions, performance targets, norms, ideals, and other people's expectations.

The following character strengths are incorporated under the core virtue of transcendence, and each will be described in further detail

- appreciation of beauty;
- gratitude;
- hope;
- humour;
- spirituality.

**Appreciation of beauty (wonder, awe, elevation).** A person with the character strength of awe is identified as being one who appreciates and notices beauty and excellence in many aspects of life. It connects to something larger than oneself – be it performances from skilled athletes, beautiful music or art, the splendour of nature, or simply the moral brilliance of others. The individual with this character strength is able to find, recognise, and take pleasure in the goodness that exists in both the social and physical worlds. This strength is not to be confined to the pursuits of those with wealth, rather, the defining features of this strength is the emotional experience of wonder or awe within the presence of excellence or beauty.

**Gratitude.** This character strength can be described as the sense of thankfulness and joy one experiences in response to a gift they receive. The gift does

not necessarily have to be something tangible, such as a present from a child on your birthday, but can also include things like listening to the ocean on a beautiful summer day. What distinguishes gratitude is the psychological response to the gift, regardless of the nature of the gift, and the experience of transcendent emotion of grace – that is, the sense that because of another person, we have received some benefit. In addition, there are distinctions to be made between transpersonal and personal gratitude. Transpersonal gratitude is a gratefulness to a higher power, the cosmos, or God, whereas personal gratitude is where thankfulness is directed toward another person for a specific benefit received, or for them just being themselves.

**Hope (optimism, future orientation, future-mindedness).** Hope and optimism are representative of an emotional, cognitive, and motivational future stance and the goodness that it may hold. When thinking about the future, the hopeful or optimistic individual expects their desired outcomes and events will happen, they act in a manner which they believe will make their desires more likely to occur, and they feel confident that these may well ensue given their appropriate efforts to engage in good cheer in the present moment while galvanising goal-directed action.

**Humour (playfulness).** The character strength of humour is universal, and the humourous individual is defined as someone who is skilled at bringing a smile to the faces of other people, teasing gently and laughing, making jokes, and seeing the lighter side of life. This strength is said to be easier to recognise than define, but includes aspects such as: being able to make others laugh or smile, playfully recognising, enjoying, and/or creating incongruity, and maintaining a cheerful and composed view of adversity that permits a person to see the light side of things and therefore maintaining a good mood.

**Spirituality (faith, purpose, religiousness).** Spirituality is said to be the most human, and sublime, of all character strengths. It is defined as having coherent beliefs about the meaning of one's place within the universe, the meaning and purpose of the universe itself, and is grounded in the conviction there is a dimension to life that is transcendent (or nonphysical). When an individual possesses this character strength, they theorise about the meaning of life in a manner that provides comfort to them and shapes their conduct, and their beliefs about religiousness and

spirituality are stable, persuasive, and pervasive. Spirituality is also referred to as the psychological significance and experience of ultimate beliefs.

### **Summary**

Positive psychology provides a refreshing, evidence-based intervention that offers effective strategies for building and maintaining wellbeing. It offers a range of strategies the individual can undertake, and again, places its focus on what is essentially right in one's life, rather than getting caught up with what is not going so well. While these strategies can be helpful for wellbeing and maintaining a positive and healthy mindset, it is also imperative that individuals have a broad skillset of strategies they can draw upon whenever the need arises. In particular, being able to address unhelpful thoughts, feelings, and behaviours is essential in everyday life, and acceptance and commitment therapy is one intervention that can be valuable in doing so.

As seen above, it is clear that whilst there are supporters of positive psychology and its evidence-based research, it is not without its critics. However, upon researching positive psychology for the purpose of this research project, it was apparent that support for this theory far outweigh those who are not in support. Additionally, due to the relatively new introduction of the field of positive psychology, no other research could be sourced that directly linked veterinarian wellbeing to positive psychology, which made it somewhat difficult to compare opposing viewpoints on this topic.

### **Acceptance and Commitment Therapy**

Acceptance and commitment therapy (abbreviated to ACT and said as one word rather than A-C-T) is incorporated with Hayes, Barnes-Holmes, and Roche's Relational Frame Theory (RFT), and it is suggested that it works through processes differently than do other treatment comparisons, such as cognitive behavioural therapy (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). It was developed almost thirty years ago, even though ACT is a relatively new therapy for most clinicians. ACT is about values-guided action, and about mindful action (Harris, 2009). By accepting one's internal experiences, facing experiential avoidance, putting problematic cognitions into context, exploring personal goals and values, and adopting a commitment to move forward in the direction of life values, an individual can enhance their psychological flexibility (Hoare, McIlveen, & Hamilton, 2012).

Relational Frame Theory sees relational responding as a generalised operant, and is a behaviour analytic approach, and oriented to, human cognition and language. It asserts that specific types of relational responding (which it refers to as relational frames) are described as the transformation of functions, and combinatorial and mutual entailment. While relational frames are applicable arbitrarily, within the natural language contexts they are typically not always arbitrarily applied (Hayes, Barnes-Holmes, & Roche, 2001).

According to Hayes et al. (2001), when a particular consequence occurs as a result of a particular activity, resulting in the activity increasing, the principle of reinforcement is assumed as a result of this behavioural change. Further, RFT asserts that unpleasant private experiences such as negative emotions or thoughts can be exacerbated by an individual's learnt way of responding.

ACT and RFT spotlight the nature of human cognition and language and apply this to being able to understand and alleviate suffering. Similar to cognitive behavioural therapy (CBT), in counselling ACT focuses on emotions, behaviours, and cognitions – especially the cognitions that are closely related to causative emotional and behavioural distress (Hoare et al., 2012). In addition, ACT uses techniques to alter the function of cognitions with a view to creating flexibility in regulating behaviour.

Fundamentally, Harris (2009) describes the ACT acronym, which stands for

- A = accept your feelings and thoughts, and be present;
- C = choose a valued direction;
- T = take action.

Hayes (2004) asserts the key objective of ACT is to assist the client to move in a valued direction, encompassing all their automatic reactions and history, by supporting them to think and feel what they already think and feel – not as what it says it is, but what it actually is. Essentially, ACT aims to create a full, meaningful, and rich life while being able to accept the inevitable pain that goes along with it (Harris, 2009).

There are six core processes of ACT, and ACT targets each of these core issues with the overall objective of increasing the client's psychological flexibility. In this context, psychological flexibility is the ability, as a human being, to contact the present moment more fully and to persist or change behaviour when it serves valued

ends to do so (Hayes et al., 2006). In addition to mindfulness, there are six core processes: acceptance, cognitive defusion, being present, self as context, values, and committed action. They will now be discussed in turn.

**Mindfulness.** Harris (2009) describes mindfulness as paying attention with curiosity, flexibility, and openness. He states this definition of mindfulness explains three important factors. Firstly, that mindfulness is not a thinking process, rather it is an awareness process. This involves paying attention or bringing awareness to the experience you are having in the present moment, rather than being caught up or buying into your thoughts. Secondly, a particular attitude of curiosity and openness is involved with mindfulness. That is, being able to open to your experience in the present moment, even if this is unpleasant, painful, or uncomfortable, rather than fighting with it or running away or avoiding it. Thirdly, mindfulness also involves flexibility of attention – that is, being able to broaden, direct, or focus your attention consciously on different aspects of the experience you are having.

**Acceptance (open up).** Acceptance in ACT is taught as a substitute to experiential avoidance. It involves an individual actively and mindfully taking on board their private events that have come about by their history, without trying to change their form or frequency unnecessarily, particularly when psychological harm would result from doing so (Hayes et al., 2006). Acceptance means we can open up and make room for painful sensations, urges, feelings, and emotions. It allows us to stop struggling with them, give them room to breathe, and simply allow them to be just as they are. We open up to them and let them be, instead of resisting them, getting overwhelmed by them, running from them, or fighting with them. It is important to note that this process, however, does not mean we have to want them or like them, but simply allows us to make room for them (Harris, 2009).

**Cognitive defusion (watch your thinking).** The concept of cognitive defusion (shortened to just defusion) means being able to step back and detach or separate oneself from images, memories, and thoughts. Rather than buying into, or being pushed around by our thoughts, we learn to be able to let them come and go as if they were vehicles driving past our front door. We are able to take a step back and observe our thinking as opposed to getting tangled up in it. This process also allows us to see our thoughts for what they really are – simply words or pictures. Rather than tightly clinging to them we are able to loosely hold onto them (Harris, 2009).

The techniques of cognitive defusion attempt to modify the unwelcome functions of private events and thoughts, rather than attempting to modify their frequency, form, or situational sensitivity. In other words, ACT attempts to alter the way in which a person relates to or interacts with thoughts by generating contexts whereby their unhelpful functions are reduced (Hayes et al., 2006).

**Being present (be here now, contacting the present moment).** The goal of being present is to enable clients to experience their world more candidly so that their actions are more consistent with their values, and their behaviour is more flexible. In this way, ACT promotes contact with environmental and psychological situations as they occur in an ongoing and non-judgemental way (Hayes et al., 2006). Contacting the present moment also means connecting consciously with, and engaging in, whatever is happening for the person in this moment and being psychologically present. It is very difficult for humans to stay present, as we tend to easily get caught up in our thoughts and then lose touch with what is going on around us. We may become absorbed in our thoughts about the future, or the past, and spend a lot of time doing so. Or we may just operate like an automatic pilot, simply going through the motions instead of being fully conscious of our experience. When we contact the present moment, this allows us to bring our awareness to either the psychological world within us, or the physical world around us, with flexibility, or we may even be able to do both simultaneously. Being present means we can pay attention to our present moment, or here-and-now experiences consciously, rather than operating on automatic pilot or getting caught up in our thoughts (Harris, 2009).

**Self as context (pure awareness).** When we talk about the mind, we generally do not recognise the two distinct elements to it – that of the observing self and the thinking self. Most of us are aware of the thinking self, which is the part of us that is always thinking – it generates our thoughts, memories, beliefs, fantasies, plans, judgements, and so on. However, the majority of people are not so familiar with the observing self, which is that part of us that has an awareness of whatever we are feeling, thinking, sensing, or doing, within in given moment. As an example, as you progress and develop through life, your thoughts change, your feelings change, your body changes, and your roles change, but the part of you that never changes is the part of you that is able to notice or observe all those things. It has been with you for your entire life (Harris, 2009). This concept is an important part of ACT because

within this context a person can have an awareness of their own flow of experiences but without being attached to them or having an investment when particular experiences occur. As such, acceptance and defusion are adopted. Self as context is adopted by ACT by metaphors, experiential processes, and mindfulness exercises (Hayes et al., 2006).

**Values (know what matters).** Deep in your heart, do you know what you want to stand for in your life, and what you want your life to be about? What is it that you would like to do while you are on the planet for this brief time, and what really matters to you in the big picture? Values describe how we would like to act or behave on an ongoing basis, and are desired qualities of ongoing action. Being able to clarify values is crucial in being able to develop a life that is meaningful. Values are often referred to as chosen life directions in ACT – they guide us on our journey through life and provide us with direction (Harris, 2009). Values are selected qualities of action that is taken purposively. They cannot be obtained as objects, rather they can be instantiated moment by moment (Hayes et al., 2006).

**Committed action (do what it takes).** The final process in ACT is committed action. ACT encourages the growth of larger and larger patterns of effective action that are related to ones chosen values (Hayes et al., 2006). Committed action means taking action that is effective, and guided by our values. While it is all well and good to know and recognise our values, our life only becomes full, meaningful, and rich via ongoing values-congruent action. Essentially, if we are only staring at the compass, we will not have much of a journey – it is only when we move our legs and arms in the direction of our choice that our journey happens. Committed actions means doing what it takes – even if this brings us pain and discomfort – to live by our values. Values-guided actions also make way for a large variety of thoughts and feelings which may be pleasurable, painful, pleasant, and unpleasant (Harris, 2009). Additionally, Harris (2009) also states that any skill that is able to enrich and enhance life can be used in this model, such as goal setting, behavioural activation, exposure, negotiation, time management, problem solving, assertiveness, crises coping, and self-soothing.

All six processes in ACT are interrelated and overlapping. Holistically, each process supports the other, and all of them are targeting psychological flexibility – the practice of a human being fully contacting the present moment and changing or

persisting behaviour in line with their chosen values. Therefore, in theoretical terms ACT can be defined as a psychological intervention based on the concepts of modern behavioural psychology which includes RFT, and which applies methods of mindfulness and acceptance, and commitment and behaviour change processes – resulting in the creation of psychological flexibility (Hayes et al., 2006). As mentioned, the six core processes in ACT are not separate, and interrelate and overlap. It can be helpful to think of them as six facets of one diamond, and psychological flexibility is the diamond itself (Harris, 2009)

### **Psychological Flexibility**

Psychological flexibility enables us to have full awareness and openness to our experiences in the present moment, and being able to be guided by our values to take action. In simple terms, it is defined as the ability to be present, open up, and do what matters. In technical terms, increasing psychological flexibility is the primary aim of ACT. The more we are able to be open to our experience, act upon our values, and be fully conscious, the better our quality of life becomes as we are better able to respond to the challenges and problems life brings in a much more effective way. Also, we experience a sense of vitality and develop a sense of purpose and meaning when we are fully engaged in our life and permitting our values to guide us – having a sense of being fully alive, regardless of how we may be feeling in the present moment, and embracing the here and now – which is also referred to as vitality (Harris, 2009).

### **The Six Core Pathological Processes**

Harris (2009) illustrates the six core pathological processes which stem from experiential avoidance and cognitive fusion. These are: fusion, experiential avoidance, dominance of the conceptualised past and future/limited self-knowledge, lack of values clarity/contact, unworkable action, attachment to the conceptualised self, and overlap among pathological processes. This is referred to as psychological inflexibility. Harris (2009) describes these as follows.

**Fusion.** The concept of fusion means we become entwined in our thoughts in a way that then dominates our awareness and has a massive influence on our behaviour. Individuals suffering from depression fuse with many kinds of unhelpful thoughts, such as “things will never get any better” or “everything is too hard” or



“counselling does not work”. Such individuals often become fused with memories that are painful, such as failure, abuse, rejection, and disappointment (Harris, 2009).

**Experiential avoidance.** Experiential avoidance means trying to escape, get rid of, or avoid, private unwanted experiences such as memories, feelings, and thoughts. It is the absolute opposite of acceptance. As an example of experiential avoidance, and again using depressed people to illustrate, these individuals desperately try to get rid of or avoid painful feelings and emotions like anger, guilt, loneliness, anxiety, sadness and so on. If these relate to an upcoming social event they do not wish to attend, or are worried about attending, then as the social event draws closer they may become fused with unhelpful thoughts like “I will not enjoy myself” or “I cannot be bothered going”, the anticipation of which then results in anticipatory anxiety or dread. Therefore, they may then withdraw from the social event so as to avoid any feelings or thoughts they may find uncomfortable, which then provides instantaneous relief, and their unpleasant feelings and thoughts dissipate. While the relief is not long-lasting, it does provide reinforcement, thus increasing any future chance of social withdrawal. Avoidance and fusion tend to go hand in hand (Harris, 2009).

**Dominance of the conceptualised past and future/limited self-knowledge.** People who suffer from depression in particular generally spend a lot of time caught up with a conceptualised past – that is, they ruminate on past events that were painful, which often-times have to do with loss, rejection, and failure. In addition, they also become fused with a conceptualised future – that is, worrying about all the terrible things that may be coming to them. When we are fused with our thoughts and avoiding them, this can readily lead to a loss of contact with our experience in the present moment. When we dwell on events from the past that were painful, and then ruminate on these, and/or start fantasising or catastrophising about the future and worrying about things that have not even happened yet, we are so focused on what we need to do next that we miss out on our life right here, right now. When we are in contact with the present moment, this includes the world inside us and around us. If we lose touch with our feelings and thoughts – our inner psychological world – we lack self-knowledge. It is much more difficult to change our behaviour in adaptive ways when we lack self-knowledge (Harris, 2009).

**Lack of values clarity/contact.** Our values often get forgotten, neglected, or lost when we allow our behaviour to become driven by fusion with thoughts that are unhelpful, or when we attempt to avoid private experiences that are unpleasant. We cannot use our values to effectively guide our actions if we are not in psychological contact with them, or we are not clear about our values. It is quite common for individuals with depression to lose touch with their values on many levels, such as being productive, taking care of their health and wellbeing, having fun, connecting with others, or engaging in activities such as hobbies, sports, and work. ACT aims to increasingly bring behaviour under the effect of values as opposed to avoidance or fusion. It is important to note, however, that our values should only be lightly fused with, as if we fuse with them too much they can become rigid rules very easily (Harris, 2009).

**Unworkable action.** Unworkable action can be described as those behavioural patterns that drag us away from valued, mindful living – actions that do not work in order to help our lives become fuller or richer, but instead, lead us to become stuck or experience an increase in our struggles. Such actions may involve those that are reactive, impulsive, or automatic rather than being purposeful, considered, mindful actions that are motivated persistently by experiential avoidance instead of values, as well as procrastination or inaction rather than effective action to improve quality of life. Some examples of unworkable action that tend to be rather common are social withdrawal, excessive use of alcohol or drugs, physical inactivity, avoiding work, excessive watching of television or sleeping, stopping activities that were previously enjoyable, procrastinating on important tasks, and even attempting suicide (Harris, 2009).

**Attachment to the conceptualised self.** Each of us has our own story about who we are, which has many layers and is rather complex. Our story includes facts like our age, name, cultural background, sex, marital status, occupation and so forth. As well, it also evaluates and describes different roles we play, our strengths and weaknesses, our hopes, aspirations, and dreams, the relationships we have, and our likes and dislikes. When we are able to lightly hold onto our story, we can develop a sense of self that is helpful in defining who we are and what it is we want in life. However, if we act as if we are actually the story itself by becoming fused with it, this then creates all kinds of problems. Harris (2009) refers to this as self-as-

description, which is a way of describing ourselves. When we are fused with this self-description as if that description is who we are, it then feels as though all the thoughts generated in this description are who we are.

**Overlap among pathological processes.** Just as with psychological flexibility, these pathological processes are all interconnected. If an individual is ruminating on why they are such a failure, this could be classed as self-as-description or fusion. If the person spends time ruminating and pacing up and down rather than taking action in a life-enhancing way, this could be classed as unworkable action. If the individual is caught up in their thoughts while in the company of other people, they are not only losing contact with the here and now, but likely losing contact with the values relating to engagement and connection with others. Such rumination may also function as experiential avoidance if it is done in a way to avoid thinking or having to deal with other painful issues or trying to act as a distraction from feelings within themselves (Harris, 2009).

### **Summary**

Acceptance and commitment therapy provides a sound, straightforward approach to being able to deal with unhelpful thoughts and feelings, and providing beneficial strategies for addressing the cognitive fusion that can result when we are psychologically inflexible. It is relatively easy to use, and can have excellent results for those who adopt and practice its concepts. Another viewpoint worth investigating, particularly for veterinarians who may be questioning whether or not they would like to remain within the profession, or for those wondering if veterinary science is an appropriate career choice for them, is career construction theory.

### **Career Construction Theory**

Career construction theory proposes a model for understanding vocational behaviour across an individual's life-cycle, as well as providing a way to comprehend how people use and choose work.

**The three perspectives of career construction theory.** According to Savickas (n.d.), career construction theory has three perspectives on vocational behaviour, consisting of

- the differential – this perspective looks at ‘what’ different people have a preference for, and comes from the perspective of individual differences psychology;

- the developmental – this perspective examines ‘how’ people cope with work traumas, vocational development tasks and occupational transitions, and stems from developmental psychology;
- the dynamic – this perspective considers ‘why’ people distinctly fit work into their lives, and derives from the narrative psychological perspective.

Thus, career construction theory helps to explain how individuals construct themselves through both interpersonal and interpretive processes (Savickas, 2013). In addition to the what, how, and why of vocational behaviour, Savickas (2012) explains how career construction theory further elaborates to acknowledge the following

- self as actor (that is, identity/personality);
- self as agent (that is, adaptability);
- self as author (that is, stories/narratives).

From this perspective on self-making, it is asserted that individuals begin the process of self-construction as actors, who then later become agents who are directing the action, and finally developing into authors who explain that action (Savickas, 2013).

Whereas in the 20<sup>th</sup> century people working as employees would typically expect to work for around 30 years towards a career in one job or organisation, today people can expect to have at least 10 jobs during their lifetime. In current times, a worker needs to be employable, be able to adapt to change efficiently, be a lifelong learner with professional character, and commit themselves to an organisation for a period of time (Savickas, 2013). Therefore, the metaphor of one’s career being a recognisable path through life in the 20<sup>th</sup> century has now, in the 21<sup>st</sup> century, changed to the metaphor of career as a carrier of meaning – that is, career carries an individual into uncharted territory. The construction of a career is likened to that of making a self, and therefore, career construction theory focuses on forming and utilising a narrative about the career, with self as actor (i.e., co-constructing person types and reputation), self as agent (i.e., adapting to traumas, tasks, and transitions), and self as author (i.e., narrating a career story) (Savickas, 2013).

Career construction theory states that careers are about mattering, and that by imposing meaning on vocational behaviour, people build their careers. As such, there is an emphasis on the processes, both interpretive and interpersonally, through

which people inflict direction and meaning on vocational behaviour (Savickas, n.d.). From constructionist viewpoints on subjective careers, individuals put meaning on the memories of their past, identify experiences in the present, and consider their aspirations for the future – then intertwine them into such a way that then portrays a life theme, or life story (Savickas, n.d.).

The life theme or life story aspect of career construction theory considers the *why* of vocational behaviour in relation to the subject matter of one's work life. It is asserted that such stories relating to an individual's career highlight the themes they use to make their choices meaningfully, and subsequently how they adjust to their work roles. Career construction theory seeks to be comprehensive in its scope by addressing the 'why' of life themes, together with the 'how' of career adaptability and the 'what' of personality. These three perspectives of career construction theory will now be briefly addressed.

### **Life Themes**

This component of career construction theory addressing the life themes emerged from Donald Super. Super proposed that individuals: turn their ideas of the type of person they are into occupational terminology; express their vocational preferences in such a way; gain entry to an occupation and develop a self-concept; stabilise themselves with an occupation while subsequently identifying their potential, and in turn, preserve their self-esteem. Again, the view that careers are about mattering is highlighted through life themes, and such themes consist of what an individual has at stake in their life Savickas (2005, n.d.).

### **Vocational Personality**

Vocational personality can be referred to as the needs, interests, values, and career-related abilities that a person has. However, career construction theory asserts that other career-related traits and interests should not be categorised as traits or factors (Savickas, n.d.), rather, viewed as reputation and resemblances to skills and attitudes that are socially constructed (Savickas, 2005). As such, they have no truth or reality value outside themselves (Savickas, 2005), they do not reside within a person, nor can they be extracted internally via interest inventories (Savickas, n.d.). According to Savickas (n.d.), they are not stable traits capable of predicting the future, rather, they are relationship phenomena that highlight meanings that are socially constructed.

### **Career Adaptability**

Savickas and Porfeli (2012) state that “career construction theory conceptualises human development as driven by adaptation to a social environment within the goal of person-environment interaction”. Further, they state that individuals must adapt to the expectations of play, building relationships, and work.

There have been slight distinctions made over a period of time from the root word ‘adapt’ (which means to join or fit, according to Latin meaning), such as adaptivity, adaptation, and adapting (Savickas & Porfeli, 2012). However, in career construction theory these words indicate a sequence that spans across adaptation results, adaptability resources, adaptive readiness, and adapting responses (Savickas & Porfeli, 2012). Adaptability can emphasise the processes a person uses to cope with constructing their career and connecting with their community (Savickas, 2005). Savickas (2005) reports there are a set of specific attitudes, beliefs, and consequences which form the strategies for coping behaviours and problem solving that are used by individuals to integrate their work roles with their vocational self-concept – these are known as the ABCs of career construction. In this regard the ABCs can be further grouped into four dimensions of adaptability, namely: concern, control, curiosity, and confidence (Savickas, n.d.).

The graphic below represents a visual perspective of career construction theory.

Figure 1.0. Overview of career construction theory

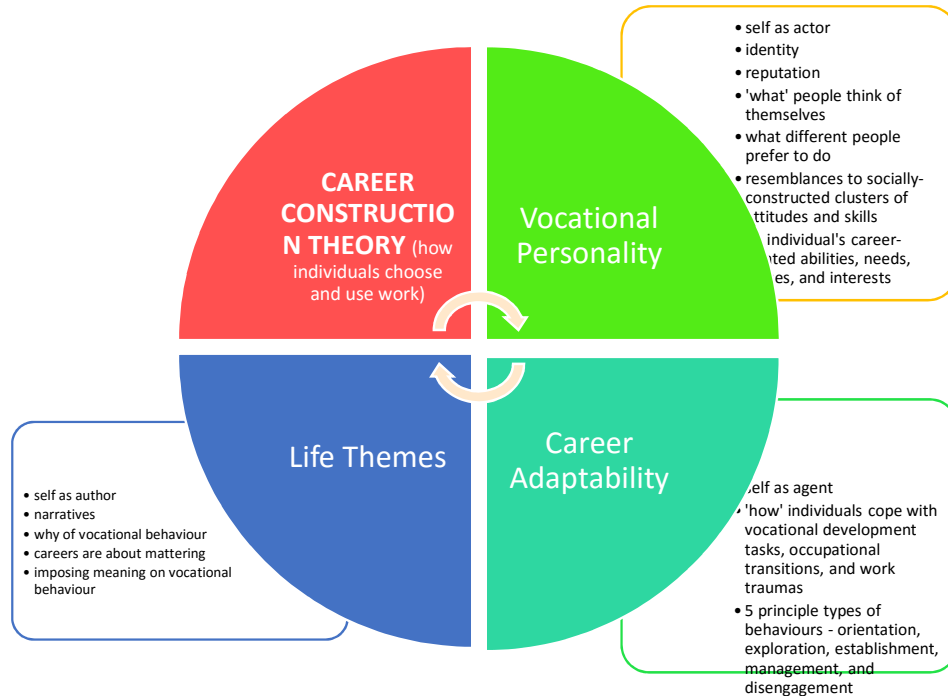


Figure 1. Visual representation of the different components comprising career construction theory showing the aspects of vocational personality, life themes, and career adaptability.

### Career Construction Theory in the Context of Veterinarians

When considering why individuals choose to become veterinarians in the context of career construction theory, it is vital to consider their career stories and attempt to discern their life theme. However, it is also important for the career counsellor not to assume that the career stories determine the future. Rather, they should be seen as a way of attempting to make meaning and shape the future instead (Savickas, n.d.).

In relation to putting career construction theory into practice, Savickas (2013) details a counselling model for career construction. Further, he outlines a step-by-step interview process using this model and the concepts of construction, deconstruction, reconstruction, co-construction, and action.

**Construction.** Firstly, the career counsellor would commence career construction counselling by having the individual describe the following

- the event that detached them from the current chapter in their career story;
- the individual's adaptive resources and readiness;

- the individual's aims for a new and different scenario that they wish to co-construct with the counsellor.

From the constructionist perspective, the counsellor would then endeavour to elicit vocational stories from the individual. According to Savickas (2013), this would be conducted as follows

- asking the individual about their role models (to examine how they have constructed themselves as actor);
- rather than asking about inventoried interests, the counsellor would ask about manifest interests (to examine strivings and goals as agent), such as their favourite television shows or books and so forth;
- to examine the individual as author, the counsellor would ask the individual to detail a script from their favourite movie, story, or book;
- asking the individual for a favourite saying, which normally indicates to the client the adaptability resources and actions that are required in order to move to the next segment in the occupational plot;
- finally, the counsellor would ask about the individual's earliest recollection that they can recall. Whilst most individuals would recall their earliest recollection as a somewhat negative experience portraying a central conflict and motif, earliest recollections are more about what lies ahead (i.e., the future) in that the individual can select, elaborate and then reconstruct such memories to guide future or present action.

**Deconstruction.** Throughout the career interview, the counsellor listens for vignettes that need to be deconstructed, so that any unrealistic or dominant ideas or expectations can be revealed and defeated in relation to their confining roles, self-limiting ideas, and cultural barriers. Many times, the vignettes requiring deconstruction are related to gender, race, or social class biases. Once these have been deconstructed, new pathways and choices may be possible in ways that have not previously been seen (Savickas, 2013).

From the counsellor's perspective, it is important to remember that the individual's stories are not determining the future, but are an active attempt at the individual making meaning and shaping the future. When an individual tells their story, they are constructing a possible future (Savickas, 2013).



**Reconstruction.** From the individual's constructions of their work life, narrative processing of vocational stories assists in identifying important events and integrating them into a grand story about the career. The identity narrative thus tells the story of an individual who becomes a person in a world they have co-constructed with their significant others. This portrayal places social mattering and personal meaning on an individual's life as it also tells about progress and patterns. However, this story highlights aspects of lived experience relevant to the questions the individual has asked, rather than telling a complete life story (Savickas, 2013).

In order to avoid getting caught up or disoriented by the many events, complexities and contradictions of an individual's life, the counsellor needs to listen for the glue that holds these facts together, instead of just listening for the facts, as it is this theme that makes a whole of the life (Savickas, 2013).

**Co-construction.** Once the individual's career narrative has been reconstructed, the counsellor presents a draft of the life portrait to the individual – including career themes, occupational plots, and character arcs. The individual is encouraged to edit the life portrait (which involves adjustments, alterations, and amendments), enabling them to make it more liveable and thus extending it into the future. This aspect is extremely important as it is the reason for the individual coming to career counselling in the first place, and also predicts positive outcomes (Savickas, 2013).

Once the intentions of the individual are clear to themselves and the counsellor, they are then ready to face the disruptions and challenges in their occupational plots, visualise the next scene, and commence action (Savickas, 2013).

**Action.** Action is necessary to turn intentions into behaviour absorbed with meaning. The counsellor and individual craft together an agenda of action to enable the individual to move from their current situation to the one they desire (Savickas, 2013).

### **Summary**

To summarise, career construction counselling requires the individual to construct their career by way of expressing vocational stories, destabilising the meanings of demoralising stories, elaborating on the identity narrative and reconstructing a life portrait, co-constructing the next stage in the occupational plot by turning tension into intention, and finally taking action to develop and lead a more

satisfying life. By taking some control in this area of their life, the individual can help build a resilient mindset, which leads to further discussion on resilience.

### **Resilience**

According to Brooks and Goldstein (2004), individuals who are resilient are those who encompass a set of attitudes or assumptions about themselves that have an influence on their developing skills and behaviours. Resilience is not necessarily only gained by experiencing some unfortunate event – it is possible to create psychological fortitude and strength by undergoing events that are positive as well (Johnstone, 2015). These behaviours and skills influence the assumptions the individual has, so there is a constantly operating dynamic process. This set of assumptions is referred to as a mindset. Therefore, an individual with a resilient mindset is said to have several main characteristics

- feeling as though they have control of their life;
- possessing and being a person with empathy;
- knowing how to strengthen their hardiness for stress;
- exhibiting interpersonal capability and effective communication;
- learning from failure and success;
- forming realistic expectations and goals;
- having decision-making and problem-solving skills that are solid;
- living life responsibly based on values that are thoughtful;
- acting as a contributing and compassionate society member;
- helping others to feel special, while feeling special themselves.

Resilience can also be described as the ability to bounce back, and while it is closely related to tough-mindedness, it is not the same thing (Lees, 2014). Whereas tough-mindedness can incorporate qualities such as being strong-willed, determined, or even avoiding seeing situations through the eyes of others, resilience can actually be found in both the brashiest people and the quietest people (Lees, 2014).

Furthermore, the term resiliency is used to measure a community's capacity to rebuild itself following a natural catastrophe, some of which may involve starvation and extreme deprivation, as well as how soon the restoration of services occurs. It can also be referred to as a term for communities who, following downturns such as traditional industries disappearing, is able to redefine itself (Lees, 2014). Johnstone (2015) asserts that resilience is more about how you bounce back or respond to

events in your life, rather than what actually happens to you at the time of the event, and is about establishing a level of acceptance and flexibility in relation to life events.

While being in possession of a resilient mindset does not infer that an individual is free from conflict, stress, and pressure, it can imply, however, that the individual is able to successfully cope with problems as they surface (Brooks & Goldstein, 2004). When we look at resiliency, we can also look at both positive and negative scripts. A positive script is when a behaviour that leads to outcomes that are positive is repeated, however, on the opposite end are behaviours that are self-defeating, or counterproductive, which, if continually repeated, will result in a negative script developing. Such negative scripts are obstacles to a resilient mindset being developed (Brooks & Goldstein, 2004). According to Lees (2014), it seems some people have a genetic influence of resilience. It appears that when faced with separation or grief, some individuals are able to naturally resume their former mental shape without disconnection, while there are other individuals who seemingly spend most of their lives trying to find their peace of mind and lost confidence. Additionally, Lees (2014) reports that military psychologists working with post-traumatic stress disorder have discovered there are some people who are more predisposed to states triggered by events that create high-stress, hyper-attentiveness, and anxiety, while others seemingly have less long-term effects.

The negative events we experience in our lives can be life-changing, terrible, painful, and soul-destroying, and may last for some time. However, Johnstone (2015) asserts that these events do not have to tarnish the rest of our lives, as often such things can materialise as learning experiences which can gift us with wisdom if we are prepared to use these encounters as experiences from which we can learn and grow. It is important to note, however, that Johnstone (2015) does not imply we should forget these events, rather, we should aim to reflect and learn on such events instead of becoming stuck or fused to them.

When we are able to accept that our life is going to involve a mixed bag of experiences that will be both positive and negative, it places us in a much better position to be able to deal with the life events that will undoubtedly be thrown at us from time-to-time. By being able to accept the things that we can and cannot change in our life is said to be one of the most important factors in being able to understand

resilience, which essentially means accepting and learning not to put our energy and focus into the things that are not working so well for us, but instead being able to grow and work with the things that are right in our lives. Being able to develop the virtue of patience, by problem solving things and breaking them down into smaller, more manageable pieces, is key to building resilience, as is the ability to cultivate a sense of self-compassion for oneself and the experiences you have encountered. This involves being kind and gentle with yourself, as well as undertaking pleasant activities for yourself such as helping others, eating well, exercising, and meditation (Johnstone, 2015).

Interestingly, Seligman (2011) describes how the entire United States army has been trained in emotional resilience, and how resilience was revealed to be a protective factor for soldiers going to war. That is, when research was conducted into why some soldiers came back from war suffering post-traumatic stress disorder and others did not, it was discovered those not suffering post-traumatic stress disorder had higher levels of resiliency. Encouragingly, according to Seligman (2011), resilience can be learned.

### **Ten Keys for a Resilient Life**

Brooks and Goldstein (2004) have identified ten keys they believe are essential for living resiliently. These ten keys are outlined below, and will be briefly discussed in turn.

**Rewriting your negative scripts and changing the words of life.** There is an assumption, according to Brooks and Goldstein (2004), that people can shift from negative ways of feeling, thinking and behaving, to more positive behaviours that are consistent with a resilient mindset. By following a sequence of steps, Brooks and Goldstein (2004) state there can be provision for a change in direction, albeit that such change may take time dependent upon how frequently and how long the negative script has been used, as well as one's openness to change, their ability to effectively handle obstacles, and their awareness of the negative script. There recommended steps in this sequence are

- rather than expecting other people to change, identify your own negative scripts and take responsibility for changing them;
- look at the issue at hand and define both short- and long-term goals relative to this issue;

- be open to the possibility of new plans of action or scripts that are aligned with your goals;
- list the criteria for assessing your new script's success, and select the script you feel will afford you the greatest chance of success;
- predict any potential obstacles that could block your success, and reflect on how these could be managed;
- implement the new script you have chosen and measure its effectiveness;
- if the course of action you have chosen is proven to be unsuccessful, change your goals or scripts accordingly.

**Rather than a stressed-out path, choose one that is stress-hardy.** Being able to manage pressure and stress is a basic characteristic found in resilient people. One's life experiences, together with an inborn temperament, play a contributing role in why some people seem to live a more stressful existence than do others, and it has been found that some people are in fact predisposed to feeling more intense stress than others since they were born (Brooks & Goldstein, 2004).

**View life through the eyes of other people.** People who are resilient have relationships that are satisfying, and at the core of these relationships is the ability to see things from the perspective of other people, or the capacity to be empathic. Empathy has been shown to be an important feature of emotional intelligence, and there are also studies alluding to the fact that empathy can be learned (Brooks & Goldstein, 2004).

**Practice effective communication.** Linked closely to empathy is the ability to effectively communicate with others, which is a central part of resiliency. Being able to communicate effectively includes the ability for active listening, together with understanding how both our nonverbal and verbal messages are perceived by others. When we are able to participate in active listening, we endeavour to validate and understand what is being communicated to us by other people. Validation, however, does not denote agreement, but instead indicates we can understand without being demeaning (Brooks & Goldstein, 2004).

**Accept others as well as yourself.** It is essential that we learn how to accept ourselves if we are to cultivate a mindset that is resilient. When we practice acceptance, we imply that we possess goals and expectations that are realistic, lead a balanced and authentic life whereby our values, goals, and behaviours are in

alignment, and we can recognise our vulnerabilities and our strengths. Unauthentic people are likely to experience an increased level of pressure and stress when their actions are not aligned with their values, and unfortunately many people get so caught up in the hassles of everyday life that they have no awareness there is a discrepancy between their values, goals, and behaviour. Such discrepancies can act as major barriers to leading a life that is fulfilling, and feeling the perception of integrity (Brooks & Goldstein, 2004).

**Display compassion and make connections.** There has been much literature over the past few years documenting how important it is to feel connected to others in order to have a sense of resilience and emotional wellbeing. Even in adulthood, irrespective of our sense of confidence or security, it is important for us to have charismatic adults in our lives who we gather strength from on an ongoing basis (Brooks & Goldstein, 2004).

**Effectively deal with mistakes.** Another essential component of a resilient mindset is the way in which we respond to, and understand, our failures and mistakes. Individuals who are resilient generally see these things as opportunities for learning and growth. While this does not equate to them being ecstatic when they experience mistakes, it does indicate they look for opportunities that could be a by-product of such setbacks, rather than not being discouraged easily. In comparison, those individuals without such resilience regularly interpret these mistakes as proof they are a failure. Their attribution to mistakes tend to be related to conditions that cannot be corrected easily, such as a lack of intelligence, and they tend to become reliant on coping behaviours that are self-defeating, or quitting, denying, avoiding things, or placing blame on other people (Brooks & Goldstein, 2004).

**Build masses of competence by dealing well with success.** The way an individual reacts to their successes in life is just as important as the way in which they respond to and understand setbacks if they are to maintain a resilient mindset. Brooks and Goldstein (2004) assert that, just like altering a mindset that is negative in relation to mistakes we make, it is also possible to put into motion a more positive and empowering mindset with regard to the achievements we make.

**Develop self-control and self-discipline.** Playing a significant role in our day-to-day activities are self-control and self-discipline. When we demonstrate empathy by thinking before we take action and being considerate of other's feelings, when we

consider certain solutions to problems, when we stop ourselves from yelling at someone whose actions have made us feel angry, or when we respond in thoughtful and rational ways, we are displaying self-control and self-discipline (Brooks & Goldstein, 2004).

**Maintain a resilient lifestyle.** When considering a lifestyle that enables us to maintain resiliency, we must adopt the same principles that are true if we were to abandon exercise programs and diets that are well-established. If we were to abandon these things, it is inevitable that our health will suffer. Therefore, adopting healthy diets, exercise programs, and a resilient mindset necessitate these aspects becoming a way of life. We cannot just assume that once these aspects are developed they will maintain themselves, as without doubt there will always be unexpected and expected challenges that materialise which will test our resiliency. Having a good sense of the characteristics of individuals who are resilient, and being able to participate in such exercises on a daily basis will assist us in maintaining and strengthening a resilient mindset in the long-term (Brooks & Goldstein, 2004).

### **Summary**

As outlined above, resiliency is a key component in maintaining a healthy lifestyle, and developing and maintaining a resilient mindset is a necessary part of life if we wish to remain psychologically healthy.

### **Formulation of Research Objectives**

In conclusion, veterinarians are subjected to working in environments that are highly stressful, and where there are a multitude of factors demanding their attention. Due to their tendency to be high-achievers, they are faced with many expectations from themselves and other people, and sadly, these are contributing factors to their high levels of suicide for some within this profession. Little has been done to provide well-researched, appropriate, and adequate intervention strategies that are eagerly accepted and able to make a difference. Given the high levels of suicide within the veterinary industry, it is essential for this issue to be taken seriously, and effective intervention strategies need to be researched and implemented. Such interventions should make use of evidence-based psychological strategies, such as acceptance and commitment therapy and positive psychology.

As discussed, positive psychology is an evidence-based intervention that provides effective tools for building and maintaining wellbeing by focusing on what

is essentially positive, or going right in one's life, instead of placing the focus on what is negative, or not going so well. This intervention has been scientifically studied, and offers a range of strategies the individual can undertake. It provides a refreshing approach to the field of psychology, which previously has had its dominance in the clinical or disease models. However, while these strategies are acknowledged as being helpful for wellbeing and being able to maintain a positive and healthy mindset, it is also important for individuals to have a toolbox of strategies they can draw upon whenever the need arises. That is, the ability to address unhelpful feelings, thoughts, and behaviours. Acceptance and commitment therapy is one intervention that can be valuable in doing so, as it provides a sound, straightforward approach to an individual's ability to deal with unhelpful thoughts and feelings, as well as the provision of beneficial strategies for addressing the resultant cognitive fusion when we are psychologically inflexible. This intervention is relatively easy to use, and it has been found to have excellent results for those who adopt and practice its concepts. Due to the unpleasant aspects of working within this profession, it is acknowledged that not all veterinarians will choose to remain in this occupation. It is also important for prospective veterinarians to have a thorough understanding of the demands of working in this industry, and as such, working with a career professional using career construction counselling could prove beneficial.

As mentioned, career construction counselling requires the individual to express vocational stories in order to construct their career, destabilise the implications of stories that are demoralising, elaborate on the identity narrative and reconstruct a life portrait, turn tension into intention by co-constructing the next stage in the occupational plot, and lastly, taking action to develop and lead a more satisfying life. The individual can help build a resilient mindset if they take some control in this area of their life, which leads to the relevance of resilience, which is a crucial component in being able to maintain a healthy lifestyle. If we wish to remain psychologically healthy, it is necessary for us to develop and maintain a resilient mindset.

With all of this in mind, if we are to progress research into veterinarian wellbeing and attempt to find effective solutions that can help prepare and empower them to deal with the realities of working as a veterinarian, we need to delve deeper into the real-life issues that are hindering their wellbeing and provide effective



intervention programs that go some way to addressing these undesirable consequences. Therefore, to summarise, the objectives of this research project are that

- it is expected that veterinarians will demonstrate a negative emotional response to performing euthanasia on animals. Study 1 of the research project will investigate the phenomenology of that response.
- it is expected that veterinarians who participate in a psycho-educational intervention program will have enhanced wellbeing and coping, as indicated by a set of measures to be validated as a part of the research project. Study 2 of the research project will address this question.

## CHAPTER THREE: METHODOLOGY

### **Justification for Research**

Given the vast literature relating to veterinarian wellbeing, some of which was discussed in chapter two, it is apparent there is an immediate need for adequate intervention to address this serious issue. As has been discussed, veterinarians are at risk for psychological ill-health, including an increased risk of suicide. While there are copious amounts of research into the many aspects contributing to the lack of wellbeing in veterinarians, little appears to have been done to actually provide an intervention that is psychologically-based, and effectively addresses the issues veterinarians face in their day-to-day lives. It is also imperative that the stigma around seeking help from others is targeted, addressed, and ideally, abolished if we are to make any headway into proactive treatment. In the meantime, however, it is equally essential that the veterinary profession have access to coping strategies that will enable them to better handle their day-to-day stressors. This research project aims to do just that. While it is noted there are many specialities to working as a veterinarian, the main focus on this research project has been toward those working with companion animals in small animal veterinary services.

### **Ethics and Politics of the Research**

As a number of veterinarians within this research project may have cultural, religious, or pre-existing psychological issues, these factors needed to be considered. In addition, there was the possibility that some veterinarians would not believe in psychology (or more specifically, psychiatry, which may be likened to components of psychology), such as scientologists. For these reasons, random sampling was not possible, and therefore veterinarians participating in this study were invited to volunteer their participation. Due to the characteristics of the veterinarian population (i.e., adults), there were no ethical considerations required in relation to minors - that is, all participants were aged 18 or over, and therefore able to participate without requiring the consent of a parent or guardian.

As this research was voluntarily administered to adults over the age of 18, and full disclosure about the purpose of the research and methods used was provided to participants, no significant ethical issues were envisaged. However, participants

were advised they could withdraw their participation at any stage should they be uncomfortable with proceeding with the research process.

In addition, as a registered psychologist with the Australian Health Practitioners Registration Board, the researcher is bound by, and practices in compliance with the Code of Ethics as set out by the Australian Psychological Society, the largest professional association for psychologists in Australia. Whilst the intention of this research proposal was to be of a positive nature adopting evidence-based positive psychology, acceptance and commitment therapy, and other beneficial strategies, it is possible that some participants (either prior to, during, or at the cessation of the research project) may wish to discuss personal psychological issues. Under the Australian Psychological Society's Code of Ethics, the researcher was ethically unable to take on a treatment role with participants, and in the event this situation arose, steps were in place to refer them to other health and/or allied health practitioners not directly involved with this research project, or self-help organisations such as Lifeline and Beyond Blue.

### **Significance of Research**

It is anticipated that due to statistical significance being found in support of this research project in relation to increased wellbeing and reduced self-harm ideation, the psycho-educational intervention program used in this research be implemented at the university level to Bachelor of Veterinary Science students as part of their core curriculum. It is also anticipated that this research will bestow a major impact on veterinarian wellbeing worldwide, as well as potential for university programs incorporating positive psychology and acceptance and commitment therapy in their curriculum.

Further, it is hoped that this research project goes some way in reducing the stigma around mental illness, and encourages – and reassures – veterinarians that it is quite okay to seek help without meaning this is a sign a weakness. On the contrary – it takes a strong person to admit they need help.

### **Relevance of the Research to Education**

There appears to be little, if no, research available that relates specifically to the area of positive psychology and veterinarian wellbeing. Should the research objectives be supported as a result of this research, this could have a major impact on how universities conduct their programs at a local (domestic) level, as well as

internationally. In addition, it is envisaged that should the research objectives be supported, the tools and programs used in implementing this research (i.e., the psycho-educational intervention program and associated resources developed for this purpose) could then be trialled, and potentially implemented, within other high-risk health professions. Therefore, this could extend to not only the veterinary industry such as veterinary nurses, veterinary technicians, pet sitters, pound workers, and animal care volunteers, but also health care professionals such as doctors, dentists, and pharmacists, as well as other at-risk industries such as the construction and resource sector. Therefore, the benefits of this research outcome, could have a major impact on how education is delivered within the university sector, and may even extend into the corporate, school, and higher education sector. Its potential could well be a significant revolution to how we see and deliver education today, offer further support to the field and evidence base of acceptance and commitment therapy and positive psychology, as well as potentially saving many valuable lives.

### **Summary of Studies**

The following chapter four (Study 1) outlines the first stage of the research project, which involved face-to-face and telephone interviews with veterinarians to ascertain their perspectives in relation to what they perceived were contributing factors to making their profession so stressful.

Chapter five (Study 2) details the second stage of the research project, which entailed the implementation of a psycho-educational intervention program developed by the researcher in order to measure its success in providing an appropriate and beneficial psychologically-based intervention, with a view to providing veterinarians with successful strategies in order to better cope with the demands of their profession.

## CHAPTER FOUR: STUDY 1

The first study was an investigation into the phenomenology of working as a veterinarian, and drew from prior research already conducted into veterinarian wellbeing and factors believed to contribute to their level of wellbeing. While it was initially believed from previous research that performing euthanasia on pets was a major contributing factor to veterinarian stress, it soon became apparent there were many other factors equally relating to their lack of wellbeing.

This purpose of this study was to receive a first-hand account of the demanding aspects of their profession, as well as to further validate existing research that has outlined which factors are believed to contribute to their lack of wellbeing. It entailed one-on-one interviews, both face-to-face and via telephone, with practicing veterinarians.

Being able to validate current literature into these factors, as well as potentially expand on current literature and knowledge into veterinarian wellbeing was essential, in order to enable the real-life issues to be fully identified, rather than theorised or hypothesised. In doing so, it allowed the researcher to gain integral knowledge into these difficulties and stressors, so-as-to develop and create an informed psycho-educational intervention program that was expected to make a positive difference to those in this profession.

### Method

This study involved individual interviews with a small group ( $n = 6$ ) of Australian veterinarians who had volunteered their participation. Four of these interviews were conducted face-to-face, and two of these interviews were conducted via telephone. Out of the six participants, four were male and two were female. They were all of varying ages and experience.

The questionnaires for the interviews were developed based on knowledge from prior research into this subject, and contributing factors known to have a negative effect on veterinarians such as euthanasing animals, unrealistic expectations, and gender biases. They involved an initial discussion relating to the purpose of the research being conducted, and participants providing their written consent. Each participant was also informed of their ability to withdraw from the research at any time.

As mentioned, the interviews were conducted in-person ( $n = 4$ ) on Queensland's Gold Coast, and telephone interview ( $n = 2$ ). Each participant was advised of the purpose of the research project, and signed a consent form prior to commencement. They were notified that they could withdraw their participation at any time. They were also advised the interview would be recorded via digital recorder, which would later be transcribed for data analysis. Of the four in-person interviews, three were conducted at the participant's practice, and one participant elected to attend the interview at the researcher's professional practice. All interviews followed the same procedure, with participants being asked a series of questions (see Table 1 below) and being invited to respond honestly and openly. Their responses were recorded by the researcher. They were also offered the opportunity to discuss any other aspect of their job that they found distressing and which had not already been asked during the interview. Additional questioning to verify or clarify participant responses was asked when necessary, and participants were also given the opportunity to disclose any other relevant information related to their wellbeing that had not already been asked from the interview questionnaire. The interviews lasted for approximately one hour. Due to reaching saturation point with the questionnaire responses, it was agreed that further interviews with additional participants would not be necessary.

Following completion of the interviews, the recordings were sent to a professional agency for transcription. Once the transcriptions had been returned to the researcher, they were individually screened using thematic analysis. As a result of the outcomes of this thematic analysis, additional factors affecting the wellbeing of veterinarians were identified.

Table 2

*Questionnaire Used for Study 1 Interviews*

Question Number	Question
1.	As a veterinarian, what aspects of the job do you personally find the most distressing? Why?

- 
2. Do you feel that clients place unrealistic expectations (such as a fast diagnosis or complete resolution) on you as a veterinarian? If so, do you find these expectations distressing? Why?
  3. Do you feel that you have enough professional support/resources to assist you during your career as a veterinarian?
  4. Some of the factors below have been identified as potential issues/concerns to veterinarians. Please indicate if you would agree with any of these, and feel welcome to elaborate on your responses
    - euthanaising animals;
    - loneliness;
    - living in remote areas;
    - demands on you from running a business;
    - unrealistic expectations from clients;
    - relationship/family issues due to being on call;
    - early experiences/trauma/distressing events in life;
    - gender biases within the veterinary industry;
    - dealing with distressed or angry owners.
  5. Have you experienced any psychological issues (such as anxiety or depression) as a result of your work as a veterinarian? Was treatment from a health professional required?
  6. What coping skills/strategies/strengths do you currently use, or have used in the past, to cope with the demands of being a veterinarian? For example – VIA strengths (such as hope and optimism; playfulness and humour; gratitude and thankfulness; prudence; discretion and caution; social intelligence).
  7. Are there any other comments you would like to make?
- 

Once transcriptions had been received they were reviewed using the process of thematic analysis (Braun & Clarke, 2006), whereby certain ‘themes’ were highlighted based on participant responses. Thematic analysis is a widely used qualitative analytic method in the field of psychology, and, according to Braun and Clarke (2006), it offers a theoretically flexible and accessible approach to the analysis of qualitative data. From this analysis, further information came to light

regarding other contributing factors which the participants had raised (such as dealing with difficult clients, compassion fatigue, and unrealistic expectations). This information was considered when designing and developing the psycho-educational intervention program for Study 2.

### **Participants**

The criteria for inclusion in this research project was that each participant was required to be an Australian veterinarian. There were no age requirements, gender restrictions, geographical, or other exclusion criteria imposed. All ethnic and/or racial groups were welcome to participate.

For Study 1 ( $n = 6$ ), veterinarians were contacted by way of personal invitation by the researcher to participate in a one-on-one interview to answer a series of questions relating to the phenomenology of being a veterinarian. Two of these veterinarians were selected by prior personal association with the researcher. One veterinarian volunteered due to personal communication with a friend of the researcher, another was randomly selected via contact on social media (Facebook message), and two volunteered via communication on the networking website LinkedIn.

### **Results**

Results from the interviews were analysed via thematic analysis. The transcript from each recorded interview was analysed and categorised into particular themes, such as euthanasia, difficult clients, unrealistic expectations, financial pressure and so forth.

Initially it was believed performing euthanasia was the major contributing factor relating to veterinarian wellbeing, however, upon analysis and reflection it was evident there were additional factors being continually reported by the participants, as well as performing euthanasia. These factors were broken down into the following categories, and included the following

- costs and financial issues;
- dealing with difficult owners/clients;
- performing euthanasia;
- being a veterinarian;
- unrealistic expectations;



- general issues.

### **Discussion**

As mentioned above, there were additional factors raised that veterinarians reported were related to the demanding aspects of their profession. While, as expected, this did include performing euthanasia, there were certainly other factors that were playing their part in reducing wellbeing. The three key contributing factors were as follows.

#### **Costs and Financial Issues**

Key amongst this area was the financial impact of veterinary work, which was believed to have a major impact on the day-to-day lives of veterinarians. More specifically, these included:

**Unrealistic financial expectations from clients.** This included the unrealistic expectations of what money can buy, ‘fix’ and treat. At one end of the spectrum there was general consensus amongst participants that some clients believed money could fix anything, and as such, expected veterinarians to ‘work miracles’, even when it was evident the issues facing the animal were life-threatening (Interview participant one, 2013; Interview participant two, 2013). On the other end of the spectrum were other owners who did not believe they should have to pay for treatment (for example – if an animal was brought into the practice by a third party following an accident, the owner did not expect to have to pay for the veterinary care that had taken place in order to treat the animal during the emergency).

**Cost of treatment.** Treatment costs was another key area and was multi-faceted, such as owners being unable to afford the required treatment for their animal, which often resulted in unnecessary euthanasia – despite the treatment being able to potentially save the animal’s life. Many participants stated their support for pet insurance, believing that if more owners had pet insurance, funds would be available to cover some, if not all, costs of treatment – thus avoiding unnecessary euthanasia in some circumstances (Interview participant two, 2013). Being able to provide treatment that is available and beneficial, but owners being ignorant or choosing not to be compliant, thus often resulting in unnecessary euthanasia was another key factor.

**Wages.** Low wages for veterinarians was another issue identified, with the often incorrect belief that due to the costs of veterinary treatment, veterinarians were

very wealthy. Many of the participants reported lower-than-expected incomes considering the nature of their work.

**Financial costs.** This includes financial issues and costs of running a practice, such as purchasing and maintaining equipment, staff wages, rent, outgoings, and overall costs of running a business. One veterinarian mentioned the cost of repairing some equipment was in the tens of thousands of dollars, which is not always affordable for some practices (Interview participant four, 2013; Interview participant one, 2013).

### **Dealing with Difficult Owners and Clients**

Dealing with difficult clients and owners was another reported stressful event for many participants (Interview participant five, 2015; Interview participant four, 2013; Interview participant one, 2013; Interview participant six, 2015; Interview participant three, 2013; Interview participant two, 2013). Many different aspects of dealing with clients were reported, and included the following.

**Financial restrictions or priorities.** In particular, some participants reported their clients would advise they could not afford veterinary treatment, yet were able to afford expensive holidays or other luxury items.

**Communication.** This was another reported issue and relates to clients not knowing how to communicate in a clear, respectful way, clients being rude to them, communication barriers due to different languages being spoken, as well as some clients expecting the veterinarian to ‘drop everything’ to speak with them.

**Unrealistic expectations.** One major factor raised by participants was the unrealistic expectations some clients place on them. For example, many participants felt their clients expected them to be able to perform miracles, and treat/save their animal no matter what. There were also reports that some owners believed that because an issue may have been treated some time ago, it would not reappear and present itself again in the future. In addition, there was also the expectation from some clients that because the veterinarian loved animals, they would perform their services at no-cost.

**Gender biases.** Some participants (particularly the female veterinarians) felt there were some gender biases when dealing with clients (Interview participant four, 2013; Interview participant two, 2013). One participant mentioned she was questioned by an owner about being female and whether a male veterinarian would

be taking over from her when she came to speak with them about treatment for their animal – despite her being more qualified and experienced than her male counterparts (Interview participant four, 2013).

**Blame.** Some participants mentioned they had been blamed if the animal was unable to be treated effectively or cured. One participant recalled a situation where an owner's cat had died, and the owner abused the veterinarian and implied she was incompetent and did not do enough to save his pet. He later apologised for his uncalled-for, and inaccurate, outburst (Interview participant two, 2013).

**Dealing with clients.** Many participants found having to deal with clients while they were in an emotional state quite distressing. For example, they could be dealing with clients who were upset due to the circumstances of their animal, or angry because their expenses were too high or they were unable to save their animal, or emotional in the case of euthanasia.

**Compliance and non-compliance.** Another issue many of the participants reported as contributing to their level of wellbeing was related to the compliance (or non-compliance) of owners. There were many different circumstances where this applies, however, a common theme was when an owner wanted to keep their pet alive no-matter what, yet the veterinarian believed the best interests of the animal were to euthanise it in order to treat it humanely and respectfully.

**Denial.** As mentioned above with the issues around compliance and non-compliance, another factor that contributed to the veterinarian's level of wellbeing was related to owners being in denial about their animal's situation, often resulting in the animal's prolonged suffering, and generally ending with euthanasia.

**Compassion fatigue.** Constantly showing compassion for their clients, particularly during times of trauma, emergencies, and euthanasia was highlighted as another area of concern.

### **Performing Euthanasia**

Thought to have been the biggest contributing factor to veterinarian wellbeing, euthanasia of animals was certainly a factor, according to the participants in this study (Interview participant five, 2015; Interview participant four, 2013; Interview participant one, 2013; Interview participant six, 2015; Interview participant three, 2013; Interview participant two, 2013). However, it was not the sole factor, and not all participants felt it was the most significant factor. Some participants reported

though, that longevity in their career was somewhat of a protective factor against the negative effects of euthanasia, however, others felt that this was an aspect of their job that was unpleasant no matter what the circumstances. The participants reported the following aspects of euthanasia that contributed to their levels of stress when having to perform this task.

**Dealing with owners.** Having to deal with the owners' grief before, during, and after the euthanasia was reported to be a contributing factor to the task of euthanasia being stressful for many of the participants. Compassion fatigue was certainly an issue in this regard.

**Frequency.** The frequency of having to perform euthanasia was also raised. One veterinarian mentioned he had heard of some theories stating the more euthanasia was conducted, the more of a protective barrier this was believed to be. He stated that he disagreed with this theory, as he found any euthanasia very difficult (Interview participant five, 2015).

**Reasons.** The reasons for performing euthanasia were another area for consideration. Whilst the veterinarians believed they were performing the euthanasia for the right reasons and for the best outcomes of the animal, there were certainly implications for those who would have been expected to euthanise healthy animals. In particular, one participant mentioned that since the advent of emergency veterinary centres that were opened after-hours, this reduced a lot of euthanising they would previously have been required to perform (Interview participant one, 2013). Furthermore, another stressful situation in this regard was when an owner could not afford, or refused, to treat the animal (despite their condition being treatable with potential good outcomes), resulting in euthanasia.

**Species.** Some participants mentioned the euthanasia could be made more difficult due to the species of animal they were dealing with. For example, one participant mentioned that some animals were easier to euthanise than others, as some animals did not have the same physical makeup as others, which did not always result in instant death when performing euthanasia.

**Human-animal bond.** Again, some participants reported they found euthanasia very difficult due to severing of the human-animal bond (Interview participant one, 2013). Additionally, it was also reported that euthanasia could be difficult due to the life-span of animals generally being shorter than humans,

resulting in some veterinarians knowing the animal and their owners throughout the animal's lifespan, and developing their own bond with the animal (and occasionally their owners).

### **Being a Veterinarian**

Many of the day-to-day aspects of being a veterinarian were reported as stressors for participants, often affecting their level of wellbeing. Many of these factors have been reported above, but in summary they include

- low wages;
- dealing with owners/clients;
- compassion fatigue;
- costs of treatment / financial burden of running a practice;
- work demands;
- unrealistic expectations on self and from others;
- lack of personal support;
- lack of knowledge;
- gender biases;
- performing euthanasia;
- work/life balance;
- location of practice and area of specialisation;
- loneliness;
- family and relationship issues;
- lack of effective coping strategies.

While some of the above factors were already addressed, each of these points will now be elaborated on in further detail.

**Low wages.** Low wages were an issue raised by some of the participants, with many commenting that there seemed to be a perception in the general public that veterinarians were extremely wealthy, particularly due to the charge-out rates for services and treatment (Interview participant four, 2013; Interview participant two, 2013). However, the general consensus from participants was that the costs of running a veterinary practice could be excessive when accounting for the costs to purchase equipment, costs to maintain and replace equipment, staff wages, purchase of medications and other goods, and overall operating costs. One participant casually mentioned there was very little money to be made in the veterinary industry,

and there could be very low profit margins to be had. Yet another participant mentioned that for veterinary nurses in particular, there was little scope for advancement once they had already reached practice manager status, which also placed a ceiling on their earning capacity. Many felt that due to the nature and demands of their jobs, their wages were low in comparison.

**Dealing with owners/clients.** Perhaps one of the more significant issues, most participants agreed this factor was a major issue affecting their level of wellbeing on the job. Dealing with owners and clients was multi-faceted, as there were a range of facets that were reported as being distressing. One aspect that was raised was having to deal with owners of animals that had been brought into emergency care by other people (such as an animal being hit by a car). The veterinary staff often had to treat these cases as emergencies, frequently resulting in their pre-booked appointments having to wait while the emergency was tended to. It also had a flow-on effect as often-times it would result in veterinary staff working through lunchbreaks or working after-hours, occasionally limiting the time they would then be able to spend with their own loved ones. Such emergencies also placed additional stress on the veterinary staff, as other clients with scheduled appointments were then forced to wait for unknown amounts of time while the emergency treatment was attended to. Every so often, once the animal had been successfully treated, the owner would come to the practice to claim and collect their pet, not expecting to pay for the services and treatment their pet had received. Therefore, some of this work would go unpaid. Some participants also commented there was an expectation they would treat the animal for free, due to the nature of their jobs and the perception they loved animals and would do anything for them (Interview participant four, 2013; Interview participant one, 2013; Interview participant three, 2013; Interview participant two, 2013).

**Client expectations.** Another stressful factor raised by participants when dealing with owners and clients was related to those who placed unrealistic expectations on veterinary staff. For example, it was reported that countless clients believed veterinarians were miracle workers, and because they may have successfully treated one of their pets previously, they were always able to successfully treat their pet. Furthermore, there were many clients who expected a complete resolution to their pet's medical issues – such as having a growth or tumour

removed, but holding the unrealistic belief that the growth or tumour will never return. Still another issue in this regard were owners who subsequently blamed the veterinarian if their animal was unable to be saved.

**Grief.** Dealing with a client's grief, particularly during traumatic situations and euthanasia, was another reported problem for participants. As previously mentioned, performing euthanasia is a difficult component of their jobs, but having to deal with the client who is clearly grieving during and following euthanasia and other traumatic events could be draining on veterinary staff. Contributing further to this is when the owner would like to remain with their deceased pet for some time after the euthanasia, but the veterinarian requires the room to treat other patients. Being able to balance the right amount of respect and assertiveness could be crucial at times like these.

**Financial matters.** Subsequently, financial issues were raised as an added stressful feature of the job, particularly when related to treatment. For example, one participant reported they found it exceptionally difficult when they knew they could successfully treat an animal, but the owner was unable to afford to pay for treatment. Chiefly this would result in euthanasia, however, some participants mentioned they had treated animals at their own expense in order to avoid unnecessary euthanasia. On the other hand, there were also reports of some clients who held the perception that money could fix everything, and if they paid the veterinarian enough money, they would be able to completely cure their animal without question. Moreover, several participants noted there were sporadically clients who were difficult to deal with in general, or who may be angry because they have had to outlay money to have their pet treated for something.

**Compassion fatigue.** Common in the helping and healing professions is compassion fatigue (Anonymous, n.d.-b), and particularly so in the veterinary industry. Compassion fatigue can be defined as a state of preoccupation and tension whereby the suffering of those being helped can extend to secondary traumatic stress for the helper. It is a state experienced by those helping distressed animals or humans (Anonymous, n.d.-b). According to the Compassion Fatigue Project (n.d.), it can hurt when we care too much, and behaviours that are destructive can arise when caregivers do not focus on practicing self-care, and instead focus on others. Trying to remain compassionate to both animal and owner could be challenging at times,

although this factor was prevalent particularly in times of trauma or end of life situations. Balancing the reality of quality of life for the pet, as well as understanding the close relationship many owners have with their pets, and the human-animal bond about to be severed, requires some juggling. For some participants, this could be exceptionally difficult when they have known the animal throughout its lifespan, and/or when they are particularly fond of the owners.

**Costs of treatment/financial burden of running a practice.** As mentioned above, the costs associated with treating animals and the financial burden of running a practice can have a significant impact on the wellbeing of veterinarians. One participant mentioned the cost of repairing a piece of equipment was in the tens of thousands of dollars, while another mentioned the cost of some machines used in their specialised practice were close to the million-dollar mark. Add to this the everyday operating costs of running a business, such as staff wages, telephones, electricity, rent, stationery, uniforms, equipment, supplies, stock and so forth, it is easy to see how quickly the profit margins can reduce.

**Work demands.** Again, as mentioned above when discussing dealing with owners and clients and the unrealistic expectations that can be placed on them, working as a veterinarian can involve significant work demands. Obviously the nature of their specialisation and location can have an impact, however, most participants agreed their jobs could be very demanding. One positive factor that was raised by a participant was the advent of after-hours emergency centres, which had reduced the requirement for many veterinarians to be on-call and work long into the night after a hard day at work (Interview participant one, 2013). Unfortunately, however, the nature of places like animal emergency centres and pounds could place increased likelihood of having to perform euthanasia. Other work demands included the general workload of consulting with clients back-to-back, dealing with unexpected emergencies, as well as having to return phone calls, perform follow-up calls, arrange referrals, deal with staff and other issues, and running a practice for many veterinarians, all added to the stressful nature of this occupation.

**Unrealistic expectations on self and from others.** As was identified earlier, this factor was specifically difficult for many participants. Whilst on many occasions the unrealistic expectations stemmed from owners, participants felt they placed unrealistic expectations on themselves, as well as had unrealistic expectations placed



on them by other staff, employers, and so-forth (Interview participant five, 2015; Interview participant four, 2013; Interview participant one, 2013; Interview participant six, 2015; Interview participant three, 2013; Interview participant two, 2013). This was not limited to the medical aspects of veterinary care, but some were also expected to reach a certain level of product sales on top of their already demanding work day. To elaborate, and as previously discussed, it is noted that a lot of veterinarians tend to be high achievers. This also tended to lean toward a self-expectance that because of their high achieving nature, they could perform at unrealistic levels. Once they realised this was not always possible, and they were not miracle workers, it could act as a self-defeating prophecy. Furthermore, some participants revealed it could be distressing when clients expected them to make all the decisions for them, particularly when this related to euthanasia of the owner's pet.

**Lack of personal support.** Some participants commented that while they were aware of what support mechanisms were in place for them, they believed some of these were only accessible if they were members of the Australian Veterinary Association (such as the telephone support provided to members) (Interview participant four, 2013; Interview participant one, 2013). Other participants mentioned they were aware they could access services through Lifeline, Beyond Blue, or via their General Practitioner for possible referral to a qualified therapist, while still others were not so familiar with support services available. When asked if any of the participants had access to psychological support through a workplace employee assistance program (EAP), none of the participants were familiar with this service. Some participants relied on family and loved ones for their support, and others felt they did not need any support at this point in time.

**Lack of knowledge.** This facet related to a perceived lack of knowledge about their profession. For example, one participant mentioned that, particularly in the early days of their career, they were often expected to diagnose and treat animals without being certain of what it was they were treating. Additionally, the participant mentioned that every now and then they questioned their own ability when treating animals, wondering if they were accurately diagnosing the issue at hand.

**Gender biases.** The question of whether the participant felt there were gender biases in the veterinary profession was asked during the interview. There were

mixed responses to this question, with predominantly the female veterinarians admitting they felt there were gender biases towards them (Interview participant four, 2013; Interview participant one, 2013; Interview participant two, 2013). As detailed previously, one female participant who worked in a senior position at a specialist practice commented that on one occasion she went to discuss a pet's treatment with its owners, and introduced herself to the owners advising she would be looking after their pet. She claimed that one of the owners appeared to be taken aback by the fact she was female, and questioned along the lines of whether a male veterinarian would be taking over from her. However, some of the male participants stated they did not feel there were gender biases, while others believed there were.

**Performing euthanasia.** Perhaps what was expected to be the single-most contributing factor to veterinarian stress, performing euthanasia was definitely an issue reported by participants. However, as mentioned, it was not the single-most important factor when investigating the stressful events of a veterinarian's occupation. However, it was repeatedly reported by participants that euthanasia was an unpleasant aspect of their job, even when they knew it was in the best interests of the animal. Many explanations as to why performing euthanasia were reported to be so distressing were provided, some of which were as follows. One reason for the distress is that the veterinarian is inevitably ending an animal's life, and the bond that was shared between owner and animal is thus severed forever. Even when the euthanasia is necessary and there are no other options available, this task was still difficult for some participants. A second reason as to why performing euthanasia could be distressing was related to dealing with the owner's emotional and psychological state prior to, during, and after, the euthanasia had been performed. This is closely related to compassion fatigue that was mentioned above. A third reason for finding this task so distressing was when the euthanasia is deemed unnecessary – such as owners not being able to afford treatment, thus leaving euthanasia inevitable, or when working at facilities such as pounds where many animals are euthanised due to apparent behavioural issues or in order to cull the influx of unwanted animals in their care.

**Work/life balance.** Possibly more prevalent before the advent of after-hours emergency care centres and for those working in remote, rural, or isolated locations where they may be the only veterinarian on duty, is work/life balance. Work/life

balance does not necessarily mean 50% of time spent at work and 50% of time spent at home, rather, it is being able to maintain an appropriate balance between the two that works well for the individual. Unfortunately, the uncertainty of what to expect each day within a veterinary practice can have an impact on work/life balance, as often staff are expected or required to work beyond their normal work hours in order to meet client demands. Other times, veterinarians may be required to make house calls on their way home from work, which can negatively impact the time they get to spend with their own family.

**Location of practice and area of specialisation.** As discussed previously, this too, can have a negative impact on the veterinarian's life. Again, for those working in rural, remote, or isolated locations – or in the case of a particular area of expertise being required (such as small animal veterinarian, equine veterinarian, and so forth), additional demands on the veterinarian can ensue.

**Loneliness.** One participant summed this up rather well – they mentioned that even though they worked within a practice that had other staff present, they were primarily working on their own when they were consulting with clients each day, which they found could be very lonely from time-to-time. The participant mentioned that at their practice they were generally booked with clients back-to-back, which resulted in them seeing client after client repeatedly, with little time left to be able to talk informally and formally with other staff in the practice (Interview participant one, 2013).

**Family and relationship issues.** Families and relationships could be impacted by the demands required of a veterinarian, as reported by participants. However, as with some of the factors addressed above, with the advent of after-hours emergency care centres, this issue was not as dominant as it had been in the past when the veterinarian was often required to be on call. Nevertheless, participants reported that they felt their family and partners did need to have a certain level of understanding and provide a level of support, particularly when they had experienced a distressing day with their clients. Unfortunately, the unpredictable working hours that sometimes ensued resulted in participants not being home in time to put their children to bed, or help prepare dinner or undertake other chores, placing undesirable pressure on both themselves and their loved ones.

**Lack of effective coping strategies.** The majority of participants reported they were not aware of any effective psychological coping strategies. Some commented they would cope by going home and having a glass of wine, while others mentioned they preferred to make sure they spent quality time with their loved ones on their days off together. Whilst most participants were aware of services such as Lifeline, Beyond Blue, and other telephone counselling services, there was general consensus that there were not enough coping strategies and resources easily available to them. Additionally, all but a few of the participants chose to be members of the Australian Veterinary Association as they felt the annual membership costs were excessive, with little benefit provided. A few participants remarked that they were aware of the telephone counselling support through the Australian Veterinary Association, but again, felt the costs of membership outweighed the benefits they would receive.

Perhaps a protective factor, which was reported by one participant, was longevity in the occupation. This participant mentioned that the longer he worked as a veterinarian, the easier it became. This is not to say that it did not affect him, rather, he had developed better ways of coping with the realities of some of the more dreaded tasks. The participant explained that in order for him to better cope with performing euthanasia, he preferred to look at it as a gift he was able to give the animal to alleviate its suffering (Interview participant one, 2013).

### **Unrealistic Expectations**

This was quite a significant factor raised by participants, and included expectations on themselves, as well as perceived expectations others placed on them (Interview participant five, 2015; Interview participant four, 2013; Interview participant one, 2013; Interview participant six, 2015; Interview participant three, 2013; Interview participant two, 2013). For example

**Expectation of a cure.** Many owners/clients have the expectation that veterinarians can ‘fix anything’ and as such, have an expectation that their animal can be ‘fixed’ without question.

**Decision making.** Many participants reported an expectation from owners for the veterinarian to make difficult decisions for them (such as euthanasia).

**Financial issues.** Again, there were repeated inferences of owners expecting veterinarians to work for no fee either because they are passionate about animals, or

if they have had to collect their animal following an emergency where a third party brought the animal to the clinic. On the other hand, there were some clients who believed ‘money fixes everything’ and that if they paid enough money, the veterinarian would somehow be able to perform miracles.

**Blame.** Some owners blamed the veterinarian if the animal was unable to be saved or returned to full health.

**Permanent fix.** There were some owners who wrongly believed that because a symptom may have been treated once, it would not reoccur.

### **Summary**

As outlined above, the benefits from conducting the one-on-one interviews with practicing veterinarians were much broader than expected. That is, while prior research identifies the performance of euthanasia as a major contributing factor to veterinarian’s lack of wellbeing, this certainly was not the only issue affecting veterinarians and additional influences were identified. As a result of the interviews from this study, it was apparent that the majority of participants were not aware, or did not practice, any effective coping strategies for helping them deal with the demands of their job. This leads to further support for the need for effective evidence-based intervention strategies to be developed and made readily available. The psycho-educational intervention program used in Study 2 was expected to do just that.

## CHAPTER FIVE: STUDY 2

While Study 1 was focused on identifying, highlighting, and validating issues already known to be contributing factors to veterinarian wellbeing, together with detecting any other difficulties faced by veterinarians in their day-to-day lives, the purpose of Study 2 was to provide veterinarians with psychological and other coping skills which are believed to have a positive impact on their individual levels of wellbeing – including the ability to cope with the demands of their day-to-day working lives.

As mentioned previously, little appears to have been done to actively address this issue by way of the provision of a psychologically-based, and effective, intervention program. This psycho-educational intervention program was developed by the researcher based on her qualifications as a registered psychologist, the strategies of which included evidence-based coping strategies using the concepts of acceptance and commitment therapy and positive psychology. Furthermore, the psycho-educational intervention program allowed for the provision of other strategies such as time management, stress management, communication skills, assertiveness skills, goal setting, and relaxation skills. These strategies were incorporated in an endeavour to acknowledge the growing amount of literature strongly calling for suitable intervention strategies such as coping and stress management skills, as well as attempting to provide a holistic intervention program that addresses both the positive and negative aspects of wellbeing.

### Method

#### Participants

Veterinarians were invited to volunteer for the study via written invitations to veterinary practices throughout Brisbane and the Gold Coast, and to those practices and veterinarians already known to the researcher. A separate communication was received from a major veterinary group seeking more information of the researcher's research, and they in turn notified their practices via email. Additionally, the researcher wrote to the Veterinary Surgeons Board of Queensland and the Queensland division of the Australian Veterinary Association to seek support of the research project, and gain their assistance in notifying, and encouraging, veterinarians to volunteer participation. Unfortunately, the Veterinary Surgeons

Board of Queensland advised they were unable to assist with this request, however, the Australian Veterinary Association did ‘retweet’ one of the social media posts on the social media site Twitter. Further recruitment was derived through social media outlets of Twitter and Facebook.

This study involved two separate groups of veterinarians who volunteered their participation in the psycho-educational intervention program. The first group consisted of veterinarians ( $n = 6$ ) and a ( $n = 1$ ) human resources professional, who was an employee of a large veterinary practice, and the second group consisted of veterinarians only ( $n = 5$ ). Both groups had participants of varying ages, with some having worked as veterinarians for many years, and others only reasonably new to working as a veterinarian. The first group was made up of three females and three males. The second group was made up of five female veterinarians. One participant from the Study 1 interviews attended the Study 2 psycho-educational intervention program, and all remaining participants ( $n = 11$ ) were newly recruited. As with Study 1, there were no restrictions on age, gender, or ethnic/racial beliefs.

### Research Design

The psycho-educational intervention program was delivered on two separate occasions, to two separate groups, for test-retest reliability. At the commencement of the program on both days, the participants in the respective group were administered the questionnaires that are outlined in the Measures section below. They were then briefed on a range of strategies including acceptance and commitment therapy, positive psychology, stress management, time management, goal setting, relaxation skills, assertiveness skills, and communication skills, as per the timetable outlined in Table 4.

Table 3

#### *Psycho-educational Intervention Program Design*

Group	Time 1 Questionnaires	Intervention	Time 2 Questionnaires	Intervention	Time 3 Questionnaires
One ( $n = 7$ )	(pre-test) X	O			(post-test) X
Two ( $n = 5$ )			(pre-test) X	O	(post-test) X

## Measures

**Depression, Anxiety and Stress Scale 21.** The DASS21 is a shortened version of the Depression, Anxiety and Stress Scale (DASS), which is a self-report scale designed to measure depression, anxiety, and stress. The depression scale assesses hopelessness, devaluation of life, dysphoria, lack of interest and involvement, anhedonia, inertia, and self-deprecation. The anxiety scale assesses skeletal muscle effects, subjective experience of anxious affect, autonomic arousal, and situational anxiety. The stress scale is sensitive to levels of chronic non-specific arousal, and assesses nervous arousal, difficulty relaxing, being impatient, upset/agitated, and irritable/over-reactive. The DASS uses a four-point frequency/severity scale to rate the extent which, over the past week, they have experienced each state (Lovibond & Lovibond, 1995). The psychometric properties of the DASS were assessed by administering the measure to a considerable sample of non-clinical participants ( $n = 2,914$ ). The results found that when assessing using Cronbach's alpha, reliability was acceptable for all three scales of depression (.91), anxiety (.84), and stress (.90) (Crawford & Henry, 2003).

**Meaning in Life Questionnaire.** The Meaning in Life Questionnaire (MLQ) provides a measure of the search for meaning in life, and the presence of meaning in life. It is a 10-item measure and has been used to help people track and understand their perceptions about their life (Steger, Frazier, Oishi, & Kaler, 2006). The MLQ is comprised of two scales – presence (which assesses the degree to which an individual perceives their life is meaningful), and search (which assesses one's motivation to discover meaning in their life). This tool has become popular, with a range of standard deviations, means, and reliability coefficients from various studies. By interpretive standards, the MLQ scores also demonstrate good internal consistency, with coefficient alphas generally within the range of the low .80s to the low .90s for both presence and search (Schulenberg, Strack, & Buchanan, 2011).

**PANAS Questionnaire.** The PANAS is a 20-item self-report measure of positive affect (PA) and negative affect (NA) (Watson, Clark, & Tellegen, 1988). It is comprised of various words describing different emotions and feelings (Seligman, 2002). Both the PA and NA reflect dispositional dimensions, with low NA being reflective of the absence of feelings of distress and unpleasurable engagement, and high NA reflecting the presence of these feelings. In contrast, the PA is



representative of the extent to which a person experiences engagement with the environment that is pleasurable, and therefore alertness and enthusiasms are indicative emotions of high PA. In contrast, low PA is characterised by sadness and lethargy. The reliability of the PANAS scales were approximated using Cronbach's alpha, and reported .89 for the PA scale, and .85 for the NA scale (Crawford & Henry, 2004).

**Work-Life Questionnaire.** The Work-Life Questionnaire (WLQ) is a 4-item measure of work-life satisfaction (A. Wrzesniewski, n.d.). It measures whether an individual perceives their work as a job (that is, with a focus on necessity and financial rewards, as opposed to fulfilment or pleasure, and it is not part of life that is majorly positive); a career (that is, with a focus on advancement), or a calling (that is, with a focus on enjoying socially useful, fulfilling work) (A. Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Psychometric properties for this test were unable to be sourced.

**Brief Strengths Test.** The Brief Strengths Test is a 24-item self-report questionnaire that measures the 24 character strengths used in positive psychology (Peterson & Seligman, 2005). It is an assessment of self-report which intends to measure a person's possession of 24 character strengths. On measures of test-retest correlations and internal consistency, the test shows good reliability and a substantial correlation with self-nominations of strengths. When using Cronbach's alpha the test shows internal consistency greater than .70 (LaFollette, 2010).

### **Procedure**

The basic structure of the program's design was informed by the researcher's understanding of the phenomenology of euthanasia, together with self-reports from veterinarians, which was determined by prior research on this topic as well as data from Study 1. The psycho-educational intervention program was designed upon conceptual principles of positive psychology (predominantly using PERMA) and acceptance and commitment therapy with the results of Study 1 used to inform Study 2 as a guideline to ensure relevance and authenticity to veterinary practitioners' needs. The program involved education on positive psychology, acceptance and commitment therapy, stress management, time management, SMART goal setting, assertiveness, relaxation, and effective communication strategies.

Following completion of the psycho-educational intervention program, participants were contacted regularly via telephone over a six-week period (ranging from weekly to monthly) in order to monitor their progress and discuss/address any issues that arose. This provided an opportunity for participants to raise any barriers they had experienced when trying to implement the strategies from the psycho-educational intervention program to ensure they were being used correctly and effectively. At the end of the six-week period, participants were emailed the same questionnaires and asked to complete and return them via fax, post, or email for scoring and comparison.

Table 4

*Session Outline for Psycho-Educational Intervention Program*

Time	Details
10.00am - 10.30am	Introductions of facilitator and participants, occupational health and safety discussion, overview of research and program, questionnaires
10.30am - 10.45am	SMART goal setting / vision boards
10.45am - 11.45am	ACT overview – how to detach, mindfulness, values
11.45am - 12.00pm	Break
12.00pm - 12.30pm	ACT worksheets
12.30pm - 1.15pm	Assertiveness, effective communication, difficult clients
1.15pm - 2.00pm	Lunch
2.00pm - 3.00pm	Positive psychology – PERMA, VIA, and other exercises
3.00pm - 3.05pm	Break
3.05pm - 3.45pm	Stress management / time management / relaxation
3.45pm - 4.15pm	Appointment setting for follow-up calls, question and answers

**Introductions.** This stage involved the researcher introducing herself, outlining her qualifications, and briefly discussing her doctoral research. Each participant was then invited to introduce themselves. Following the introductions, an overview of occupational health and safety issues was presented, such as emergency evacuations in the event of a fire within the building, and locations of toilets, tea rooms and so forth. An overview of the researcher’s research and psycho-educational intervention program was provided to participants, to inform them of the purpose of the training they were attending, as well as requirements for follow-up

post-training. The participants were also advised they were able to withdraw their participation at any stage. Consent forms were provided and signed by all participants, and they were each requested to complete the questionnaires provided within their program materials.

**SMART goal setting/vision boards.** This module provided an overview of SMART goal setting. That is, that goals should be specific, measurable, achievable, realistic, and time-based. A full outline of this module is presented in Appendix G. In addition, the concept of vision (or dream) boards was also presented. The researcher explained that vision boards are a visual representation of what they visualise for their future, and they can be for any time period – such as short term goals or desires, medium term goals or desires, or long term goals or desires. Creating a vision board generally involves using a sheet of cardboard (around A3 size is generally helpful), and then using magazine pictures, photos, or other visual items to represent the person's goals or desires. As an example, people may cut out pictures of their dream home, or ideal holiday location, or desired car and so forth. The idea is that by having a visual representation of our goals and desires, and viewing these regularly, it helps to remind us what we are focused on achieving

**ACT overview – how to detach, mindfulness, values.** In this segment, participants were introduced to the concepts of acceptance and commitment therapy, and strategies for using this method within their day-to-day lives. Examples were provided of how we all tend to become fused with unhelpful thoughts and feelings and become attached to them, and how this then tends to create our behaviour. The method for using ACT was explained as a four step sequence, and is detailed in Appendix H.

**ACT worksheets.** Participants were provided with four ACT worksheets, developed by Harris (2009). These included the bullseye and life compass worksheets, which are simple worksheets for taking a birds-eye view of your values, together with writing down a more detailed list of your values. The other two worksheets were related to how they might get caught up or entangled with their thoughts, and how it affects them in many different ways if they become fused with their thoughts. It allows them to identify how to dissect the problem in different ways. One of the worksheets uses the acronym DOTS, which highlights how they

might use distraction, opting out, thinking, and substances as a way to avoid dealing with the issues at hand.

**Assertiveness.** This module of the psycho-educational intervention program provided participants with an overview of assertiveness, including the differences between passive, passive/aggressive, assertive, and aggressive behaviour. It also provided them with effective ways to become more assertive with other people. Participants were taught the information as detailed in Appendix I, together with being provided with a handout containing this information for later referral.

**Effective communication, difficult clients.** Also included in this module was a discussion around effective communication styles, and the different types of communication such as verbal and non-verbal communication. Effective listening and communication skills were provided to participants. Both of these subjects were then discussed in the context of dealing with other people, and in particular, how they may use these strategies more effectively within the workplace. More specifically, the information as outlined in Appendix J was provided to participants, together with a handout comprising the same information.

**Positive Psychology – PERMA, VIA and other exercises.** This module provided an explanation of what positive psychology is, what it is not, and its basic history and background. Participants were provided with several handouts that had been prepared by the researcher which detailed this information. While it was recommended they take the full VIA Survey of Character Strengths questionnaire available on various websites online, they were required to complete the brief strengths test as part of their battery of tests for this aspect of the research. The concepts of PERMA (which were discussed in chapter two of this dissertation) were also outlined, as well as simple positive psychology exercises they could complete, such as keeping a gratitude list, conducting random acts of kindness, three good things, using character strengths in different ways, and so on. Full details are outlined in Appendix K.

Participants were also provided with stress management, time management, and relaxation strategies to enable participants to effectively deal with stress, better organise themselves, and develop the ability to relax in a healthy way. The strategies were also provided as handouts to enable participants to take them home and read them thoroughly, and then act as a reminder for later implementation. The strategies

were developed by the researcher in her capacity as a registered psychologist. These are shown in full detail in Appendices L and M respectively.

### **Relaxation**

Relaxation is an important part of our health and wellbeing. We need to be able to relax in order to keep our stress and anxiety levels at a manageable level. There are many different forms of relaxation, and finding what makes you feel relaxed is important. Relaxation is not just about sitting quietly and doing nothing (although some people do find this relaxing). It is suggested that you think of relaxation essentially being about what makes you feel relaxed and helps you to get that wonderful feeling of ‘calm’.

Some forms of relaxation can include

- sitting quietly and deep breathing;
- listening to music;
- dancing;
- gardening;
- exercising (such as walking, jogging, surfing);
- arts and crafts (including colouring-in);
- sitting at the beach and watching the ocean;
- being in nature;
- stroking a pet;
- engaging in hobbies;
- socialising with friends;
- journaling.

Two easy but often beneficial strategies are

***Deep breathing.*** Deep breathing can be a wonderful way of relaxing and keeping a sense of calm. It can also be very effective for helping with symptoms of anxiety. Best of all - it is completely free to do and can basically be done anywhere and anytime. There are a few different strategies used for deep breathing, however, this is one suggested strategy you may find helpful:

*Step one.* Breathe in (inhale) through your nose to the count of three or four - so that would be “one and two and three and four” as you breathe in. You can choose to hold it there for a second if you wish, although this is not essential. When you breathe in (inhale), make sure it is coming from your stomach/diaphragm as this

enables oxygen to circulate to the brain (assisting with the brain functioning effectively). If you breathe from your chest (that is, those short-shallow breaths we tend to take when we are stressed or anxious) this is similar to when we hyperventilate, and we do not allow oxygen to flow to the brain properly, therefore the brain does not always function effectively.

*Step two.* Breathe out (exhale) through your mouth gently to the same count - again, that would be “one and two and three and four” as you exhale.

***Progressive muscle relaxation.*** Progressive muscle relaxation is the process of progressively relaxing the muscles in our bodies. Participants were advised to be mindful and seek professional advice from their medical practitioner if they had any injuries to any area of their body, prior to doing progressive muscle relaxation. Again, there are different ways that these can be done, however, this strategy was recommended:

*Step one.* Lie down (preferable - although it can be done in a seated position) in a comfortable position. Clench/tighten your feet as much as possible and hold for a couple of seconds. Then slowly release the tension.

*Step two.* Clench/tighten your calf muscles and hold for a couple of seconds. Then slowly release the tension.

*Step three.* Clench/tighten your upper legs and hold for a couple of seconds. Then slowly release the tension.

*Step four.* Repeat these steps using other parts of your body – for example: buttocks, stomach, chest, shoulders, hands, mouth, nose, and eyes.

The process of clenching/tightening tightens the muscles, but then relaxes the muscle when released. This can be an effective way of releasing built-up tension in your muscles.

#### **Appointment setting for follow-up calls, question and answers**

The final component of the psycho-educational intervention program was an opportunity for questions and answers, and making arrangements for follow-up phone calls to be made with the facilitator to enable progress checks to take place over the next few weeks.

Upon completion of the psycho-educational intervention program, all questionnaires and consent forms were gathered, and participants left. They were each later contacted via telephone or email (if unavailable by telephone) to check in

with each participant to ascertain how they were progressing with the implementation of the strategies provided through the training intervention program, as well as enabling them the opportunity to clarify any aspects they were uncertain of. Some participants requested weekly contact for several weeks, whereas other participants were happy with just an initial follow-up call. Participants were also kept up-to-date via email from the researcher as to the timing for the return of the questionnaires, which was scheduled for six weeks after the training intervention program took place. Whilst it took a few reminders to some participants, there was a 100% rate of return on all questionnaires.

### **Procedure**

This psycho-educational intervention program was offered on two occasions to different veterinarians – one in November 2014, and the second in January 2015 – in order to gain test-retest reliability.

This study consisted of attendance at a one-day psycho-educational intervention program whereby participating veterinarians were taught a series of tools and strategies designed to assist them in coping with the demands of their job. The program commenced at 10.00am and finished at approximately 4.30pm. As with Study 1, participants were advised of the purpose of the research and that they could elect to withdraw such participation at any time. They were all requested to sign a consent form confirming their agreement to participate.

### **Results**

Analysis of pre-and-post testing from the psycho-educational intervention program was conducted by way of Wilcoxon Signed Ranks Test. Appendix G outlines the statistical results of the pre-and post-questionnaires.

For the purposes of this study, the Wilcoxon Signed Ranks Test was only applied to the DASS21, PANAS, and Meaning in Life questionnaires. The Work-Life Questionnaire and Brief Strengths Test were not analysed as it was believed their results would no longer be relevant to the data analysis and interpretation.

These results indicate the psycho-educational intervention program had a positive effect on participants, given there were some statistically significant results. It is believed that as a result of the psycho-educational intervention program, participants learnt effective psychological coping strategies, which in turn assisted in decreasing their levels of depression, anxiety, and stress while also helping them to

feel better about themselves. Subsequently, as a result of the psycho-educational intervention program, participants' psychological status improved.

**Depression, Anxiety and Stress Scale (DASS21).** All three scales on the DASS21 returned statistically significant results when comparing pre- and post-test results. In particular, each individual scale returned the following results: depression ( $p = .019$ ); anxiety ( $p = .011$ ); stress ( $p = .005$ ). The interpretive results for this scale are outlined in Appendix

The mean for these participants were: depression (pre) = 10.8333, depression (post) = 5.6667; anxiety (pre) = 8.3333, anxiety (post) = 4.8333; stress (pre) = 19.8333, stress (post) = 10.6667.

The median for these participants were: depression (pre) = 11.00, depression (post) = 2.00; anxiety (pre) = 8.00, anxiety (post) = 4.00; stress (pre) = 21.00, stress (post) = 10.00.

The range for these participants were: depression (pre) = 20.00, depression (post) = 16.00; anxiety (pre) = 20.00, anxiety (post) = 22.00; stress (pre) = 20.00, stress (post) = 26.00.

The mode for these participants were: depression (pre) = .00, depression (post) = 2.00; anxiety (pre) = 2.00, anxiety (post) = .00; stress (pre) = 24.00, stress (post) = 10.00.

Subsequently, these results support the research objectives that the psycho-educational intervention program would have a significant improvement on the veterinarian's ability to cope with the everyday demands of their working life, and their levels of depression, anxiety, and stress would decline as a result of this program.

**Positive and Negative Affectivity Scale (PANAS).** The negative affectivity scale returned statistically significant results ( $p = .010$ ), supporting the research question that the psycho-educational intervention program would have a significant improvement on the veterinarian's ability to cope with the everyday demands of their working life.

The positive affectivity scale did not return statistically significant results ( $p = .505$ ), not supporting the research question that the psycho-educational intervention program would have a significant improvement on the veterinarian's ability to cope with the everyday demands of their working life.



Higher scores on the positive affectivity scale indicate people feel great a majority of the time, and they feel abundant levels of joy and pleasure from the good things in life (Seligman, 2002). Overall, the results from this study indicate the participants may be feeling better about themselves and their day-to-day lives, but not necessarily happier in their day-to-day lives.

The mean for these participants were: negative affect (pre) = 16.25, negative affect (post) = 12.1667; positive affect (pre) = 8.3333, positive affect (post) = 4.8333.

The median for these participants were: negative affect (pre) = 16.5000, negative affect (post) = 11.5000; positive affect (pre) = 30.5000, positive affect (post) = 33.0000.

The range for these participants were: negative affect (pre) = 15.00, negative affect (post) = 6.00; positive affect (pre) = 33.00, positive affect (post) = 28.00.

The mode for these participants were: negative affect (pre) = 17.00, negative affect (post) = 10.00; positive affect (pre) = 29.00, positive affect (post) = 28.00.

**Meaning in Life Questionnaire (MLQ).** Both scales (search and presence) did not return statistically significant results ( $p = .720$  and  $p = .443$  respectively).

The mean for these participants were: meaning in life – search (pre) = 22.3333, meaning in life – search (post) = 23.4167; meaning in life – presence (pre) = 22.5000, meaning in life – presence (post) = 24.0000.

The median for these participants were: meaning in life – search (pre) = 24.5000, meaning in life – search (post) = 23.5000; meaning in life – presence (pre) = 25.000, meaning in life – presence (post) = 26.0000.

The range for these participants were: meaning in life – search (pre) = 30.00, meaning in life – search (post) = 13.00; meaning in life – presence (pre) = 30.00, meaning in life – presence (post) = 15.00.

The mode for these participants were: meaning in life – search (pre) = 5.00, meaning in life – search (post) = 23.00; meaning in life – presence (pre) = 25.00, meaning in life – presence (post) = 29.00.

**Work Life Questionnaire (WLQ).** The pre- and post-results of this questionnaire were not statistically analysed due to the specific nature of the questionnaire, and being deemed irrelevant.

**Brief Strengths Test.** This questionnaire was not statistically analysed due to the specific nature of this questionnaire, and the fact that the individual character

strengths of participants are more innate and subjective, and unlikely to significantly change in such a short period of time. However, while beyond the scope of this research project, further investigation of commonly reported strengths within veterinarians could be the subject of further research.

### **Discussion**

Initially it was proposed that a pre-test post-test control group design (Heppner, 1999) would be used to investigate the program's impact upon the measures. It was anticipated that questionnaires would be distributed to participants before and after the psycho-educational intervention program, and then analysed to determine changes in scores as per the research objectives. However, due to time restraints and difficulties recruiting participants, the psycho-educational intervention program was adjusted to include test-retest methods with two separate groups of participants. It was also initially proposed that the psycho-educational intervention program would be conducted for two hours per week, over a six-week period. However, due to the difficulties mentioned above, it was decided to facilitate the program as a one-day event.

Based on the encouraging results from the psycho-educational intervention program used in this study, the program did appear to have a positive impact on participants. That is, the results demonstrated reduced levels of depression, anxiety, and stress, all of which are contributing factors to an individual's level of psychological health and wellbeing. Furthermore, the psycho-educational intervention program also showed statistically significant results relating to negative affect, which can indicate they felt somewhat better about themselves.

The use of various strategies, including the evidence-based psychological tools from both acceptance and commitment therapy and positive psychology, were beneficial in providing participants with effective, proven, techniques to help them better cope with the demands of their jobs and every lives.

The inclusion of stress management techniques also seemed to be beneficial, as it allowed for the proactive, rather than reactive, approach to dealing with life's stressful events. Similarly, incorporating time management skills into the psycho-educational intervention program also appeared to be useful in that it provided helpful techniques for being better able to manage their time and become more organised. Additionally, it was believed participants would benefit from learning

simple, but beneficial, relaxation techniques to help them unwind and lessen their levels of stress.

Assertiveness and communication skills were crucial strategies for participants to learn, as they both play a major part in being able to communicate, and deal, with clients, co-workers, supervisors, friends, family, and so forth in a more effective way.

SMART goal setting was also believed to be important, as unless we have any goals, how do we know where we are headed? Teaching the participants to be able to set themselves specific, measurable, achievable, realistic, and time-based goals – including short term, medium term, and long term goals - was significant inasmuch as it allowed for them to have something to focus on, and, essentially achieve. Such sense of achievement is a core factor in positive psychology's PERMA principles.

The results from Study 2 are encouraging, and provide a starting point for further interventions.

## CHAPTER SIX: DISCUSSION

The purpose of this research project was to ascertain whether there was any relationship between veterinarians performing pet euthanasia and any related effects to their wellbeing, as well as investigating why being a veterinarian seems to have such a negative psychological impact for many practicing veterinarians, including a high rate of suicide. As outlined in chapters four and five, the research project was split into two separate studies – Study 1 and Study 2. Study 1 related to the first research question, which hypothesised that veterinarians will demonstrate a negative emotional response to performing euthanasia on animals. Study 2 related to the second research question which hypothesised that veterinarians who participate in a psycho-educational intervention program will have enhanced wellbeing and coping.

While the veterinarians in this research project confirmed the task of performing euthanasia was a stressful event, there were many other factors identified as a result of this research that offered further insight into aspects of their work which were deemed to be distressing. Interestingly, performing euthanasia was not the single most important factor affecting their wellbeing, and additional major contributing factors were reported such as having to deal with difficult clients, unrealistic expectations, and financial matters.

Being able to meet face-to-face and via telephone with practicing veterinarians of varying ages, experience, and gender proved to be extremely beneficial, due to the intimate insight many of them provided. These interviews enabled prior research findings into factors affecting veterinarian wellbeing to be validated and explored in-depth, as well as an opportunity for participants to elaborate on the demands of their profession. It was also mentioned by many participants that they not only appreciated the fact that further research was being conducted into the issues faced by this profession, but that effective strategies were being explored and researched as a prospective intervention tool in tackling this worldwide problem. It is also believed that many participants enjoyed the interaction and opportunity to openly discuss the multifaceted demands of their job within the realms of the Study 1 interviews.

Most importantly, however, the psycho-educational intervention program comprised many effective strategies in an effort to address the psychological

wellbeing needs of veterinarians. The literature reviewed in this research project repeatedly called for appropriate interventions to help veterinarians to deal with the demands of their profession more effectively, such as useful coping strategies, communication skills, and stress management tools. The psycho-educational intervention program did just that. Not only did it introduce acceptance and commitment therapy as a psychological intervention for dealing with unhelpful thoughts, feelings, and behaviours, and stress management strategies to help veterinarians better manage their stress, but it also offered time management skills, assertiveness skills, relaxation strategies, goal setting, and wellbeing recommendations. Overall, the psycho-educational intervention program provided for a holistic approach to wellbeing by not only focusing on tackling the psychological ill-health considerations discussed throughout this research project, but also offered proactive solutions for those who may not currently be experiencing symptoms of distress, and desire to maintain their current levels of wellbeing.

The psycho-educational intervention program showed promising results, including a significant decrease in symptoms of depression, anxiety, stress, and negative affect – all of which are contributing factors to psychological wellbeing. This indicates that following their participation in the psycho-educational intervention program, participants were feeling less stressed, anxious, and depressed, and provides some support signifying they were better able to cope with the demands of their everyday lives once they had learnt the strategies taught in the psycho-educational intervention program. It also indicates that while participants were generally feeling better about themselves, they were not necessarily feeling happier.

The combination of strategies provided in the psycho-educational intervention program were found to be effective, as evidenced by the reported decreases in levels of depression, anxiety, stress, and negative affect. The researcher strongly believes her preference of using acceptance and commitment therapy over other modalities such as cognitive behavioural therapy was a wise choice, inasmuch as this intervention lends itself to a range of strategies that are relatively straightforward and easy to implement. This research also lends itself to providing further support of acceptance and commitment therapy as an effective psychological intervention.

Much of the research reported in this thesis has eluded to the many stressful events faced by veterinarians, and it is evident that these professionals should be

equipped with a psychological toolbox of resources they can refer to when needed. By empowering the participants with effective strategies in time management, stress management, assertiveness skills, communication skills, acceptance and commitment therapy (for coping strategies and handling unhelpful thoughts, feelings, and behaviours), goal setting, positive psychology (for developing and maintaining wellbeing), and relaxation techniques thus provided them with powerful strategies and potential solutions for dealing with the demands of both their personal and work lives.

In respect of resilience, further investigation of the links between higher levels of resilience and veterinarian wellbeing are warranted. Unfortunately, resilience was not directly researched or addressed within the parameters of this research project, however, the researcher believes that building resilience is a crucial factor that could have far-reaching consequences. As was demonstrated in chapter two, individuals with higher levels of resiliency tend to cope with the demands and challenges of everyday life in a much healthier, and proactive way. Developing and maintaining a hardy resilient mindset could be an integral part of treating the psychological issues that plague this profession.

When evaluating the implications of these results in relation to the research objectives, it is satisfying to have taken a deeper dive into the real world of veterinarians, developing further insight into the multitude of aspects that contribute to their day-to-day lives, rather than a commonly-held viewpoint that being a veterinarian is a wonderful job where they just play with kittens and puppies all day long. Sadly, and as has been demonstrated by this, and copious other research, this is not the reality and there is a darker side to working as a veterinarian that is not immediately obvious to those unfamiliar with this industry.

While it seems like much has been done to research the factors contributing to the negative psychological impact which are considered part-and-parcel of this occupation, sadly there does not appear to have been much development into effective intervention programs and strategies to address these issues, other than the provision of telephone support, crisis lines, and limited cognitive behavioural therapy strategies. As a registered psychologist with a personal and professional interest in suicide prevention, the researcher believes this issue needs to be dealt with head-on, with effective proven and beneficial programs being provided to veterinarians to

assist them in dealing with the everyday demands of their profession. It is believed the psycho-educational intervention program used in this research project goes some way to successfully tackling and treating this problem proactively and effectively.

This concern is not going away, and no longer can it be hidden under the table with an ‘all is well’ attitude. This psycho-educational intervention program aims to address everyday factors affecting wellbeing and thus takes the initiative of providing proven strategies to proactively focus on the issues at hand. It is evident from this, and other, research that being a veterinarian is not always what it is cracked up to be. Veterinarians are typically high-achievers, and tend to be very intelligent. While these characteristics are admirable, they do have their limitations particularly when dealing with the demands of their job. Unfortunately, it was revealed in this research project through general discussions with many participants, that a lot of veterinarians have such high levels of pride and the mindset that due to their high intelligence and high achieving personalities they should be able to effectively deal with any problem that comes their way – without seeking the help of anyone else. Sadly, this leads to many veterinarians suffering in silence unnecessarily, which then has a flow-on effect to their colleagues, clients, families, friends, and so on. It is suggested that this attitude may also have stopped many veterinarians from offering their participation in the psycho-educational intervention program, even though it is apparent the program was beneficial in providing adequate coping skills and strategies to afford veterinarians the opportunity of dealing with their stressors in a more appropriate, and psychologically healthier manner.

### **Method**

As discussed in chapter three, the methods utilised in this research project primarily focused on two separate, but related, studies. The original intention of this research project was to have three studies. The first study (Study 1) was as-is – that is, comprised of face-to-face and telephone interviews with veterinarians whereby they were asked a series of questions deemed relative to the stressful nature of their profession. These questions were derived from existing research into veterinarian wellbeing. Upon completion of the interviews, the audio recordings were sent to a professional transcription agency where they were transcribed and later assessed by the researcher using thematic analysis via the thematic analysis method. From these

themes, stressful issues were identified (and supportive of existing research in most cases), which were intended for subsequent validation in the national survey which was originally to comprise Study 2.

The purpose of Study 2 was to provide effective psychological and other coping strategies in order to teach and assist participants in being able to attend to their psychological distress (if any), and/or enable and empower them with these strategies so as to maintain their current level of wellbeing if this was satisfactory. All but the DASS21 questionnaires were identified from the Authentic Happiness website ([www.authentichappiness.org](http://www.authentichappiness.org)), and directly related to positive psychology. They were selected in order to ascertain their reliability and usefulness in measuring veterinarian wellbeing, however two of the questionnaires (the work-life balance questionnaire and the brief strengths questionnaire) were not statistically analysed as they were deemed irrelevant to the overall evaluation of this topic. These questionnaires were also utilised with a view to providing further support and credibility to the field of positive psychology.

As mentioned, the initial intent was for Study 2 to become a national survey of veterinarians, which would have been provided via an online questionnaire via Survey Monkey. As discussed, however, unfortunately time demands and subsequent delays in the renewal of ethical approval within the university necessitated this study being abandoned. Study three would have been the psycho-educational intervention program, however, after the national survey was shelved, this study thus became Study 2.

Ideally, the psycho-educational intervention program would be implemented over a two-day timeframe, to allow for further elaboration on the many topics covered, as well as the opportunity to discuss their responses with their fellow participants. One participant mentioned it would have been beneficial to have further discussion around the stressful aspects of their profession, which would be able to be incorporated in a longer program stemming two days rather than one day.

### **Significance and Implications of Outcomes**

The significance of Study 1 was far-reaching. Not only did it provide further validation to existing research highlighting the relationship between performing euthanasia and the wellbeing of veterinarians, it also identified additional factors and issues that many veterinarians are faced with on a daily basis – such as dealing with



difficult clients, compassion fatigue, high expectations, financial issues, and so forth. Additionally, the outcomes from the Study 1 interviews provided a basis for discussion at the stage two psycho-educational intervention program, demonstrating to participants the level of understanding gained from this and other research and reinforcing the goal of the researcher to develop a valuable, evidence-based psychological program which can be easily taught at different levels and which is also effective at addressing the issues at hand.

The benefits of the psycho-educational intervention program in Study 2 are expected to be far-reaching, as it has been developed by a practicing registered psychologist, using beneficial psychological strategies to provide veterinarians with effective tools they can use with relative ease. As was demonstrated in this research project, the psycho-educational intervention program returned statistically significant results when addressing factors of depression, anxiety, stress, and negative affect. Not only that, it is envisaged that this program will also be effective for anyone working in a high-risk occupation, particularly within the traditional helping professions where compassion fatigue and dealing with other people is commonplace. It is believed the strategies within the psycho-educational intervention program are easy to learn, as well as being relatively easy to implement, as evidenced by the results from this stage of the research project, together with self-reports from participants on its effectiveness and ease of use.

It is also expected this research project will provide further support to the field of positive psychology, which is a relatively new, but effective, concept in the psychological and wellbeing industries. This research project adopted the model of positive psychology in its psycho-educational intervention program, teaching participants the history and methodologies behind it, including the latest research from Seligman adopting the use of PERMA. It also utilised many of the questionnaires utilised in positive psychology, such as the Work-Life Questionnaire and Brief Strengths Test, Meaning in Life Questionnaire, and the Positive and Negative Affect Scale. To the best of the researcher's knowledge, no other research project has looked at the links of using positive psychology with veterinarian wellbeing, and it is expected this could well be a world-first – leading the way to further investigate benefits in this regard.

Furthermore, it is anticipated this research project will also positively contribute to the research and benefits incorporating acceptance and commitment therapy. This method was chosen over the more popular cognitive behavioural therapy due to the researcher's experience using this intervention model with hundreds, if not thousands, of clients over the past ten years. Based on feedback from clients, together with personally adopting its methods, the researcher believes this modality provides an easier platform than the traditional cognitive behavioural therapy – yet can still deliver excellent results. Again, to the best of the researcher's knowledge, there has been no other research incorporating the strategies of acceptance and commitment therapy as an intervention to treat and maintain veterinarian wellbeing, which could again be a world-first.

It is hoped and expected that the psycho-educational intervention program adopted in this research project will be implemented at many levels, and be far-reaching to encompass the entire veterinary industry (that is, veterinary nurses, veterinary technicians, and other veterinarian support staff), as well as any occupation and industry working closely with animals.

It is also anticipated that due to the positive results from the psycho-educational intervention program, universities and educational facilities worldwide will consider adopting and implementing this program as part of their core curriculum for all students studying the veterinary sciences.

The researcher strongly believes the outcomes of this research project add further support to existing research, but also take it one step further by proactively addressing this issue via the psycho-educational intervention program. As previously mentioned, while there is vast research on the issues surrounding veterinarians and those within the veterinary industry, there does not appear to have been much done to actually address these factors in an effective, and maintainable manner. It is envisaged this research project will go some way in highlighting the issues faced by those in the veterinary industry and raise awareness of the debilitating and devastating effects many of them face.

In addition, it is anticipated the psycho-educational intervention program could be widely used in other industries and environments with high levels of distress and suicide.

### **Limitations**

One limitation of this research project was the relatively small sample size. While this topic is of huge importance to the veterinary industry in particular, it is believed the personality styles of many veterinarians (such as pride, or a belief that because of their general superior intellect, they should not have to seek external help) may have limited participation.

Another limitation of this research project which was later identified through other professional projects with which the researcher is involved, is that of resilience. Whilst positive psychology and acceptance and commitment therapy can provide strategies for coping with, and maintaining, the demands of everyday life, a specific investigation of resilience was not conducted due to time constraints. However, there are many resiliency questionnaires and training programs available that should be further investigated to ascertain the links between levels of resiliency and level of wellbeing.

Yet another limitation was time restraints faced by the researcher, and gathering appropriate support from veterinary professionals and institutions. It was originally intended that a national survey of veterinarians be instigated after Study 1, which would have enabled veterinarians to complete an online questionnaire designed to provide further evidence and support for the factors raised from the Study 1 interviews. Furthermore, it is envisaged this study would have also provided the opportunity for veterinarians to raise any other issues that may not have been identified already through Study 1.

While the psycho-educational intervention program returned statistically significant results, it is noted that other threats to internal validity and sources of potential bias were not able to be ruled out. The DASS21 is not an accurate diagnostic tool as it is a self-report measure that can be easily manipulated, however, it does provide for an indication of a person's current level of depression, anxiety, and stress. Future research may elect to use a more rigorous psychometric tool which can highlight pre-existing and existing psychological issues such as mood disorders, personality disorders, substance abuse, and so on. This may provide an additional picture of the personality characteristics of veterinarians, and whether there are any correlations across this group.

There were other factors that may have played a role in the reported decrease in symptoms of participants on the DASS21 self-report questionnaire. For example, one participant mentioned they were under increasing pressure from their employer to meet certain levels of product sales on top of the already demanding daily tasks they were required to perform. The participant noted at the start of the psycho-educational intervention program that they were feeling rather stressed due to these demands, which she believed were also as a result of decreasing profits within their practice. However, upon completion of the follow-up questionnaires and telephone calls, the participant mentioned another veterinarian had been made redundant, and it appeared at the outset that the financial pressure had been lifted from her employer somewhat, as she was no longer required to try and make product sales to her clients in addition to her day-to-day veterinary tasks. The participant reported feeling much less stressed as a result of this incident, which may or may not have had an overall bearing on the results they returned.

#### **Future Research and Recommendations**

One recommendation for further research and consideration is that of psychological testing prior to acceptance at educational institutions offering studies in veterinary science. It is suggested that by using a vigorous, scientifically-sound psychometric test, any pre-existing or existing psychological issues could be identified and seriously considered prior to acceptance of the student. Additionally, such testing could be offered at the post-graduate levels to enable employers to psychologically screen applicants (similar to when applicants undergo medical tests prior to being offered employment) to ascertain if there are any areas for concern. This is not to say that any applicant with a psychological history would be excluded, rather, it can be used as a diagnostic tool to provide beneficial information into the background of the applicant. By undertaking these measures, educational institutions and employers could then elect whether to assist these individuals with seeking appropriate support, as well as contributing to their duty of care in the long term.

Another recommendation for further research and consideration is that of resiliency. Unfortunately, as mentioned previously, resiliency was not directly measured within the scope of this research project, and it was after the completion of both studies one and two that this aspect was apparent. It is strongly suggested and

hypothesised that a strong, resilient mindset could be a vital element in future intervention programs.

Additionally, future research in the area of veterinarian mental health could also focus on the positive aspects of working in this profession. That is, not all veterinarians would be experiencing stress and a lack of wellbeing, and therefore it could prove beneficial to investigate how these veterinarians cope with the challenges of their job. Perhaps there are protective factors they adopt which enable them to better handle the demands of their work, or how they cope with the stressful factors that have been identified through this, and other, research. In other words, what is it, or why is it, that makes these veterinarians enjoy their job and not be bogged down by the sometimes overwhelming tasks that contribute to psychological ill-health? By researching and investigating this area, it may be possible to identify a whole new perspective on the positive aspects – and traits – of working as a veterinarian.

### **Conclusion**

As has been addressed throughout this dissertation, the importance of taking a proactive approach to veterinarian wellbeing cannot be understated. Veterinarians are at increasing risk of psychological ill-health and suicide due to the multi-faceted components required of them within their day-to-day working lives. Not only that, but so too are other skilled and semi-skilled people working within the veterinary and other industries requiring a close relationship with animals.

Sadly, it appears that little has been done to actually address this growing trend, despite the vast amount of research that has been undertaken over many years, and in many countries worldwide. It is hoped that the psycho-educational intervention program developed for this research project will go a considerable way in providing a psychologically-based, effective, intervention for the veterinary and animal industries. While there have been limited attempts to tackle the high rates of suicide within this industry, unfortunately this problem is still as evident as ever. It is also apparent that the majority of research and intervention provided appears to have been undertaken by veterinarians, rather than those in the more traditional helping professions of psychology, counselling, and psychiatry. Perhaps if more people, particularly those in a position to offer solutions to effectively help those

within this profession, were made aware of the seriousness of this issue, then more could be done to raise awareness and take this major problem in hand.

Being able to effectively address the stigma surrounding mental illness, coupled with raising awareness of the realities of working in the veterinary profession and providing non-judgemental support for those working in this industry, is essential. It is also strongly recommended that the governing and professional bodies for this profession, together with health professionals, veterinary employers, and educational institutions offering studies in veterinary science, step-up and take notice of this profession and advocate for further research into appropriate intervention programs such as that developed for this research project. Actions such as they can provide much-needed help and support for our veterinarians.

Again, it is hoped that this research will go some way in its attempt to not only highlight this issue, but also in its endeavour to do something about it.

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**APPENDICES**

### Appendix A - Study 1 Interview Questionnaire

1. As a veterinarian, what aspects of the job do you personally find the most distressing? Why?
2. Do you feel that clients place unrealistic expectations (such as a fast diagnosis or complete resolution) on you as a veterinarian? If so, do you find these expectations distressing? Why?
3. Do you feel that you have enough professional support/resources to assist you during your career as a veterinarian?
4. Some of the factors listed below have been identified as potential issues/concerns to veterinarians. Please indicate if you would agree with any of these, and feel welcome to elaborate on your responses
  - euthanaising animals;
  - loneliness;
  - living in remote areas;
  - demands on you from running a business;
  - unrealistic expectations from clients;
  - relationship/family issues due to being on call;
  - early experiences/trauma/distressing events in life;
  - gender biases within the veterinary industry;
  - dealing with distressed or angry owners.
5. Have you experienced any psychological issues (such as anxiety or depression) as a result of your work as a veterinarian? Was treatment from a health professional required?
6. What coping skills/strategies/strengths do you currently use, or have used in the past, to help you cope with the demands of being a veterinarian? For example: VIA strengths (such as: hope and optimism; playfulness and humour; gratitude and thankfulness; prudence, discretion and caution; social intelligence).
7. Are there any other comments you would like to make?

**Appendix B – Depression Anxiety and Stress Scale (21) (DASS21)**

DASS21	<i>Name:</i>	<i>Date:</i>
<p>Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you <b><i>over the past week</i></b>. There are no right or wrong answers. Do not spend too much time on any statement.</p> <p>The rating scale is as follows:</p> <p>0 Did not apply to me at all            1 Applied to me to some degree, or some of the time            2 Applied to me to a considerable degree, or a good part of time            3 Applied to me very much, or most of the time</p>		
1	I found it hard to wind down	0 1 2 3
2	I was aware of dryness of my mouth	0 1 2 3
3	I couldn't seem to experience any positive feeling at all	0 1 2 3
4	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0 1 2 3
5	I found it difficult to work up the initiative to do things	0 1 2 3
6	I tended to over-react to situations	0 1 2 3
7	I experienced trembling (e.g., in the hands)	0 1 2 3
8	I felt that I was using a lot of nervous energy	0 1 2 3
9	I was worried about situations in which I might panic and make a fool of myself	0 1 2 3
10	I felt that I had nothing to look forward to	0 1 2 3
11	I found myself getting agitated	0 1 2 3
12	I found it difficult to relax	0 1 2 3
13	I felt down-hearted and blue	0 1 2 3
14	I was intolerant of anything that kept me from getting on with what I was doing	0 1 2 3
15	I felt I was close to panic	0 1 2 3
16	I was unable to become enthusiastic about anything	0 1 2 3
17	I felt I wasn't worth much as a person	0 1 2 3
18	I felt that I was rather touchy	0 1 2 3
19	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0 1 2 3
20	I felt scared without any good reason	0 1 2 3
21	I felt that life was meaningless	0 1 2 3

### Appendix C – Meaning In Life Questionnaire

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers.

Select how true or untrue each statement is for you using the following scale. Please circle the number that corresponds with your answer.

- 1 Absolutely untrue
- 2 Mostly untrue
- 3 Somewhat untrue
- 4 Can't say true or false
- 5 Somewhat true
- 6 Mostly true
- 7 Absolutely true

1. I understand my life's meaning  
(Please circle which number best applies) 1 2 3 4 5 6 7
2. I am looking for something that makes my life feel meaningful  
(Please circle which number best applies) 1 2 3 4 5 6 7
3. I am always looking to find my life's purpose  
(Please circle which number best applies) 1 2 3 4 5 6 7
4. My life has a clear sense of purpose  
(Please circle which number best applies) 1 2 3 4 5 6 7
5. I have a good sense of what makes my life meaningful  
(Please circle which number best applies) 1 2 3 4 5 6 7
6. I have discovered a satisfying life purpose  
(Please circle which number best applies) 1 2 3 4 5 6 7
7. I am always searching for something that makes my life feel significant  
(Please circle which number best applies) 1 2 3 4 5 6 7
8. I am seeking a purpose or mission for my life  
(Please circle which number best applies) 1 2 3 4 5 6 7
9. My life has no clear purpose  
(Please circle which number best applies) 1 2 3 4 5 6 7
10. I am searching for meaning in my life  
(Please circle which number best applies) 1 2 3 4 5 6 7

### Appendix D - PANAS Questionnaire

This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the number that corresponds with your answer. Indicate to what extent you feel this way right now, that is, at the present moment.

- 1 Very slightly or not at all
- 2 A little
- 3 Moderately
- 4 Quite a bit
- 5 Extremely

- |                        |           |   |
|------------------------|-----------|---|
| <b>1. Interested</b>   | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>2. Distressed</b>   | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>3. Excited</b>      | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>4. Upset</b>        | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>5. Strong</b>       | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>6. Guilty</b>       | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>7. Scared</b>       | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>8. Hostile</b>      | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>9. Enthusiastic</b> | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>10. Proud</b>       | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>11. Irritable</b>   | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>12. Alert</b>       | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>13. Ashamed</b>     | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>14. Inspired</b>    | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>15. Nervous</b>     | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>16. Determined</b>  | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>17. Attentive</b>   | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>18. Jittery</b>     | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>19. Active</b>      | 1 2 3 4 5 | (Please circle which number best applies) |
| <b>20. Afraid</b>      | 1 2 3 4 5 | (Please circle which number best applies) |



### Appendix E – Work-Life Questionnaire

Read each of the questions. For questions 1-3, think about how much you are like the person described. Then circle your responses for each one. All questions must be completed for this questionnaire to be scored.

- 1 Very much
- 2 Somewhat
- 3 A little
- 4 Not at all

1. Ms. A works primarily to earn enough money to support her life outside of her job. If she were financially secure, she would no longer continue with her current line of work, but would really rather do something else instead. Ms. A's job is basically a necessity of life, a lot like breathing or sleeping. She often wishes the time would pass more quickly at work. She greatly anticipates weekends and vacations. If Ms. A lived her life over again, she probably would not go into the same line of work. She would not encourage her friends and children to enter her line of work. Ms. A is very eager to retire.

1 2 3 4 (Please circle your response)

2. Ms. B basically enjoys her work, but does not expect to be in her current job five years from now. Instead, she plans to move on to a better, higher-level job. She has several goals for her future pertaining to the positions she would eventually like to hold. Sometimes her work seems like a waste of time, but she knows she must do sufficiently well in her current position in order to move on. Ms. B can't wait to get a promotion. For her, a promotion means recognition of her good work, and is a sign of her success in competition with her co-workers.

1 2 3 4 (Please circle your response)

3. Ms. C's work is one of the most important parts of her life. She is very pleased that she is in this line of work. Because what she does for a living is a vital part of who she is, it is one of the first things she tells people about herself. She tends to take her work home with her and on vacations, too. The majority of her friends are from her place of employment, and she belongs to several organizations and clubs pertaining to her work. Ms. C feels good about her work because she loves it, and because she thinks it makes the world a better place. She would encourage her friends and children to enter her line of work. Ms. C would be pretty upset if she were forced to stop working, and she is not particularly looking forward to retirement.

1 2 3 4 (Please circle your response)

4. Please rate your satisfaction with your job on a scale from 1 to 7, where 1 is completely dissatisfied, 4 is neither satisfied or dissatisfied, and 7 is completely satisfied.

1 2 3 4 5 6 7 (Please circle your response)

### Appendix F – Brief Strengths Test

Think about how you have acted in the actual situations described below **during the past month (four weeks)**. The questions ask about behaviours that most people find desirable, but we want you to answer only in terms of what you actually did. If you did not encounter a described situation, please mark the "not applicable" option. Read each one and then circle the statement that matches your response. All questions must be completed for this questionnaire to be scored.

1. Think of actual situations in which you had the opportunity to do something that was novel or innovative. How frequently did you show CREATIVITY or INGENUITY in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
2. Think of actual situations in which you had the opportunity to explore something new or to do something different. How frequently did you show CURIOSITY or INTEREST in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
3. Think of actual situations in which you had a complex and important decision to make. How frequently did you show CRITICAL THINKING, OPEN-MINDEDNESS, or GOOD JUDGMENT in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
4. Think of actual situations in which you had the opportunity to learn more about some topic, in or out of school. How frequently did you show LOVE OF LEARNING in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
5. Think of actual situations in which you had the opportunity to offer advice to another person who needed it. How frequently did you show PERSPECTIVE or WISDOM in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
6. Think of actual situations in which you experienced fear or threat. How frequently did you show BRAVERY or COURAGE in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
7. Think of actual situations in which you faced a difficult and time-consuming task. How frequently did you show PERSEVERANCE, PERSISTENCE, DILIGENCE, or INDUSTRIOUSNESS in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------
  
8. Think of actual situations in which it was possible for you to present a false view of who you are or what had happened. How frequently did you show HONESTY or AUTHENTICITY in these situations?  

Not applicable	Never/rarely	Occasionally	Half the time	Usually	Always
----------------	--------------	--------------	---------------	---------	--------

9. Think of your everyday life. How frequently did you show ZEST or ENTHUSIASM when it was possible to do so?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

10. Think of your everyday life. How frequently did you express your LOVE or ATTACHMENT to others (friends, family members) when it was possible to do so?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

11. Think of your everyday life. How frequently did you show KINDNESS or GENEROSITY to others when it was possible to do so?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

12. Think of actual situations in which the motives of other people needed to be understood and responded to. How frequently did you show SOCIAL INTELLIGENCE or SOCIAL SKILLS in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

13. Think of actual situations in which you were a member of a group that needed your help and loyalty. How frequently did you show TEAMWORK in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

14. Think of actual situations in which you had some power or influence over two or more other people. How frequently did you show FAIRNESS in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

15. Think of actual situations in which you were a member of a group that needed direction. How frequently did you show LEADERSHIP in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

16. Think of actual situations in which you had been hurt by someone else. How frequently did you show FORGIVENESS or MERCY in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

17. Think of your everyday life. How frequently did you show MODESTY or HUMILITY when it was possible to do so?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

18. Think of actual situations in which you were tempted to do something that you might later regret. How frequently did you show PRUDENCE, DISCRETION, or CAUTION in these situations?

Not applicable    Never/rarely    Occasionally    Half the time    Usually    Always

19. Think of actual situations in which you experienced wishes, desires, impulses, or emotions that you wished to control. How frequently did you show SELF-CONTROL or SELF-REGULATION in these situations?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

20. Think of your everyday life. How frequently did you show APPRECIATION OF BEAUTY AND EXCELLENCE or AWE when it was possible to do so?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

21. Think of actual situations in which someone else helped or benefited you. How frequently did you show GRATITUDE or THANKFULNESS?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

22. Think of actual situations in which you experienced failure or a setback. How frequently did you show HOPE or OPTIMISM in these situations?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

23. Think of your everyday life. How frequently did you show PLAYFULNESS or HUMOUR when it was possible to do so?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

24. Think of your everyday life. How frequently did you show RELIGIOUSNESS or SPIRITUALITY when it was possible to do so?

Not applicable   Never/rarely   Occasionally   Half the time   Usually   Always

### **Appendix G – SMART Goal Setting Exercises**

Short term, medium term, and long term goal setting were addressed, and participants were provided with a handout outlining SMART goal setting in more detail, as well as examples for their completion. The idea of setting goals is to give us something to aim for, something we can accomplish. Goals can also help in providing us with a sense of direction. However, they need to be SMART goals in order for them to be more realistic and achievable. SMART goals also keep us accountable - if our goals are open-ended, they may never be achieved. SMART stands for specific, measurable, achievable, realistic, and time-based.

To define this further, our goals need to be: Specific - what are you specifically hoping to achieve? For example - rather than “I want to run a marathon”, you would define this as something like “I want to run in a 10km marathon”. Measurable - how will you measure your progress in achieving this goal? For example - by being able to run 1km each week for two months, and then increasing this to 2km each week and so on. Achievable - your goals need to be achievable, otherwise they are unlikely to be met. For example - is running in a 10km marathon next July achievable for you? Realistic - are your goals realistic? For example - is it realistic to think that you could run 10km by July next year? Time-based - within what timeframe do we want to achieve your goal? For example - July next year. If this is open-ended (such as “I want to run in a marathon”), it is unlikely to be achieved.

Short-term goals - think about all the things you want to achieve within the next three-to-six months, and write them down. These are your short term goals.

Medium-term goals - think about all the things you want to achieve within the next six-to-12/24 months, and write them down. These are your medium term goals.

Long-term goals - think about all the things you want to achieve within the next one-to-two years or longer, and write them down. These are your long term goals.

## Appendix H – Acceptance And Commitment Therapy Exercises

***Mindfulness.*** This step involved a discussion on mindfulness, and some suggestions for how to become more mindful. One strategy involves looking around the environment you are currently in, and noticing five things you can see. Then notice five things you can hear. Once you are aware of what you can see and hear in the present moment, then bring your focus to just notice what you are thinking and/or feeling.

***Is this a helpful thought/feeling?*** Once you have noticed what you are thinking and/or feeling in the present moment, ask yourself if this thought/feeling is helpful and/or workable. That is, if you were to pay all your attention to this thought/feeling and allowed it to control your behaviour, would you be happy with the consequences in the long term? If the answer is yes, then carry on with those thoughts or feelings. However, if the answer is no, then proceed to the next step.

***Defusion.*** This is the step that allows you to detach or defuse from the current thoughts/feelings you are having. There are many ways to do this, however, one recommended strategy is to simply acknowledge the thought/feeling by saying “thank you for the thought that .....

***Values guided action.*** Once you have been able to defuse from the thought/feeling, you then need to take action. Ideally, this action should be aligned with your values and provide for long-term benefits, not just short-term gain.

## Appendix I – Assertiveness Exercises

Essentially, assertiveness is about being able to say our message, while being respectful to ourselves and others at the same time. Unfortunately, some people often think that assertiveness equals aggressiveness, but this is not the case.

There are different forms of communication - passive communication is typically very shy or withdrawn. Aggressive communication is typically said in a raised voice or dominating manner. Passive aggressive communication involves things like saying something under your breath, or mumbling it as you are walking away. Assertive communication is ideal, as it allows us to state our feelings and needs in a respectful, non-blaming or judgemental way.

It is recommended that when being assertive you ‘own’ the need or feeling by making ‘I’ statements. You should not have to justify your right to ask for what you want, nor should you have to justifying saying no.

Making ‘I’ statements includes

- stating/describing the situation objectively;
- stating how you feel about the situation (that is, your response to what is happening);
- stating what you want to happen (that is, your preferred outcome).

It is important to

- focus on the facts and describe what is bothering you objectively;
- avoid blame;
- stay calm;
- express your feelings;
- use appropriate body language to support your statement.

## Appendix J – Communication Exercises

There are different types of communication

- verbal (speech);
- non-verbal (such as facial expressions, body language, gestures, written, etc.).

Non-verbal communication may contradict verbal messages (such as saying “I’m fine” but your body language shows otherwise); may be ambiguous (such as raising eyebrows or shrugging shoulders can send different messages); conveys emotion (such as touching someone’s arm, or facial expressions such as smiling); and is multi-channelled (such as facials, voice tone, body language). For communication to be effective, we need constructive interaction. Ways of doing this include

- learning to feel and communicate empathy;
- practice withholding judgement;
- strive for honesty;
- approach others as equals;
- express opinions tentatively.

***Listening skills.*** Listening is essential for effective communication and to build and manage relationships. There are five stages of effective listening

- receiving;
- understanding;
- remembering;
- evaluating;
- responding.

***Communication skills.*** Effective communication skills include

- active listening;
- paraphrasing;
- empathy;
- asking questions;
- being assertive;
- evaluating communication.



## Appendix K – Positive Psychology Exercises

**Identifying your character strengths.** Complete the VIA Survey of Character Strengths questionnaire on the Authentic Happiness website. Once you have identified your top five strengths, aim to use them in different ways each day. Using character strengths is said to increase a sense of engagement called ‘flow’ which is said to enhance well-being.

**Three good things.** This activity can be used in a variety of ways, however, we recommend it is used in the following order

- three good things about yourself;
- three good things that you have done today;
- three good things that you have seen or heard about today.

To start off, record three good things about yourself on a daily basis (and only the good things, not the bad), and repeat this process each day until you have run out of good things. Then go to step two and then step three, following the same process.

**Gratitude.** Gratitude is about our ability to be grateful for the things we have (or have had), rather than focusing on all the things we do not have. This activity can be used in two ways

- write a gratitude letter about someone who has played an important part in your life, but who you feel you have never really thanked. Arrange to meet the person (without telling them about your gratitude letter) and then read them the letter;
- obviously it may be difficult to personally meet with this person, therefore a modification of the above is to write the gratitude letter, and then post or email it to them.

A separate gratitude activity is to write a list of all the things you are grateful for, and complete this on a daily basis into a gratitude journal.

**Random acts of kindness.** Kindness can be considered as the act of being considerate, respectful, caring, and showing charitable behaviour towards ourselves or other people. Kindness is also considered to be a virtue, which essentially means it is a positive quality which is morally good. When we are kind to someone (and feel good about it), our body releases endorphins (or ‘happy chemicals’), which help us to feel good (similar to when we exercise). Practicing random acts of kindness can enhance these positive feelings.

**Practice optimism, not pessimism.** Hope and optimism are one of the character strengths of positive psychology. Research has also shown many health benefits of optimism and having an optimistic (rather than pessimistic) outlook. The good news is that optimism can be learned.

**Nurture relationships.** According to the 'PERMA principles of positive psychology, we need positive relationships in our lives to contribute towards well-being. Therefore, we need to be able to nurture the relationships we do have in order to enhance and maintain these for optimal benefit.

**Forgiveness.** Holding on to grudges can maintain negative thoughts and behaviours - which cannot be changed or controlled. Why hold on to these negative aspects and make ourselves miserable? Whilst you do not have to forget what has happened, practicing forgiveness goes some way to helping us in moving forward in a positive manner.

**Savouring the good things.** When we savour the things we enjoy in life, it promotes a sense of wellbeing each time we remember them. By savouring these events, we are allowing ourselves to experience the positive feelings time and again.

**The perfect day.** Allow yourself to daydream and imagine the 'perfect day'. What would you be doing? Who would you be with? Where would you be? This exercise does require you to be realistic (i.e., you need to have the capacity to undertake the activities). Once you have pictured your perfect day, set about making it happen.

**Goal setting.** If we do not have goals, how do we know where we are headed? It is important to have SMART goals (specific, measurable, achievable, realistic, and time based) in order to accomplish things. Think about your goals - short term, medium term, and long term - what will it take to achieve these? Once you have established what they are, make a commitment to sticking to them.

**Coping strategies.** Develop appropriate and healthy coping strategies in order to deal with the ups and downs of everyday life - after all, our reaction to the crisis is not going to change things - rather it just determines whether we feel good or bad about it.

## Appendix L – Stress Management

There is both “good” stress (called “eustress”) as well as “bad” stress (called “distress”). We need a certain amount of both the good and the bad stress, as this is what helps to keep us motivated. For example, if you are getting a bit tense and irritable about getting your suitcase packed and getting to the airport on time for a 9.00am flight, you may be feeling quite stressed. But once you are on that plane and enroute to your destination, that stress generally disappears - this is an example of eustress. If you were not feeling this level of stress, you may not have the same motivation or sense of urgency to get things going and keep you on track for getting to the airport on time. However, on the flip-side, if you were running around in a state of panic and feeling completely overwhelmed and out of control in this situation, this clearly would not be helpful and would be more attuned to distress. Ultimately, stress can have fatal consequences, so being able to effectively manage our stress is vital for our health and wellbeing.

***Know your stressors.*** Learn to recognise the things that get you stressed (your ‘stressors’). For example, if you know that catching a train full of crowded people to go to a concert where you will be in the mosh pit is going to get you totally stressed out, then consider if it is really a good idea. If you really want to attend the concert and travel by train, then develop appropriate strategies for helping you to acknowledge that you will likely be feeling stressed, and how you can effectively cope with this.

***Recognise your symptoms.*** Being able to recognise the symptoms you feel when you are stressed (some common symptoms include things like a tense stomach, feel nauseous, being irritable and short-tempered, breathing more rapidly, sweating, and having an increased heart rate) can help you take a more proactive role in combating stress. If you recognise the symptoms early on, you can become more proactive in dealing with them.

***Practice mindfulness.*** Mindfulness is essentially about ‘being in the moment’ or the ‘here and now’. When you are mindful, you are not caught up in the past or future - you are dealing with this very moment, right here, right now. Right now is the only moment you can respond to your present thoughts and feelings, so when you are able to recognise them as they are happening, you can take steps to ensure your behaviour is aligned with your values to get a

better outcome in the long run. One quick and easy mindfulness strategy is to ‘just notice’ – that is, just notice five things you can see, hear, feel, taste, touch, and smell. This brings you back into the current moment, where you can then take action.

***Relaxation.*** Relaxation is not just about sitting down and doing nothing. Relaxation is whatever you do that helps you to feel relaxed - so for some people this could be different things. Some common forms of relaxation include meditation, surfing, gardening, dancing, reading, art, singing, different forms of exercising, stroking an animal, listening to music, watching television, colouring in, journaling, reflecting, laughing, and sitting quietly.

***Socialisation.*** For many people, surrounding ourselves with supportive friends and family can be a great form of stress relief. Laughing releases endorphins (the feel-good chemicals) and helps us to de-stress in the long run. Being with family and friends can also distract us from whatever our minds are caught up in, and help us to focus on something else in the short-term.

***Work/life balance.*** Developing a good work-life balance is essential to our health and wellbeing. Despite popular beliefs, work-life balance is not about spending 50% of our time at work, and 50% of our time at home. It is about finding a balance that works for us - so for some people it might be 60/40 or 70/30 - whatever works for us that allows us to spread our time between the demands of work and life, but also making sure we have time for relaxation and leisure.

***Set SMART goals.*** Sometimes we can get stressed because we do not have SMART goals. SMART goals are specific, measurable, achievable, realistic, and time based. When are goals are SMART, we are in a much better position to achieve them as they are more likely to be realistic. Make sure that you do not place too many expectations on yourself that you will not be able to meet, as this can create additional stress, and affect self-esteem and confidence.

***Learn assertiveness skills.*** Learn how to speak up and say no. For some of us, we get stressed because we do not know how to say no effectively, and then feel resentful because we are lumbered with all these things that we did not want. When you are assertive, you are able to get your message across in a respectful manner - being respectful to yourself and the

other person. Being assertive is not about being aggressive or passive - it is about confidently and respectfully taking ownership of how you are feeling when a particular thing happens by making 'I' statements, and stating what you would like as the outcome.

***Develop appropriate coping strategies.*** Stress is a very real part of life for all of us. What stresses one person is not necessarily going to stress another person, and therefore we are all going to experience stress in different ways. Being able to develop appropriate coping strategies is essential to managing stress and enabling us to keep a sense of wellbeing. Recommended strategies include acceptance and commitment therapy and positive psychology (as discussed in chapter two).

***Seek professional help.*** If you feel like stress has control of you, it is essential to take appropriate action and do something about it. Being proactive rather than reactive is crucial. If you do not feel like you have appropriate (and by this, it means healthy and safe) strategies, we highly recommend you seek professional help. Speaking with your doctor or a psychologist is a great way of taking action, as they can generally help you to develop your own appropriate coping strategies to combat stress.

## Appendix M – Time Management

The following time management strategies are presented as suggestions and recommendations to assist you in better managing your time and becoming more organised.

***De-cluttering / mind dumping.*** If you think of your mind as a drawer or bookshelf - there is only so much information that can be stored in there at any one time. Once that drawer or bookshelf is full, there is no room left for anything else to be stored there - if we try to cram more in there, it will eventually collapse or give way. Sometimes there are so many competing demands on our minds that it all becomes very overwhelming and we feel as though we can no longer cope. Therefore, it is essential that we are able to empty out information in order to make way for new information to fit. When we have a nice balance with this, information is able to come and go more freely.

***Making a task or “to do” list.*** Making a to-do list or list of tasks is a great way to get all those thoughts in your head down on paper - where you can stop having to try and remember them.

***Task list.*** Make a complete list of all the tasks (both large and small) that are running around in your head. This list should include things like projects, work tasks - emails, phone calls, reports, meetings, follow-ups, calendar items, social requests, family commitments, appointments and so on.

***Journal.*** Make a list or journal of all the thoughts currently running around in your head - even if they are just one-word (for example, if you are trying to remember to go to the bank, just write ‘bank’ as a prompt).

***Set up a “tickler” file.*** Tickler files are like mini-reminders. They act as prompts, so anything in that particular file is a reminder that you have to do something that day or within that month.

***Monthly files.*** Set up a “tickler” file by having one file for each day of the month (so they would be labelled 1-31) or one file for each month (so January to December)

***To-do lists.*** Mark items on your ‘to do’ list with a corresponding date when it is required, and then place them in the relevant month’s file. When you get to that file, you then address each of the items in it. It eliminates the need to have to check and re-check all the documents on

your desk in case you have missed a deadline on something. It also means you can stop worrying about trying to get everything accomplished in one day, by allowing you to prioritise things that are really important today.

***Clear or tidy your desk.*** For many of us, when our desks and offices or homes are cluttered, our minds feel cluttered. Being able to clear away this clutter allows us some clarity and focus.

***Completely clear your desk.*** If an item requires action, decide when you will act on it, write it on the document, and put it in your tickler file. If something needs filing, mark it 'filing' and put it in a filing tray/folder. If something needs to be on someone else's desk – put it there. Remember, if in doubt, throw it out.

***Immediate tasks.*** Any time you are given an action task that would take less than two minutes to undertake, do it immediately.

***General tips.*** The following are a few general tips that can assist with getting you organised and managing your time more effectively

- any time you are given an action task that would take less than two minutes to undertake, do it immediately;
- when you are talking on the phone, stand up while doing so;
- each morning, do the most important item first;
- realign your levels of stress by looking out the window, taking a walk outside, or changing your mindset;
- if you have any 'in between' time, such as waiting for someone to get back to you, or you have a spare 10 minutes before an appointment, use this time effectively, such as: returning phone calls, keeping a file with reading material in it and read something out of it, clean your desk and put things back in their proper places, go through your daily action list, update your daily action lists and waiting lists, check your mail, write a note or memo.

***On the phone.*** These suggestions can help you while you are on the telephone, and are simple steps you can take to try and avoid lengthy phone calls

- group important phone calls together and do them all at once;
- plan your calls (for example, make a list of the questions you need to ask);

- focus your concentration on the call (that is, do not try and respond to emails at the same time);
- stand up while talking.

***Your personal prime time.*** Your personal prime time is the time during the day where you are at your prime. Once you have identified your prime time, there are three things you need to do: 1) Respect this time - do not do trivial tasks such as filing or tidying your desk as you are potentially putting off starting a difficult task. Try to stay on track by disciplining yourself. 2) Protect your prime time - block the two-hour period off on your calendar so activities of less importance do not impede this time. 3) Direct your prime time - schedule the tasks requiring the most concentration and energy (and generally the most important ones) into this part of your day. In order to identify your personal prime time, the following steps are recommended.

***Splitting your day.*** Split your day into two-hour time segments. When you have done this, put an 'x' into the appropriate two-hour time segment box to indicate your level of energy during a typical work day.

***Personal prime time.*** Once you have completed the chart with x's, a typical day can be graphed by connecting the x's to see how and where each day has its ups and downs. Where there are times of high energy, pick that particular time segment as your prime time, which is when you are at your peak mentally or physically.

***The most important 15 minutes.*** It can take just 15 minutes to schedule your entire work day. Therefore, you should block off 15 minutes on your calendar each day, and use this time to make sure your days are ones of purpose, direction, accomplishment, and meaning. It is recommended that you undertake this 15-minute schedule at the end of your work day in order to make your momentum work for you (ideas are generally fresher at the end of each day, as you have an awareness of what you achieved or did not achieve that day). By doing this at the end of the work day, it gives you a sense of closure on the day, and also enables you to identify the most important tasks to do the next day, giving you the opportunity to start the task first thing the next morning.



***Calendars and diaries.*** Keep an appointment calendar, and make sure you put everything into it. Keep a time inventory or schedule (such as 8.30am to 9.30am: respond to emails).

Rank your priorities as follows

- A = urgent;
- B = important;
- C = no time frame.

Then itemise each one in each category as A1, A2, and so on, to list each urgent item and its priority. As an example, A1 would mean it would need to be attended to before anything else.

***Procrastination list.*** Make a list of all the things you have been procrastinating about. Rate each of these items in terms of how much pressure you feel for not having completed them. Start with the item that has been bothering you the most, and continue down your list until everything has been completed.

***Handling visitors.*** Some suggestions for how to handle visitors include

- screen your visitors;
- meet visitors outside your office;
- stand up if a visitor enters your office;
- confer while standing up (so they do not get too comfortable);
- set time limits for visits (such as “I have a phone call to return in 5 minutes”);
- develop rescue signals with co-workers.

***Handling internal drop-ins.*** As with handling visitors, there are also those people from within your organisation or home that drop-in unannounced. Some strategies for handling these effectively can include

- meet with associates/co-workers regularly so as to limit meeting times;
- agree on a “quiet time” in the office;
- establish times when you are available to others;
- block interruptions.

***Cluster your time.*** Wherever and whenever possible, set aside a designated time period where you can cluster similar activities together - for example, emails and phone calls.

***Putting it all together - time to take action now.***

- prepare your 'mind dump';
- identify your 'to do' list;
- prioritise items on your 'to do' list;
- complete your personal prime time chart;
- prepare an appointment calendar/diary;
- prepare your procrastination list.

**Appendix N – DASS21 interpretive categories**

Range	Normal	Mild	Moderate	Severe	Extremely Severe
Depression	0 – 9	10 – 13	14 – 20	21 – 27	28+
Anxiety	0 – 7	8 – 9	10 – 14	15 – 19	20+
Stress	0 – 14	15 – 18	19 – 25	26 – 33	34+

### Appendix O - Interpretive scores for Meaning in Life Questionnaire

<p>Above 24 on Presence Above 24 on Search</p>	<p>If you scored above 24 on Presence and also above 24 on Search, you feel your life has a valued meaning and purpose, yet you are still openly exploring that meaning or purpose. You are likely satisfied with your life, somewhat optimistic, experience feelings of love frequently, and rarely feel depressed. You are probably somewhat active in religious activities, and tend not to value pursuing sensory stimulation as much as others. You are generally certain of, and occasionally forceful regarding your views and supportive of having an overall structure in society and life. People who know you would probably describe you as conscientious, thoughtful, easy to get along with, somewhat open to new experiences, and generally easy-going and emotionally stable.</p>
<p>Above 24 on Presence Below 24 on Search</p>	<p>You feel your life has a valued meaning and purpose, and are not actively exploring that meaning or seeking meaning in your life. One might say that you are satisfied that you have grasped what makes your life meaningful, why you are here, and what you want to do with your life. You are probably satisfied with your life, optimistic, and have a healthy self-esteem. You frequently experience feelings of love and joy, and rarely feel afraid, angry, ashamed, or sad. You probably hold traditional values. You are usually certain of, and often forceful regarding, your views and likely support structure and rules for society and living. You are probably active in and committed to religious pursuits. People who know you would probably describe you as conscientious, organised, friendly, easy to get along with, and socially outgoing.</p>
<p>Below 24 on Presence Above 24 on Search</p>	<p>You probably do not feel your life has a valued meaning and purpose, and you are actively searching for something or someone that will give your life meaning or purpose. You are probably not always satisfied with your life. You may not experience emotions like love and joy that often. You may occasionally, or even often, feel anxious, nervous, or sad and depressed. You are probably questioning the role of religion in your life, and may be working hard to figure out whether there is a God, what life on earth is really about, and which, if any, religion is right for</p>

	<p>you. People who know you would probably describe you as liking or play things by ear, or ‘go with the flow’ when it comes to plans, occasionally worried, and not particularly socially active.</p>
<p>Below 24 on Presence Below 24 on Search</p>	<p>You probably do not feel your life has a valued meaning and purpose, and are not actively exploring that meaning or seeking meaning in your life. You may not always be satisfied with your life, or yourself, and you might not be particularly optimistic about the future. You may not experience emotions like love and joy that often. You may occasionally, or even often, feel anxious, nervous, or sad and depressed. You probably do not hold traditional values, and may be more likely to value stimulating, exciting experiences, although you are not necessarily open-minded about everything. People who know you would probably describe you as sometimes disorganised, occasionally nervous or tense, and not particularly socially active or especially warm towards everyone.</p>

### Appendix P – Wilcoxon Signed Ranks Test Results

	D_pre	A_pre	S_pre	D_post	A_post	S_post	NA_pre	PA_pre	NA_post	PA_post	MLQS_pre	MLQPr_pre	MLQS_post	MLQP_post
N Valid	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	10.8333	8.3333	19.8333	5.6667	4.8333	10.6667	16.2500	33.6667	12.1667	34.5833	22.3333	23.4167	22.5000	24.0000
Median	11.0000	8.0000	21.0000	2.0000	4.0000	10.0000	16.5000	30.5000	11.5000	33.0000	24.5000	23.5000	25.0000	26.0000
Mode	.00 <sup>a</sup>	2.00 <sup>a</sup>	24.00	2.00	.00	10.00	17.00	29.00	10.00 <sup>a</sup>	22.00 <sup>a</sup>	5.00	23.00 <sup>a</sup>	25.00 <sup>a</sup>	29.00
Std. Deviation	6.89971	6.08027	6.63097	6.13979	6.57590	7.15203	3.86417	10.99035	2.03753	9.02983	10.33382	3.82476	9.70941	4.95434
Range	20.00	20.00	20.00	16.00	22.00	26.00	15.00	33.00	6.00	28.00	30.00	13.00	30.00	15.00

a. Multiple modes exist. The smallest value is shown

	D_post - D_pre	A_post - A_pre	S_post - S_pre	NA_post - NA_pre	PA_post - PA_pre	MLQS_post - MLQS_pre	MLQP_post - MLQPr_pre
Z	-2.354 <sup>b</sup>	-2.534 <sup>b</sup>	-2.805 <sup>b</sup>	-2.590 <sup>b</sup>	-.667 <sup>c</sup>	-.358 <sup>b</sup>	-.766 <sup>c</sup>
Asymp. Sig. (2-tailed)	.019	.011	.005	.010	.505	.720	.443

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.