



ANIMAL WELFARE IN SOUTH AFRICA:
A MULTI-COMPONENT PROGRAMME DESIGN

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COMPULSORY DECLARATION:

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this research proposal from the work, or works of other people has been attributed, cited and referenced.

Signature:

Signed by candidate

Date: 12th December 2014

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Executive Summary

The ongoing international atrocity of animal abuse is a persistent and widespread social problem within human society. The maltreatment of animals, particularly in rural impoverished contexts in South Africa continues to be a pertinent challenge facing local animal welfare organisations. Upon identifying the need to improve the conditions of animals living in the Darling community, the Swartland SPCA approached the evaluator in order to design a plausible humane education programme.

The evaluator began this research by reviewing the history and underlying principles of humane education, the efficacy of humane education, as well as formalised humane education programmes. Findings from the review revealed that humane education programmes hold diminished capability for the achievement of improved animal welfare when implemented in isolation. Although these programmes aim to affect behavioural change in order to respond to the problem of animal welfare, behavioural change is not easily achieved with a simple intervention such as humane education. Thus, designing a programme for the Swartland SPCA based solely on the logic of humane education with the expectation of behavioural change was deemed problematic. Subsequently, the evaluator endeavoured to develop a novel programme design to target the problem of animal welfare in Darling.

Increasingly, research points to the need for a multifaceted approach in dealing with the problem of animal maltreatment due to its complex nature as well as the fact that it is based on a large number of confounding personal, familial, social, cultural and psychological factors. To address this need, the evaluator, in consultation with the SPCA, identified a number of possible reasons as to why the problem of animal welfare was a prevalent issue within the Darling community. This highlighted the need for additional interventions that could be employed holistically to alleviate the problem of animal abuse.

Given that this research concerns the welfare of animals in terms of human-directed behaviours, it was decided that humane education as a form of intervention should be investigated further in its ability to affect attitudinal change in conjunction with

violence prevention and peer education / modelling interventions as additional programme components. In order to affect interpersonal violence at a behavioural level, a violence prevention component was selected with the hope that reductions in interpersonal violence may extend toward the reduction of violence and abusive behaviour towards animals. Finally, peer education / role modelling was selected as a means of involving community members in the promotion of animal welfare via the concepts developed from the humane education programme component.

Since an improvement of animal welfare conditions is essentially dependant on the performance of individual behaviours, grounding the programme in a theory of behaviour change was identified as an important first step in the programme design. As such, Ajzen's theory of planned behaviour was utilised as a behaviour change model in order to guide the programme's design framework and to ensure that the programme components corresponded with theoretically identified mechanisms of behavioural change. It was anticipated that utilising a multidimensional programme design rooted in a theory of behaviour change would increase the likelihood of achieving the link between attitudinal change and behavioural change.

Therefore, this evaluation provides the Swartland SPCA with a broad-based programme design which provides a variable-oriented insight into the proposed mechanisms of change and can be utilised as a framework in the adaption of programme components. It is envisioned that this tool be used by the programme stakeholders to decide on intended outcomes, select the programme activities, and further define the design details thereof.

A number of recommendations are also made in order to assist with the successful implementation of this programme and its sub-components in the long term. These include lobbying for the inclusion of animal welfare and violence prevention content as part of national school curricula, obtaining a violence prevention partner organisation to assist with certain implementation considerations, and finally the importance of continuous community engagement and involvement prior to and during the programme's rollout.

Glossary

- Animal Welfare: a state of harmony between the animal and its environment, characterised by optimal physical and psychological functioning and high quality of an animal's life (Hughes, 1976).
- Animal Abuse: non-accidental, socially unacceptable behaviour that causes pain, suffering or distress to and/or the death of an animal (Ascione & Shapiro, 2009).
- Animal Cruelty: socially unacceptable behaviour that causes unnecessary pain, suffering, or distress to and/or death of an animal (Ascione & Shapiro, 2009)
- Animal Neglect: denying an animal food, water, or medical treatment, the excessive confinement of an animal, or allowing an animal to live in filth (DeGue & DiLillo, 2009).
- Violence Against Animals: the intentional infliction of physical pain or injury (e.g., beating, shooting, drowning; making an animal fight; engaging in sexual acts with an animal) on an animal (DeGue& DiLillo, 2009).

It is important to note that the definitions of 'animal abuse' and 'animal cruelty' are similar and often used interchangeably. Some authors (McPhedran, 2008) argue that 'abuse' differs from 'cruelty' as abuse infers the performance of behaviours that cause intentional and unnecessary pain, suffering and distress and/or death whilst cruelty does not necessarily imply the performance of deliberate behaviour. Despite these distinctions, for the purpose of this dissertation the term **animal abuse** will be used as a generic term to refer to all forms of abuse, cruelty, neglect and violence against animals.

“Our prime purpose in this life is to help others, and if you can’t help them, at least don’t hurt them” Dalai Lama

Chapter 1: Introduction

Animal abuse ranging from purposeful violent behaviours to unintentional neglect, is a longstanding and persistent occurrence within human society (Ascione & Arkow, 1999). Although animal abuse may be thought of as an archaic practice, it is in fact still an ongoing global atrocity even in the modern and civilised world in which we currently live. From a South African perspective, abuse against animals is a prevalent issue. Over the course of two years (2012 – 2013) 6, 232 animal abuse charges were investigated in the Western Cape alone (*Cape of Good Hope SPCA*, 2013). The establishment and proliferation of societies and organisations dealing with animal welfare are testament to the fact that maltreatment of animals continues to be a pertinent contemporary problem facing society today.

While there are a number of different organisations committed to animal welfare within South Africa, the Society for the Prevention of Cruelty to Animals (SPCA) is the largest and most prominent organisation of its kind. Founded in 1872, the SPCA is also the oldest animal welfare organisation in South Africa. Regionally, the SPCA has over 90 branches that operate in both major and smaller cities across the country. As a registered non-profit and public benefit organisation, the SPCA is concerned with the protection of animals against abuse, cruelty, neglect and maltreatment. The SPCA comprises several different units/services that together ensure the protection of animal rights. These units/services include: a 24-hour inspectorate, a lost and found service, mobile clinics, and humane education programmes. The SPCA also houses a number of centres including an animal hospital, boarding kennels, a horse care unit and an animal care centre.

Globally, a problem frequently encountered by animal welfare organisations is that of uncontrolled animal populations. In South Africa this problem is more frequently found in informal settlements. Due to the vast number of felines and canines in these settlements, many are unwanted and uncared for which often results in animals developing infections and diseases. This may adversely affect human residents in these informal settlements, especially children, who are at risk for contracting these same ailments. The problem of uncontrolled canine and feline

populations is exacerbated by the fact that informal settlements are often ill-equipped in dealing with the problem of sterilisation, let alone the consequences of uncontrolled animal populations. In an attempt to manage this problem, SPCA branches frequently run mass sterilisation campaigns in communities where a need has been identified.

Located in the Western Cape, the Swartland branch of the SPCA recently ran a mass sterilisation campaign in Darling with the aim of sterilising 70% (915) of the animals in this area (Swartland SPCA, 2014). During the campaign, a team of inspectors visited each household in the area to identify animals that needed to be neutered or spayed. After identifying these animals and receiving permission from the owners, inspectors scheduled them for the sterilisation procedure. The scheduling was planned according to the street in which the animal was housed. The sterilisation process was carried out sequentially in one or two streets at a time. Animals from these streets were transported to the Swartland SPCA's animal hospital where they were surgically sterilised and allowed time to recover. Thereafter, the animals were transported back to their owners. Inspectors then collected another cohort of animals until all animals identified were sterilised. This method of scheduling ensured that no animals were accidentally overlooked. The campaign, which began in October 2013, has seen SPCA inspectors visiting a total of 1, 985 houses in the area. Of the houses visited, 71% (1, 403) were found to accommodate animals and consent to sterilise animals was obtained from 76% (1, 068) of these households. This has resulted in a remarkable feat with the sterilisation of 1, 136 animals which amounts to 87% of the total number of animals in the Darling area.

This highly successful campaign surpassed its objective of sterilising 70% of the animals in the area. During the sterilisation drive, however, the team of SPCA inspectors identified additional concerns during house visits. Inspectors recorded the observed conditions of the animals, some of which were alarming. In their reports, inspectors classified the appearance of an animal's body structure as either a) emaciated, bony and starved, b) thin, lean or skinny, c) normal ideal and often muscular, d) obese, or e) overweight, heavy, husky or stout. Inspectors also noted the appearance of mange, ticks, fleas, bites and ringworm. Lastly, the inspectors ascertained whether rabies and 5in1 vaccinations had been administered to the animal.

In addition to the poor physical conditions of the animals, there were a number of animals without shelter, water, food and appropriate veterinary care and this was highlighted as a further concern. It is believed by SPCA inspectors that these poor conditions are commonly caused by ignorance and/or a lack of understanding of animal needs by individuals living in South Africa, specifically those in poorer and poverty stricken areas (Cape of Good Hope SPCA, 2014). Subsequently, the Swartland SPCA expressed interest in implementing a humane education programme in order to a) educate residents of the informal settlement on the appropriate care for their animals; and as a result b) improve overall welfare of animals in Darling. The SPCA approached the evaluator to conduct research to assist with this endeavour. It was envisioned that this dissertation would be used to source funding from several sponsors to finance the proposed programme. As such, the development of this project for the SPCA is currently in its conceptual phase. As a starting point the evaluator began to explore literature on humane education. By analysing the research that has been conducted in this area, the following review aimed to document: 1) the concept of humane education; 2) its history; 3) the underlying causal logic of these interventions; and 4) the effectiveness of these programmes. The next section details the findings of this literature review.

Humane Education

Humane education is broadly defined as the teaching of compassion and respect in relation to animal welfare, environmental and social justice concerns (Itle-Clark, 2013; Selby, 1995). It is centred on the transmission of relevant information, strategies and skill sets that endeavour to develop and promote a way of life that is more ethical, sustainable and peaceable. Humane education strives to incorporate concerns about animals, humans and the environment into educational practices and recognises them as interconnected and fundamental aspects of a morally conscious, just, and healthy society (Antoncic, 2003). Additionally, it seeks to explore and advance methods through which people can live with increased kindness and a better regard for the planet and all of its life forms. Through these principles, humane education aims to model, encourage and instil a sense of empathy towards animals, the environment and ultimately other human beings (Horsthemke, 2009). Traditionally, the concept has been seen as a method of ensuring that children grow and develop into humane adults. The underlying mechanism governing this concept

is that of transference in that it is thought that children will extend the concepts suggested through humane education to their relationships with humans. By highlighting the consequences of human action and how these actions impact other species, animals, individuals and the earth itself, humane education seeks to encourage individuals to take greater responsibility in the creation of a more responsible, active, independent society and ultimately a better world for all.

History of humane education.

Initially, the humane education movement did not begin with its current broad intentions of promoting respect for all forms of life and the environment. Rather, it came about as an attempt to teach children the importance of kindness to animals (Antoncic, 2003). Children's propensity for abuse towards animals was recognised as problematic by society as early as the seventeenth century. During this time, the importance of childhood experience and the impact this had on youthful character had only just come to be understood. It was this recognition that led to the correction of childhood animal abuse. The rectification of such behaviours was considered important as it was reasoned that abuse towards animals may eventually be directed toward humans (Unti & deRosa, 2003). Even though, at this point in time, humane education was thought to be inherent in the cultural value of society, it soon became evident that more moral guidance needed to be directed towards children (Itle-Clark, 2013). Animals were well-suited for this form of instruction and assisted in teaching children values such as self-discipline, empathy, and moral sensitivity that were regarded as important traits of gentility (Arkow, 2006). Consequently, a need to incorporate the teaching of the humane treatment towards animals within educational systems was identified.

Much of the literature suggests that the late 1800s was the time at which humane education began to emerge as a formalised movement after the establishment of animal welfare organisations in the United States (Itle-Clark, 2013). During this period, efforts were made by such organisations to encourage empathy for animals in an attempt to reduce abuse towards animals within society at large. The utility of humane education extended beyond abuse towards animals and was also seen as a valuable means of controlling anarchy and radicalism, ensuring public order and reducing crime (Arkow, 2006). Although this concept initially began in response to the problem of children's abuse directed at animals, during its formative

years humane education was in fact aimed towards both adults and children (Unti & deRosa, 2003). When animal welfare organisations, however, recognised that law enforcement approaches could only extend so far in dealing with the problem of animal abuse, it became evident that humane education practices should instead be directed towards children as a means of not only reducing, but also preventing the occurrence of abuse crimes in later adulthood. Therefore, the emphasis of humane education was soon shifted to the education of children alone as a long term response to the spread of animal abuse. This shift has since been incorporated as one of the central themes in humane education practice as it is believed that educating children to treat animals with respect and kindness will encourage them to treat humanity in a similar way later on in adulthood (Horsthemke, 2009). Moreover, humane education is seen not only as a means of preventing violence toward both animals and humans, but also as a means of increasing the likelihood of identifying and intervening in violence that may already be occurring (Faver, 2010).

After the shift in the focus of humane education exclusively on children, the movement's values were slowly incorporated into formal education systems toward the end of the 1800s and the beginning of the 1900s. This sparked the growth, proliferation and some progression toward the institutionalisation of the movement (Unti & deRosa, 2003). Attempts to institutionalise humane education within school classrooms were driven by three processes: a) the influx in both children's and educational literature dedicated to the topic, b) the passing of regional legislation within the United States advocating for the compulsory teaching of humane education in school systems, and c) the introduction of academic courses on the topic in tertiary institutions.

The proposed institutionalised concept sought to employ formal instruction methods as a means to develop children's knowledge, attitudes and behaviours towards the empathetic and responsible treatment of both animals and other individuals (Ascione, 1997). It also sought to advance of a sense of empathy towards all living things and, at the same time, empowered children to utilise their acquired knowledge to act in support of animals within their communities (Horsthemke, 2009). Yet, as is often the case with concepts related to the organisation and control of human behaviour, the status of humane education has been moulded by the social, political and cultural landscape in which it has found itself over the twentieth century. A lack of institutionalisation in the public school curriculum as well as a shift in focus

on the World Wars during this time saw the vigour once paid towards humane education programmes decline (Faver, 2010; Unti & deRosa, 2003). Towards the end of the twentieth and into the beginning of the twenty-first century, however, interest in humane education has gradually begun to resurface and programmes have slowly been re-instilled in schools and youth-oriented institutions.

Ultimately, in the same way that assisting children in the development of good character became an essential part of their education, teaching them to treat animals humanely became an integral component of good character. This circular concept continues to be a central theme currently linking many variations of humane education globally and is also seen as a highly relevant response to the challenges faced by society in the twenty-first century.

Underlying theories of humane education.

The theoretical underpinnings of humane education are supported by research proposing to demonstrate that intentional animal abuse during childhood serves as an indicator for engagement in other forms of interpersonal violence later in life (Arbour, Signal, & Taylor 2009). A number of studies have demonstrated that the first signs of violence displayed by children tend to manifest in animal abuse, and often escalate to more serious acts of violence against other individuals (Antonicic, 2003; McPhedran, 2008; Thompson & Gullone, 2003). This area of research has been predominantly investigated using correlational methods. As a result, this approach does not constitute direct empirical evidence that animal abuse in childhood *leads to* interpersonal violence in adulthood, however, there is sufficient evidence available to suggest a strong association between these two types of violence (Ascione, 1993; Flynn, 2000; Gullone & Clarke, 2008).

In a study investigating the link between criminal violence and animal abuse, incarcerated offenders convicted on the basis of violent crimes were assessed for indications of cruelty to animals in childhood (Merz-Perez, Heide, & Silverman, 2001). Results suggested that violent offenders were significantly more likely to report that they had committed acts of animal abuse during childhood than other offenders convicted of non-violent crimes. In a similar investigation, Gullone and Clarke (2008) corroborated these findings by demonstrating that, on average, offenders with a history of animal abuse committed a higher number of offences directed towards other individuals, such as homicide and rape, compared to

offenders without a history of animal abuse. Furthermore, in a review of studies employing a sample of incarcerated individuals, Ascione (2001) found that between 25% and 66% of violent criminals' developmental histories demonstrate intentional acts of animal abuse.

Since the majority of this research is based on criminal samples, other authors have attempted to investigate similar hypotheses using samples of university students to determine whether youths who commit acts of animal abuse are more likely to approve of later engagement of interpersonal violence. After surveying an undergraduate student sample about past experiences with animal abuse and current attitudes towards several forms of family violence, Flynn (1999) found that respondents who reported engaging in animal abuse during childhood displayed significantly more favourable attitudes towards corporal punishment and inter-partner violence in comparison to those respondents who had not engaged in such abuse.

Further research has also revealed significant associations between animal abuse, domestic violence, and child abuse such that the presence of animal abuse is argued to be a marker of interpersonal and inter-partner violence in the home (Ascione, Weber, & Wood, 1997). Studies have demonstrated that the incidence of animal abuse is greatly increased in households in which family violence and abuse is present in comparison to control households in which violence is not present (McPhedran, 2008). In research utilising a sample of university students, exposure to family violence and animal abuse was investigated. It was found that animal abuse may be indicative of family violence as 60% of participants who had witnessed or committed acts of animal abuse during childhood also reported experiences of child maltreatment or domestic violence (DeGue & DiLillo, 2009). Although much of this research is both retrospective and correlational in nature, it suggests that childhood animal abuse may constitute a significant marker for criminal behaviour later in life. Moreover, the research has shown that committing acts of animal abuse in childhood may lead to increased acceptance of, or a desensitisation towards interpersonal violence.

Since such research has demonstrated there is a likelihood that individuals who commit acts of violence are often involved in acts of animal abuse in childhood, the focus of humane education has shifted to children in order to prevent or reduce the potential for this linkage at an early age (Antoncic, 2003). Through its focus on values of respect, compassion, responsibility and empathy, as well as the

advancement of pro-animal attitudes, humane education is thought to offer an effective means to accomplish this objective. Humane education is therefore considered to possess the potential to assist in the prevention of both unintentional and intentional animal abuse in childhood and may decrease later tolerance for interpersonal violence (Arbour et al., 2009).

While some authors maintain that the prospective reduction and prevention of interpersonal violence may hinge directly on the ability to teach children about the compassionate and respectful treatment of all living beings, others argue that such a link remains unsubstantiated by empirical scientific literature (Ascione & Shapiro, 2009; Miller & Knutson, 1997). For example, the findings of Arluke, Levine, Luke, and Ascione (1999) demonstrate that whilst there is an association between animal abuse and a variety of antisocial behaviours, this association is not exclusive to only violent behaviours. Furthermore, the authors argue that the link between animal abuse and later interpersonal violence is too simplistic and belies the more complex and subtle associations that exist in this relationship (Arluke et al., 1999). Beirne (2004) has termed the alleged chronological causal relationship between animal abuse and interpersonal violence the 'progression thesis' and notes that there are evidentiary weaknesses in the methodology and conceptualisation of this theory.

One of the fundamental flaws in this body of research stems from the inconsistent definition and employment of such concepts as animal 'cruelty' and 'abuse'. These concepts have received insufficient theoretical attention in terms of their operationalisation and fail to indicate at what level certain behaviours can be classified as cruel or abusive (McPhedran, 2008). The absence of longitudinal studies is a further methodological concern in this research. Without investigations that examine the relationship between childhood animal abuse and later engagement in interpersonal violence at more than one point in time, the chronological causal sequence of the progression thesis remains unfounded (Beirne, 2004). Instead, the existing evidence supports the hypothesis that there may be a number of behavioural and developmental problems, including childhood animal abuse, which cluster together and occur concurrently whilst sharing a similar contextual background. As such, this contradicts the hypothesis that animal abuse in isolation precedes and then leads to other violent antisocial behaviours and also challenges the supposition that preventing abuse towards animals will also inhibit the development of later violent behaviour.

A further flaw in the methodology of this research is that much of it employs samples of incarcerated individuals who are representative of a population that may already lack moral fortitude. The use of such populations threatens the validity of this research as it gives rise to two sampling biases. Firstly, since these individuals may have already practiced other violent acts in the past, the external validity of these studies is compromised as they are unable to generalise their findings to other populations. Secondly, incarcerated individuals may possess a vested interest in exhibiting exaggeratedly aggressive personae and may therefore tend to overstate or even construct retrospective and self-reported acts of animal abuse and violence they have been involved in (McPhedran, 2008). This may result in erroneous findings that fundamentally threaten the validity of a large section of this research. Ultimately, owing to a lack of focused empirical data and a lack of reliability due to retrospective analyses, it is contested that generalisations from animal abuse to interpersonal violence are seemingly premature (Beirne, 2004; McPhedran, 2008). Although there is a strong association between these concepts, more empirical evidence regarding the specific nature and temporal precedence of this relationship is needed in order to draw sound causal inferences.

Despite the questionable basis of this research, humane education has incorporated the supposition that teaching children to treat animals with compassion and kindness will in turn influence the way in which children behave toward others later in life (Ascione, 1997). Therefore, humane education assumes that there is a causal link between intentional animal abuse enacted during childhood and the engagement in other forms of interpersonal violence later in life. As such, if abusive behaviour towards animals may eventually result in interpersonal violence against humans, then perhaps teaching children to behave respectfully and compassionately towards animals may also eventually generalise to human interaction and behaviour. In addition, humane education also supports the supposition that changes in attitudes will eventually lead to changes in behaviour toward both animals and humans. Indeed, attitudinal and behavioural changes have been identified as the key objectives in humane education practice (Arkow, 2006). Although the central aim of humane education focuses on the development of *both* pro-animal attitudes and behaviours, research into the teaching of humane education predominantly utilises attitudinal measures to assess effectiveness in fostering positive relations towards animals (Arbour et al., 2009). To date, little research has been conducted that

assesses humane education's impact on either self-reported or observed behaviour in relation to animals.

Taken together, the evidence suggests that humane education's confidence in the ability of attitudinal change to affect behavioural change is unfounded as, at present, research remains inconclusive. Despite this, most research into the effects of humane education has focused on its impact on attitudinal rather than behavioural measures. Therefore, the relationship between attitude and behaviour change has yet to be empirically demonstrated in humane education research. Some studies have made attempts to measure both attitudinal and self-reported behaviour change toward animals after the implementation of a humane education programme (Arbour et al., 2009; Ascione, 1992; Nicoll, Trifone, & Samuels, 2008; Sprinkle, 2008). Although such studies demonstrate that programmes are able to affect changes in attitudes towards animals, their ability to subsequently affect a change in self-reported behaviour remains unsupported by empirical evidence. Therefore, although the link between attitude change and resultant behaviour change using experimental designs appears theoretically plausible, more research directed toward this in the field of humane education is needed to determine whether this concept will be supported in this domain.

Ultimately, the purpose of humane education is to affect real world changes in behaviour with regard to the reduction of violent and abusive behaviours directed towards animals. Thus far, literature concerning the history, current research and underlying theories of humane education has not been able to conclusively demonstrate that this concept is effective in achieving its intended real world behavioural outcomes. Despite this, welfare organisations still view these kinds of programmes as a proactive way to attempt to resolve the issue of animal abuse. Having considered the history and underlying principles of humane education, the following section will review the extent to which humane education programmes are considered effective from two perspectives: 1) their ability to affect attitudinal changes towards animals and 2) their ability to affect behavioural changes towards animals. Furthermore, the extent to which humane education programmes that cause attitudinal changes are also effective at changing behaviours towards animals will be examined.

Evaluation research of humane education.

Despite the popularity of the concept, formalised research into the impact of humane education interventions and the implementation of programmes only began in the late 1900s (Unti & deRosa, 2003). Even though humane education seems to be experiencing a current resurgence, after almost a century since its inception, the knowledge, understanding and empirical research into the implementation of formalised programmes remains limited. Moreover, the methods through which the objectives of such programmes are achieved remain varied. Despite the small amount of empirical research conducted on these programmes and their underlying theory, there are very few humane education programmes that have been subjected to formal evaluation in an attempt to gauge their effectiveness

Early research.

The research literature surrounding humane education begins with a number of studies conducted in the early 1900s that attempted to investigate the role of animals in children's psychological and social development. Vockell and Hodal's (1980) study is frequently cited as one of the earliest attempts to examine the impact of a humane education programme on measures of children's attitudes towards animals. In this study, school children received a humane education programme presented by a visiting educator together with printed materials and posters. The effect of the programme was assessed using the Fireman test which is designed to measure the extent of children's favourable attitudes toward animals (Vockell & Hodal, 1980). Although results indicated that children who received the programme demonstrated more favourable attitudes towards animals than the control group, the failure to collect pre-test information makes for a problematic interpretation of these results as the groups may have differed significantly in their humane attitudes prior to the implementation of the programme. Nonetheless, this study was the first of its kind to advance the understanding of humane education programmes in the classroom.

In a similar study employing the Fireman test in a pre- and post-test design, Fitzgerald (1981) used four different conditions to evaluate the effectiveness of a focused classroom humane education programme with different durations and treatment intensities on humane attitudes in school children. Results indicated that the group who received a more intensive treatment demonstrated significantly more

humane attitudes than the three other groups. Thus, Fitzgerald (1981) concluded that focused classroom presentations could have a positive influence on the humane attitudes of children.

In further a study investigating whether more extensive humane education programmes result in a greater impact on older children's animal-related attitudes, Cameron (1983) utilised two programmes focused on either reading material and media presentations alone or presentations combined with lectures presented by an instructor. Although there were no significant differences between the intervention groups themselves, pre- and post-test scores revealed that both intervention groups' mean attitude scores were higher than those of a control group. Cameron (1983) concluded that in older children, intensive interventions can have a positive impact on animal-related attitudes.

Whilst all of these earlier studies were largely problematic in terms of their design, they formed the foundation from which more empirical evaluation research was conducted in later years.

Formalised evaluation of humane education.

From the literature review, there was a small amount of research that reported formalised evaluations of humane education. In one of the earliest and most ambitious evaluations of humane education, Ascione, Latham, and Worthen (1985) used an experimental pre- and post-test design to assess the effects of a school-based curriculum-blended humane education intervention on children's humane attitudes. The study targeted both children and teachers. The intervention group consisted of 1,800 randomly assigned children and 77 randomly assigned teachers. Children in this group were guided through an average of ten hours of instruction on humane education material during the school year, whereas the control group did not receive the intervention. Children's attitudes toward companion and non-companion animals were assessed both pre- and post-intervention. The study's main objective was to conduct an ecologically valid evaluation of humane education teaching materials as they would be used over the course of a school year. The intervention resulted in increases in attitudes amongst younger children in comparison to children in the control group of the same age. Results also demonstrated that older female children demonstrated increased attitudes compared to males. Despite a moderate

yet inconsistent enhancement of attitudes for children who received the intervention, the study produced encouraging results.

A few years later, Ascione (1992) again used a similar curriculum in assessing the impact of a year-long humane education programme on school children's animal-related attitudes as well as human-directed empathy. The study employed a pre-test post-test design in which 32 first, second, fourth and fifth-grade classrooms were randomly assigned to either the experimental or control condition. Volunteer teachers in the experimental group implemented a humane education curriculum for a minimum of 40 hours during the school year, whereas teachers in the control group refrained from humane education instruction (Ascione, 1992). Results indicated that the animal-related attitudes of children were improved inconsistently depending on grade-level. Younger children, but not older children, in the experimental group demonstrated a significant difference in attitudes in comparison to those in the control group. The programme also produced increases in post-test scores on the generalisation measure of empathy for experimental groups as opposed to control groups in older children.

To assess whether the effects of this programme could be sustained, Ascione and Weber (1996) located and re-tested 80% of the original sample of fourth-grade children a year after the 1992 evaluation was conducted. This group of children was selected as results from the previous study suggested that the effects of the programme were most apparent at this grade level. After administering a further post-test to children on measures of attitude towards animals and human-directed empathy, analyses of the data revealed that fourth-grade children assigned to the experimental group had maintained higher humane attitude scores than children assigned to the control group. Although dated, this study remains significant as it was one of the first studies to robustly evaluate the long-term effectiveness of a humane education programme.

A later study also sought to assess the immediate and long-term effects of a Responsible Pet Ownership Programme on 126 school children from 15 different schools between the ages of five and six (Coleman, Hall, & Hay, 2008). Schools that had agreed to take part in the programme but had not yet done so were used as controls. The programme was delivered during a single 30-minute session which included the teaching of factual information and engagement in role play activities. The study assessed the effects of the programme on children's knowledge of how to

interact with dogs as well as their knowledge of responsible pet ownership at three different time points: two weeks, two months and four months post-intervention. Although the results of the study indicate that children were able to retain their knowledge of how to interact with dogs at two weeks, two months and four months post-intervention, their knowledge of responsible pet ownership did not persist at the two and four month follow-ups. As such, this study demonstrates that the information taught by educational programmes needs to be reinforced if it is to be retained by children in the long term.

It has been proposed that programmes incorporating direct contact with live animals are optimal for the promotion of empathy and therefore most effective in the transference of humane education concepts (Ascione, 1992; Thompson & Gullone, 2003). This is because children have been found to possess a curiosity and fascination for other species which may in turn capture children's attention and increase motivation both of which may aid in the learning process.

Recently, research with eight classes of first-grade children (n = 154) found that an in-class education programme, significantly increased children's self-reported empathy towards animals compared to children who did not participate in the programme. The programme was run once every two weeks over a four month period, incorporated live visits from therapy animals and focused on student-centred activities. Although it was able to increase empathetic attitudes, the programme did not result in an increase in reported behaviours and relationships towards companion animals (Nicoll, Trifone, & Ellery Sameuls, 2008). The programme was therefore effective in changing attitudes, however, there was no evidence that the attitudinal change affected behaviour. The sustainability of programme effects are unclear as changes in self-reported empathy were not assessed beyond immediate post-test measures.

A similar study incorporated the use of a live animal in a school based programme aimed at teaching children how to identify and practice pro-social behaviour as well as how to be empathic (Sprinkle, 2008). The study employed the Healing Species violence prevention and character education programme which consists of eleven 45-minute weekly lessons. A pre-test post-test design was used to measure students' empathy, violent and aggressive behaviours as well as their normative beliefs about aggression prior to and after the programme was delivered. Findings from the study revealed the Healing Species programme positively affected

students' levels of empathy, violent behaviours, teacher's perceptions of outwardly aggressive behaviours and normative beliefs about aggression. Yet, without the use of a control group, these results should be interpreted with caution. Although it is clear that programmes incorporating live animals demonstrate the ability to change children's attitudes toward animals, this relationship has not been empirically demonstrated due to the limited number of scientifically rigorous studies conducted to address this relationship. Moreover, transferability to enacted behaviours toward animals remains unknown as do the sustainability of these effects.

While there are only a small number of evaluations conducted on humane education programmes, these are largely focused on programmes run in North American and European countries. As such, little cross-cultural research has emerged in this field with few advances being made in developing countries. Despite this, there has been some research into the effects of humane education outside these areas. A study carried out in a rural area in Mexico sought to assess whether an educational programme used for animal welfare teaching had a significant effect on the knowledge of six-year-old children from different schools (Aguirre & Orihuela, 2010). The programme was developed specifically for first grade children in a Mexican context. The experimental condition was administered to 177 children, whereas 99 children participated in a control condition and did not receive the programme. The experimental condition included a 10 week-long animal welfare education programme with an hour dedicated to the teaching of animal welfare topics per week. Children in both groups received a pre- and post-test measuring their knowledge of and attitude toward animals. Results indicate a considerable programme effect in that children in the experimental group demonstrated a significantly increased number of correct answers on the post-test in comparison to those in the control group. This research indicates that children living in moderate economic conditions can assimilate as well as increase their knowledge of animal welfare concepts.

A Portuguese study sought to determine whether the implementation of an educational programme involving the use of animals was able to significantly change students' attitudes towards animals (Fonseca et al., 2011). The study utilised a longitudinal intervention programme, the Rodentia Project, which is founded on the concept of the classroom pet and aims to promote the positive attitudes toward animals in primary school children. Two classes of 43 fourth grade students from the

same school participated in the in the programme and were assigned to either a control or experimental group. The study was conducted using a 43-item pre- and post-test design to measure children's attitudes toward animals. Results indicated that the children in the experimental group displayed significantly increased attitudinal scores on the post-test in comparison to children in the control group.

In a smaller Australian evaluation of a humane education programme aimed at younger children, Arbour et al. (2009) sought to determine whether the programme lead to changes in both the treatment of animals and human-directed empathy. Nine-year-olds from two classes were divided into an experimental and a control group to form a sample of 37 children. The study utilised an intervention programme provided by the Royal Society for the Prevention of Cruelty toward Animals that was included in lessons and was delivered using two one-hour lessons each week for four consecutive weeks. Although this study, unlike most other humane education research, attempted to measure actual self-reported behaviours toward animals, scores on this measure did not increase significantly for children in the experimental group. Furthermore, it was found that an increase in empathy scores was only significant for males in the experimental group. Therefore, this research suggests that brief interventions may have some impact on empathy levels in children, however, the sustainability of such effects is not supported.

Finally, research into the effects of an educational anthrozoology project on children's knowledge and perception of animals, their responsibility towards pets as well as their relationship with animals was conducted (Mariti et al., 2011). The project included four 40-minute classroom and content-based meetings that focused on the behaviour, communication, and ethological needs of certain animals. The study employed a pre-test post-test design and included 201 children aged between nine and eleven years old in seven schools in Italy. Results of the research suggest that overall children provided a higher number of answers on two questionnaires after having received the project in comparison to their answers on the same questionnaire prior to receiving the project. The authors concluded that as a result of the project children displayed more humane attitudes toward animals.

Whilst international research into the effectiveness of humane education has made some inroads toward establishing whether such programmes are able to affect both knowledge and attitude change, this did not extend to the observation of significant changes in the behaviour of children.

Children have long been recognised as an important target audience for education programmes owing to the fact that they are easily taught, represent a captive audience and are custodians of the future. Yet, the need for immediate action in dealing with problems like animal welfare and other environmental dilemmas is pertinent. It is unlikely that children will be able to autonomously put the knowledge gained through educational programmes to good use until they are older (Vaughan, Gack, Solorazano, & Ray, 2003). Consequently, research has begun investigating whether children are effectively able to influence their parent's knowledge and attitudes via the information learned in educational programmes. If this is the case, then such programmes may be able to continue their focus on children rather than adults. Although studies of this nature are scarce, Vaughan et al. (2003) were able to demonstrate that children are not only able to learn and retain information in a school environment, they are also able to transfer this information to their parents. In the study, 60 primary school children received a four week environmental education programme. The programme comprised of educational colouring books and other activities to be completed at home with parents. To measure knowledge change, children, their parents and an adult control group received a pre-test measuring knowledge before the programme began, and then received the same test upon conclusion of the programme and again eight months later. Results from the first post-test indicate that children and parents in the programme increased their knowledge scores whereas the adult control group did not. The second post-test indicated that children, parents in the programme and the adult control group all increased their knowledge scores. This demonstrated that parents were able to learn from their children and both these groups in turn transmitted the information to the control group. Despite its positive results, the major focus of this research was the transmission of knowledge and not whether this lead to any behavioural changes in the sample.

Conclusions.

Ultimately, the purpose of humane education is to affect real world changes in behaviour. These include the reduction of violent and abusive behaviours directed towards animals and, through an emphasis on these interspecies relations, the enhancement of interpersonal relations between individuals. Thus far, literature dealing with the evaluation of humane education programmes has been able to

demonstrate the ability of these programmes to affect attitudinal changes toward animals. Although humane education shows potential, the literature has not been able to conclusively demonstrate that these programmes are effective in translating attitudinal changes into behavioural changes that may result in the achievement of intended real world outcomes.

Various limitations inherent in the reviewed literature may account for these inconsistencies. Firstly, many studies lack the inclusion of a control group. This makes it difficult to attribute changes in the dependent variable to the programme alone as it is possible that there are various other extraneous variables operating within this relationship. These variables may threaten the internal validity of the research and therefore the extent to which the causal conclusions made are in fact warranted. Secondly, programmes that do report changes in behaviour often do so through measures relating to self-reported or projected behaviours. This is problematic because self-report measures are fraught with social desirability, response bias and demand characteristics. Therefore, the use of self-report measures may obscure or prevent the accurate observation of intended programmes effects due to problematic instrumentation.

Thirdly, some programmes have been shown to affect certain target populations differently. Within the literature, there are a number of pronounced age and gender effects with older children often displaying increased change on measures relating to predicted behaviours and males demonstrating increased scores on empathy-related attitudinal measures. Other research also points to the effects of humane education programmes on diverse cultural groups. Although cross-cultural research into the effects of humane education is limited, it is important to understand how specific cultures, contexts and environmental conditions may affect different target populations. Due to the fact that age, gender and cross-cultural effects may be interacting with outcome variables, the interpretation of the effectiveness of humane education programmes is made more complicated.

Fourthly, many programmes use differing measurement tools and inconsistent indices of efficacy. Although many studies utilise empathy as an indicator of efficiency, it has been argued that this is not the most adequate indicator of success for humane education programmes (Fonseca et al., 2011). Instead, some authors argue that attitude measurement is a better indicator of success. These inconsistencies result in a lack methodological rigour and also make it difficult to

compare the effectiveness of different programmes due to the fact that there are no standard evaluation processes for humane education programmes.

Finally, a further limitation of the literature is that the target population of these programmes is extremely narrow as many are focused exclusively on school children. Although the literature justifies this by highlighting the importance of targeting children as they are a captive learning audience, custodians of the future and may act as agents for the prevention and reduction of later abuse and violence in adulthood, this has left a large gap in the literature regarding the effects of humane education on adults themselves.

Owing to these limitations, it is believed to be difficult to implement a programme solely based on the logic of humane education with the anticipation that it will result in behavioural change. As such the evaluator opted to continue with the design of a humane education programme, however, other forms of interventions which could be holistically integrated with humane education were also considered in order to address and resolve some of the limitations evident in the humane education literature. The evaluation therefore seeks to propose a viable programme design that has the ability to alleviate the problem of animal welfare in Darling as identified by the Swartland SPCA.

Scope of Evaluation

Rossi, Lipsey, and Freeman (2004) note that the nature of an evaluation is largely dependent on the conceptual and organisational structure of a programme. Different evaluation questions will arise at different stages of programme development and, accordingly, differing evaluation approaches are needed. Upon the initiation of new programmes, evaluators are often called upon to assist in the development of the programme's design, objectives, definition of its target audience, expected outcomes and the means by which the programme expects to achieve these. During these formative phases of the programme, an evaluator may often serve as a planning consultant in order to conceptualise and shape the programme design in such a way that it is likely to effectively achieve its objectives (Rossi et al., 2004). Evaluators can also contribute to a programme's development by facilitating the production of a strong, plausible and well-articulated programme theory. In so doing, the evaluator can assist in ensuring that the programme maximises its prospects for success in achieving its intended outcomes with regard to the social

conditions it wishes to improve. Due to the fact that the Swartland SPCA's animal welfare programme is still in a conceptual phase, the implementing organisation could greatly benefit from evaluation input regarding the programme's design, theory and implementation considerations.

This research aims to respond to this evaluation need by answering the following theory and design evaluation questions:

1. What programme theories have been utilised in interventions that aim to effect change in attitudes and behaviours?
 - 1.1.1. Can these programme theories be adapted for the purpose of animal welfare promotion?
 - 1.1.2. What are the most significant implementation considerations for these programmes?
 - 1.1.3. How should the intervention be designed and adapted to animal welfare in terms of:
 - a) Recommended programme activities
 - b) Target audience
 - c) Length of intervention implementation
 - d) Additional implementation considerations
 - e) Possible standardised/generic outcomes
 - f) Indicators linked to generic outcomes
2. Taking the results from evaluation question one into account, what is a plausible programme theory for an animal welfare programme in the Darling community?

Chapter 2: Method

Due to the nature of this evaluation, the utilisation of reporting standards typically employed for generic social science methods were considered unsuitable. Instead, this chapter details the procedure that was followed in order to answer the proposed evaluation questions.

Evaluation Question 1

As a starting point, the evaluator conducted an electronic search for international and local animal welfare programmes. If such programmes existed, the evaluator would have been able to use them as a basis for the design of the Darling intervention. The results produced literature regarding animal welfare in terms of

farming practices and scientific experimentation with no focus on social programmes designed to improve animal welfare. Thus, no best practice examples of animal welfare interventions currently exist in social science literature. As such, following a proposal presentation of this research, a discussion was held between the evaluator and a panel of evaluation experts at the University of Cape Town regarding the kinds of interventions are usually implemented to effect the attitudinal and resultant behavioural change of a specific target audience. Given that this research concerns the welfare of animals in terms of human-directed attitudes and behaviour, it was decided that humane education as a form of intervention should be investigated further. Owing to the fact that improvements in animal welfare require changes in both attitude and behaviour, two additional interventions were identified and agreed upon as being successful social interventions namely, violence prevention and peer education / role modelling. Thus, the inclusion of these additional two interventions warranted the need for an investigation into their underlying theoretical principles. Based on the decision to use these three interventions, the evaluator was then able to initiate the procedure in order to answer the proposed sub-questions of the first evaluation question.

In order to locate, screen and review relevant literature needed to answer the evaluation questions related to the underlying theory and design of the identified interventions, three broad steps were followed. Firstly, journals were located using research databases and various key search terms. Secondly, the articles retrieved were screened in order to determine to suitability and applicability to the evaluation questions. Lastly, the articles deemed relevant were then reviewed and reported on. Each of these steps is discussed in more detail below.

Step 1: Locating literature.

To identify relevant literature, a search was performed using the following electronic databases: Academic Search Premier, Google Scholar, JSTOR, LexisNexis Academic, ProQuest, PsychINFO, and Wiley Online Library. This preliminary broad-based literature search was conducted using the following search phrases: *humane education*; *peer education*; and *violence prevention*. More specific searches were also performed using the Boolean operator 'AND'. These search phrases included the original search terms: *humane AND education*; *peer AND education*; and *violence AND prevention* supplemented with the following terms:

AND *program**; AND *programme*; AND *program*; AND *eval**; AND *evaluation*; AND *evaluating*; AND *research*; AND (*underlying theory*); AND (*causal logic*); AND (*theory of change*); AND *indicators*; AND *monitoring*; AND *activities*; AND *outcome**; AND (*South Africa*). A general search was also conducted using the terms *community* AND *intervention*; as well as *community* AND *programme*. Although every attempt was made to survey the literature on each intervention widely, the inclusion of extensive information on each intervention was limited due to the complex nature of this evaluation. As such, it is important to note that whilst there is a large amount of additional information and a number of alternative underlying theories and designs that could be utilised for each intervention, literature was selected on the basis of what was viewed as most suitable for and applicable to the animal welfare context. Therefore, preference was awarded to information and theories of change that: 1) demonstrated relevance to animal welfare and the local context in which the programme will be implemented and; 2) could be easily incorporated into the wider theory of behaviour change utilised in the programme design.

Step 2: Screening.

During the initial search phase, the title of each article was screened with regard to whether it corresponded to one of three predetermined criteria: 1) general humane education / violence prevention / peer education research; 2) evaluation reports of humane education / violence prevention / peer education programmes; and; 3) articles presenting the underlying programme theories of humane education / violence prevention / peer education interventions. Articles that did not meet any of the three criteria were discarded.

Step 3: Review and document.

The retained articles were analysed in relation to the proposed sub-questions of the first evaluation question. Chapter 4 presents the results of this review.

Evaluation Question 2

This evaluation question focuses on a plausible programme theory for an animal welfare programme in the Darling community. Based on the results obtained from the literature, the evaluator was able to report standardised programme theory diagrams for each of the three interventions. These diagrams were then collated to

develop a plausible overall programme theory and design for the Swartland SPCA's animal welfare programme.

Chapter 3: The Need for a Holistic Programme Design

The research results on the effectiveness of humane education programmes presented in Chapter 1 suggest that these programmes may affect attitudinal change, but they are insufficient in preventing and terminating harmful behaviours toward animals. In light of these findings, research has proposed that a multidimensional, holistic intervention may be a more effective solution to address the problems associated with animal abuse (Ascione, 1997; Arkow, 2006; McPhedran, 2008). In order to increase the likelihood for behaviour change, humane education programmes ought to be supported by other intervention components. This multifaceted design should then be able to respond to the multitude of intersecting factors associated with the enactment of abusive behaviour toward animals.

One of the primary reasons that a multidimensional approach is seen as optimal is because animal abuse is essentially a complex phenomenon which is based on a large number of confounding personal, familial, social, cultural and psychological factors (Arkow, 2006). Studies have identified a strong relationship between animal abuse and domestic violence, inter-partner violence, child abuse, elder abuse, destruction of property, and violent crime (Arluke & Luke, 1997; Ascione 2001; Arkow, 2006). For example, research has found that there is a stronger likelihood that an individual who is abusive toward a partner is also abusive toward animals owned by the abused partner in comparison to samples of individuals who aren't abused by their partners or spouses (Ascione & Arkow, 1999; Flynn, 2000; Gullone, Volant, & Johnson, 2004). Therefore, this points to the concurrent nature of violence and abuse in a domestic setting.

Further evidence suggests that settings of family violence or dysfunction are predictive of the development of a number of anti-social childhood behaviours including animal abuse (Shaw, Bell, & Gilliom, 2000; Toupin, Dery, Pauze, Mercier, & Fortin, 2000). In a review of studies, Duncan and Miller (2002) found that the experience of physical abuse, sexual abuse, paternal alcoholism and domestic violence contributed as common childhood risk factors for the development of animal abuse. As such, the occurrence of animal abuse may often present as a complex

issue that is confounded by the simultaneous presentation of other forms of interpersonal and familial violence.

The fact that animal abuse should be acknowledged as a process rather than an isolated behaviour that can be 'treated' with one kind of intervention has been put forward as a second reason for the adoption of a multidimensional approach. Usually, violence against animals is thought of as a one-off occurrence. Yet, this is seldom the case as animal abuse is a behaviour that often re-occurs and progresses toward more serious violent acts which often coincide with other familial, emotional or social factors. In order to understand the developmental nature of animal abuse, it is important to acknowledge that this behaviour may stem from a diverse and complicated range of motivations. Despite this, there is a lack of knowledge surrounding the underlying causes and motives behind animal abuse (Arkow, 2006). For example, much research points to the co-morbidity of animal abuse and behavioural or personality disorders. Research in this field argues that animal abuse often goes unrecognised as symptomatic of existing underlying psychological disorders and is instead treated only as an isolated behaviour that may lead to future developmental problems rather than part of a developmental disorder (McPhedran, 2008). As such, this perspective ignores both the underlying motivations as well as the many contextual factors that may be occurring when animal abuse is observed.

To better understand the development of abusive behaviour toward animals as well as the complexity surrounding human-animal interactions, animal abuse should rather be seen as a multidimensional behaviour. This supports the nine dimensions of animal abuse developed by Ascione (1997) each of which are viewed on a continuum (see Appendix 1). This approach allows for the distinction between different kinds of behaviours toward animals as well as a differentiation between the various motivational states that underlie such behaviours (McPhedran, 2008). The ability to distinguish between different behaviours and motivations may be an essential means of enhancing understanding about the relationship between animal abuse and interpersonal violence. This points to the fact that interventions should be aimed at all dimensions that contribute to the problem of animal abuse rather than any one of these in isolation. As a result, it is reasoned that a multidimensional approach possesses greater promise in successfully preventing and resolving this ongoing problem.

Although it is hypothesised that animal abuse leads to other forms of violence, evidence suggests that it is also the context in which animal abuse takes place and the characteristics that are fostered in such a context that underlie later violent behaviours. In this way, the environment in which animal abuse occurs is thought to be a key factor that contributes to the development of abusive behaviour toward both animals and other individuals (McPhedran, 2008). Therefore, it is hypothesised that intervening on a number of contextual levels to deal with the underlying motivations, complex factors and progressive nature of animal abuse is the most valuable way of approaching this problem. Holistic interventions that are intended to address the multifaceted nature of abusive environments are more likely to be effective in disrupting the cycle of violence within which animal abuse and interpersonal violence appear to be located (Arkow, 2006).

Research has proposed a strong argument in favour of a multidimensional approach to interventions aimed at addressing animal welfare concerns as well as broader issues of interpersonal violence in society (Ascione, 1997; Arkow, 2006; McPhedran, 2008). Since much research points to the complex nature of animal abuse as well as the fact that it is based on a large number of confounding personal, familial, social, cultural and psychological factors, it is important that interventions target these differing factors via various programme components in order to achieve the greatest degree of behavioural change possible. Therefore, the evaluator intends to utilise a multi-component model in the proposal of a broad-based programme design and plausible programme theory for an animal welfare intervention that can be adapted and utilised not only by the Swartland SPCA, but also by other animal welfare organisations within South Africa.

Since the link between attitude and behaviour change has not been realised through humane education, it is proposed that utilising a multidimensional programme design may increase the likelihood that attitudinal change results in or influences behavioural intentions and subsequent changes. In addition, it is important that the programme's design is grounded in a behavioural theory so as to ensure that the programme components correspond with theoretically identified mechanisms of behavioural change. Although there are a number of broad based behavioural theories that account for the link between changes in attitudes and resultant changes in behaviour, Ajzen's theory of planned behaviour is the dominant theoretical framework in the attitude-behaviour literature (Olsen & Zanna, 1993). This

framework is the most common theory of behaviour change and has been utilised in various fields of behavioural science. The programme design will account for the specific mechanisms of this behavioural theory when selecting particular programme components so as to ensure that these interventions are able to respond to central tenets of the theory of planned behaviour. This particular theory of behaviour change has been selected for two primary reasons. Firstly, since the theory of planned behaviour places importance on the link between intentions and behaviours this integrates well with previous literature discussed regarding the problematic nature of the link between attitudes and behaviours in humane education. Secondly, this behaviour change theory comprises a number of components that, in combination, are thought to lead to behaviour change. As such, this ties in well with the need to develop a multifaceted approach to animal welfare.

Theory of Planned Behaviour

The theory of planned behaviour concerns the link between beliefs and behaviours and has been applied to studies of the relation between beliefs, attitudes, behavioural intentions and behaviours in various fields (Ajzen, 1991). This behaviour change theory is viewed as a powerful and useful model for the prediction and explanation of behavioural intentions and behaviour itself. As an extension of Ajzen and Fishbein's (1980) theory of reasoned action, the theory of planned behaviour proposes three theoretically independent components that, in combination, are able to predict intentions and resultant behaviour in specified contexts. The four major components of the model include attitude, subjective norm, perceived behavioural control, and access and have been found to predict behavioural intention with a high degree of accuracy (Ajzen, 1991; Armitage & Connor, 2001). As seen in Figure 1, the theory asserts that the more favourable an individual's attitude and subjective norm is toward a behaviour, and the greater their perceived behavioural control over the behaviour, the stronger the individual's intention to perform the behaviour should be (Ajzen, 2002). In this sense, intentions are thought to denote the motivational factors that influence behaviours with stronger intentions resulting in an increased likelihood of behavioural performance. The four major components of the theory will be described below.

In an attempt to explain behaviour, the theory initially deals with certain antecedents that precede the model's components as can be seen in Figure 1.

These corresponding behavioural beliefs point are thought to affect attitude toward the behaviour, normative beliefs that provide the fundamental determinants of subjective norms, control beliefs which supply a basis for perceptions of behavioural control and an absence of environmental constraints which enables access (Ajzen, 1991; Armitage & Connor, 2001). The theory of planned behaviour asserts that behaviour is a product of pertinent information or beliefs relevant to the behaviour itself as expressed in these four antecedents. The pertinent information or beliefs that accompany the antecedents are considered to be the predominant determinants of a person's intentions and actions.

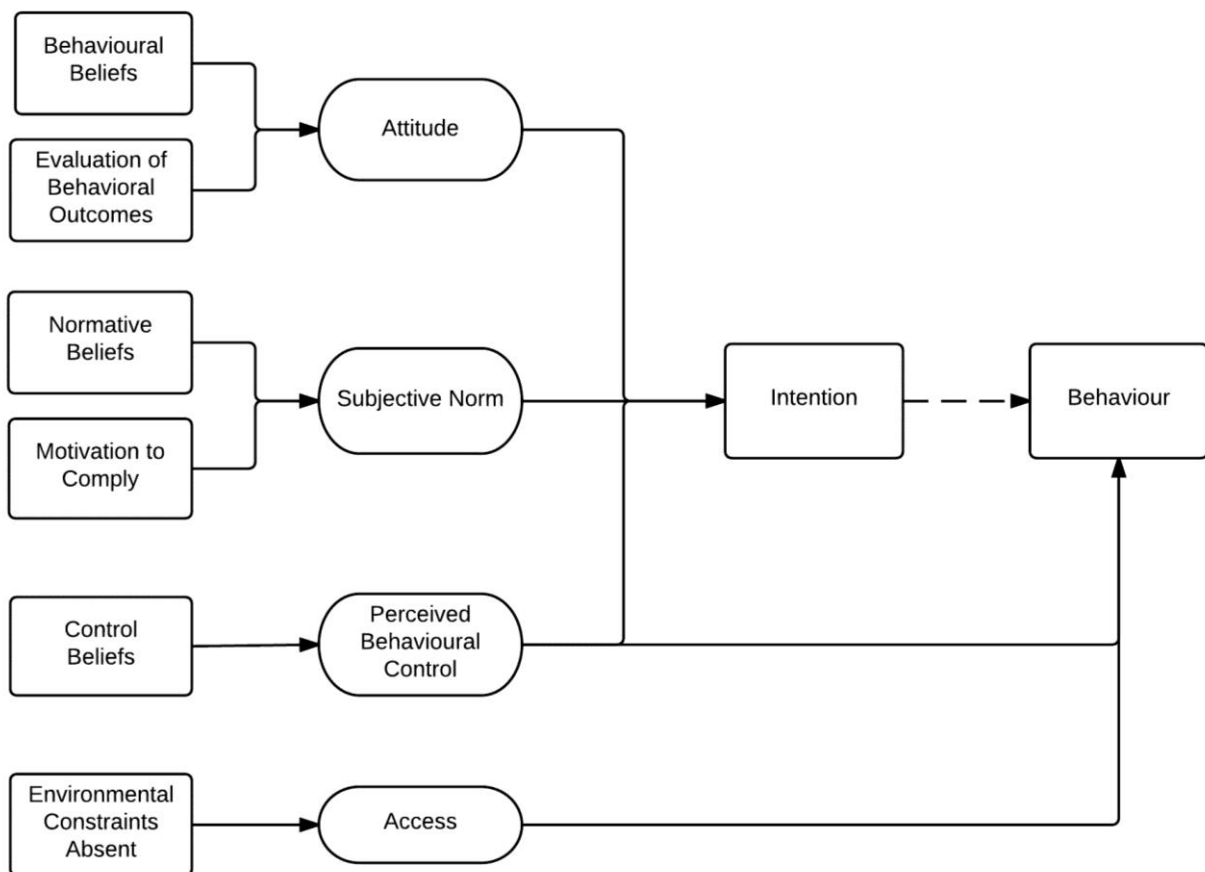


Figure 1. Theory of planned behaviour.

Attitude.

Attitude refers to the degree to which a person has an overall favourable or unfavourable appraisal or evaluation of the performance of a behaviour (Ajzen, 1991). Attitudes are developed from the beliefs individuals hold about the object of

such attitudes. When it comes to attitudes toward a specific behaviour, each belief about the behaviour is linked to a certain outcome or attribute such as the cost of performing the behaviour, for example. Since the attributes we come to associate with certain behaviours are already positively or negatively valued, attitude toward the behaviour is automatically and simultaneously acquired (Ajzen, 1991). Moreover, the subjective value an individual places on a given behavioural outcome influences their attitude toward it in direct proportion to the strength of an individual's behavioural beliefs about the outcome (Fishbein & Ajzen, 1975). Generally, individuals tend to form favourable attitudes toward behaviours that are thought to have desirable consequences, whereas negative attitudes are formed towards behaviours associated with undesirable consequences. For example, if an individual attributes a positive association to the performance of a behaviour associated with animal welfare and anticipates favourable outcomes from the performance of such a behaviour, the individual's attitude toward the behaviour is increased.

Subjective norm.

In contrast, subjective norm refers to the perceived social pressure to perform or not to perform a behaviour. As can be seen in Figure 1, the creation of a subjective norm is preceded by the formation of salient, normative beliefs. These relate to the likelihood that important groups or individuals support or oppose the performing of certain behaviours and an individual's motivation to comply with these views. The strength of an individual's normative beliefs is influenced by their motivation to comply with the views of these important individuals and groups. For example, if important family members of an individual have formed the normative belief that it is only acceptable to treat animals humanely and the individual possesses high levels of motivation to comply with these family members, the subjective norm of the individual with regard to the treatment of animals is strengthened. Both attitudes and subjective norms are thought to impact on an individual's ability to form the intention that precedes behaviour.

Perceived behavioural control.

The theory of planned behaviour states that intention can only be expressed if the behaviour itself is under volitional control such that an individual can, at will, decide whether or not to perform a behaviour (Ajzen, 1991). Volitional control also

points to the presence or absence of resources and opportunities required to perform the behaviour. Behaviour is most strongly influenced by one's confidence in one's ability to perform it. Therefore, according to theory of planned behaviour, realistic perceived behavioural control, together with behavioural intention can be used to directly predict behavioural achievement. In general, more favourable attitudes and subjective norms bring about greater perceived behavioural control. Control beliefs may be based on previous experience with the behaviour, but may also be influenced through implicit information or the experiences of others regarding the behaviour which may enhance or lessen the perceived difficulty of performing the behaviour. For example, perceived behavioural control may be enhanced when an individual believes that they have the skills and abilities necessary to perform behaviours associated with animal welfare.

Access.

Despite this, performance sometimes depends on non-motivational environmental factors like time, money, or the cooperation of others. This is represented by the fourth component in Figure 1, and refers to the fact that environmental factors must be absent in order for an individual to access the possibility of performing a behaviour. For example, it is possible that although an individual may have formed the intention to treat animals humanely and may wish to perform this behaviour, the individual may not be able to execute this if he or she is unable to afford dog food or does not have access to a clean water supply. In this instance, certain environmental factors have impacted in the individual's ability to execute the behaviour despite the formation of an intention to do so.

Collectively, all four components of the theory represent an individual's actual control over their behaviour, however, the importance of each factor in the prediction of behaviour may vary across behaviours and situations with certain factors asserting more influence than others. The theory of planned behaviour has been found to be useful in an attempt to understand certain behaviours as well as to implement interventions that may be effective in changing such behaviours. In so doing, Ajzen (1991) argues that each component of the theory can serve as point of attack for interventions aimed at changing intentions and therefore behaviours.

Furthermore, it is reasoned that targeting all components of this theory through varying interventions may result in a greater likelihood of behaviour change.

As a result, this evaluation will utilise Ajzen's theory of planned behaviour as a basis for the construction of a multi-component animal welfare intervention. The utilisation of such a theory is highly suitable for use within a multidimensional programme since the theory itself also has a number of dimensions. The varying components of Ajzen's theory will be merged into the design of the intervention with corresponding programme elements selected on the basis of their ability to respond to each of the proposed triggers for intention. Ultimately, the model will consist of an overarching programme theory based on the theory of planned behaviour. The model will also detail: 1) smaller programme theories and activities for each component of the programme as identified by relevant literature, 2) an account of how each component will function within the South African animal welfare context. General outcomes that can be expected from these activities will also be specified.

Limitations.

The utilisation of the theory of planned behaviour poses two limitations in terms of its reliance on correlational supportive evidence and its applicability to a South African context. Firstly, although theories about attitude-behaviour relations converge on the idea that intention is a primary determinant of behaviour change, most research in this field utilises correlational studies that preclude causal inferences. The use of correlational research to make inferences about causation in the relationship between intention and behaviour is problematic for three reasons (Webb & Sheeran, 2006). Firstly, such studies are subject to consistency or self-presentation biases due to the cross-sectional nature of their designs which may inflate the estimated strength of the relationship between intention and behaviour. Secondly, cross-sectional correlational studies cannot discount the possibility that it was behaviour that caused intention and not intention that caused behaviour. Finally, correlational designs are plagued by the 'third variable problem' whereby a third and unmeasured variable is the cause of both the intention and the behaviour. Although, correlational designs are often not seen as a valid method of determining whether intentions cause behaviour, the causal impact of intentions on behaviour change has, however, been empirically investigated through a meta-analysis of experimental designs where random assignment is employed. This analysis found that intentions

result in small-to-medium changes in behaviour (Webb & Sheeran, 2006). Therefore, whilst the theory of planned behaviour's assertion that intention has an effect on behaviour can be maintained, it is likely that the size of this effect is smaller than previous correlational research has suggested.

Secondly, the theory of planned behaviour is criticised for a lack of cross-cultural applicability since it has been both developed and tested exclusively within a western context. It is argued that whilst the theory of planned behaviour focuses on individual intentions and subsequent behaviours, African culture exists within a collectivist society. As such, there is little evidence to support the effective functioning of this notion of behavioural reasoning in a South African context. Finally, although theory of planned behaviour is able to account for many factors contributing to the formation of behavioural intentions as well as the performance of behaviours themselves, individual behaviours are not always consistent with prior intentions. Instead, behaviours can be motivated by a number of other factors including impulses, desires and other unconscious factors that may not fall within the reasoned realm of this behaviour change theory.

Despite the fact that there are a number of limitations to the theory of planned behaviour, it was selected as it is important to ground programme design in a theory of behaviour change so as to ensure interventions correspond with theoretically identified mechanisms of behavioural change. Furthermore, the theory of planned behaviour was thought to be best suited to the context of animal welfare because it relates and responds to problematic nature of the link between attitudes and behaviours in humane education and is comprised of a number of components that tie in well with the need to develop a multifaceted approach to animal welfare.

Since this particular theory of behaviour change has not yet been applied to the context of animal welfare, there is a possibility that the combination of these programme components may not lead to behaviour change and thus the achievement of animal welfare outcomes. Despite this, it is imperative that a first attempt is made to determine whether a multi-component approach utilising the theory of planned behaviour is effective in bringing about behaviour change with regard to animal welfare outcomes. Given that this intervention will be multidimensional in nature, involves a number of target populations, and may be implemented progressively, it is postulated that the probability of effecting behaviour change and as such enhancing animal welfare is strengthened. In so doing, the

implementation of this intervention will meet the needs of the client and should improve animal welfare in the Darling community.

Chapter 4: Proposed Programme Design

The following chapter will describe the individual programme components that constitute a viable broad-based framework designed to address the multifaceted problem of animal welfare. The three broad-based programme components chosen for inclusion in this proposed framework are humane education, violence prevention and peer education / role modelling. Each section will follow a similar structure as outlined here. To begin, a brief overview of the current literature on the programme component and the underlying theory or rationale on which the component is based will be discussed. Subsequently, the evaluator will provide an explanation of how each programme component responds to the necessary tenets of the theory of planned behaviour in order to effect behaviour change. The implementation considerations that contribute to the success of these kinds of programmes will be then be detailed as well as how the component can be adapted to suit the animal welfare context. Finally, on this basis, the evaluator will propose a design for a programme theory framework for each component. Overall, each framework will outline possible components for adaption in the SPCA's larger animal welfare programme rather than providing a definite programme theory and design. It is envisioned that this tool then be used by the stakeholders to decide on intended outcomes, select the programme activities, and further define the design details thereof. Although the humane education and violence prevention components target different aspects of the phenomena thought to contribute to incidences of animal abuse, both of these components have similar implementation considerations in terms of their adaption to a South African context and, as such, this issue of adaptation will be discussed collectively for both components following the presentation of the violence prevention programme theory framework.

Humane Education

Based on the information presented in Chapter 2, humane education can be defined as the teaching of compassion and respect in relation to animal welfare, environmental and social justice concerns (Itle-Clark, 2013; Selby, 1995). These programmes are centred on the transmission of relevant information, strategies and

skill sets and strive to incorporate concerns about animals, humans and the environment into educational practices (Antoncic, 2003). In so doing, formal instruction methods are utilised as a means to develop knowledge, attitudes and behaviours towards the empathetic and responsible treatment of both animals and other individuals (Ascione, 1997). Although there is only a small body of evidence supporting the ability of humane education to increase knowledge about and alter attitudes toward animals, this approach cannot be disregarded since it has potential to target the attitude component of Ajzen's theory of planned behaviour.

Link to theory of planned behaviour.

According to Ajzen (1991), individuals tend to form favourable attitudes toward behaviours that are associated with positive behavioural beliefs and are evaluated to have desirable consequences. More favourable attitudes toward a behaviour are likely to create stronger intentions which in turn contribute to an increased possibility of actual behavioural performance. The provision of education on the empathetic and responsible treatment of animals is expected to increase an individual's knowledge base and improve evaluations of humane behaviour toward animals which should then lead to an increase in positive behavioural beliefs regarding the treatment of animals. The enhancement of behavioural beliefs in addition to the creation of positive evaluations of behavioural outcomes is likely to result in improved attitudes toward the treatment of animals. In line with the theory of planned behaviour, enhancing favourable attitudes toward the humane treatment of animals should then increase individuals' intentions to uphold animal welfare behaviours and may eventually result in the actual performance of these behaviours.

Underlying theory / rationale.

Humane education's underlying theory of change postulates that incorporating relevant information and skills sets into interactive educational practices will equip individuals with increased knowledge on animal care and will also provide experience in interacting with animals themselves (Antoncic, 2003). In turn, this is expected to bring about both improved attitudes and actual behaviours toward the treatment of animals. Modelling, encouragement and instillation of empathy towards animals are the principal mechanisms humane education attempts to harness to achieve this goal (Horsthemke, 2009). Through its focus on values of respect,

compassion, responsibility and empathy, as well as the advancement of pro-animal attitudes, it is thought that through humane education instruction, individuals will transfer these suggested concepts to their relationships with animals.

Furthermore, an indirect outcome of humane education is that children learn to transfer the compassion and empathy learned in relation to animals toward other individuals. The theoretical underpinnings of humane education are founded in research suggesting that intentional animal abuse during childhood serves as an indicator for engagement in other forms of interpersonal violence later in life (Arbour et al., 2009). A number of studies have demonstrated that the first signs of violence displayed by children tend to manifest in animal abuse, and often escalate to more serious acts of violence against other individuals (McPhedran, 2008; Thompson & Gullone, 2003). By emphasising the importance of empathy, responsibility respect, and compassion, humane education is thought to offer an effective means to prevent or reduce the potential for this linkage at an early age. Therefore, it is reasoned that if abusive behaviour towards animals may eventually result in interpersonal violence against humans, then educating children to behave respectfully and compassionately towards animals may also generalise to human interaction and behaviour.

Implementation considerations.

In order for a humane education programme to be successful in achieving these specified outcomes, four primary factors in the implementation of such a programme have been identified in the literature. These factors include target audience, setting and method of delivery, dosage, and materials.

Target audience.

Throughout the history of humane education, children have been the predominant target audience of these interventions. It was thought that targeting these programmes at children would not only reduce, but also prevent the occurrence of abuse crimes in later adulthood (Unti & deRosa, 2003). As such, all research and evaluation of humane education programmes focuses exclusively on children as a target audience. The literature is largely divided in terms of the age group of children who are targeted with some interventions focusing on younger children between the ages of five to seven years (Aguirre & Orihuela, 2010; Coleman

et al., 2011; Nicoll et al., 2008), whilst others focus on older children between eight and 11 years old (Fonseca et al., 2011; Mariti et al., 2011; Sprinkle, 2008; Vaughan et al., 2003). The literature is also varied with regard to the effectiveness of interventions aimed at these different age groups. Whilst some authors report greater success in achieving attitudinal changes with younger children (Ascione, 1992), others reports more sustained effects in older children (Ascione & Weber, 1996). Despite this inconsistency, researchers seem to agree that it is imperative for humane education interventions to be developmentally sensitive and thus designed to be grade and age appropriate (Ascione & Weber, 1996).

Setting and method of delivery.

This implementation consideration concerns the way in which humane education programmes are presented and the space in which they are implemented. More specifically, the method of delivery focuses on which individuals are responsible for the teaching of humane education concepts. Although some programmes encourage visitation to local animal welfare organisations, the majority of humane education programmes are located within in a school-based classroom setting. Furthermore, much of the literature identifies programmes that outsource the delivery of humane education content to trained independent educators or programme instructors who are often sourced from animal welfare organisations (Aguirre & Orihuela, 2010; Arbour et al., 2009; Arkow, 2006; Nicoll et al., 2008; Sprinkle, 2008). Programmes utilising humane education content that is integrated into the educational curriculum, however, often train school teachers as agents for the delivery of programmes. Despite the majority of literature pointing to the use of independent educators, there is considerable evidence demonstrating limited success with short-term programmes that are presented by outsiders (Arkow, 2006; Ascione, 1997). Instead, it is argued that organisations implementing humane education programmes ought to focus their resources on training school staff to deliver teacher-facilitated humane education instruction.

Dose.

Dose refers to the relationship between differing strengths of the intervention and the outcome it produces. This relationship describes a change in effect which is caused by altered levels of exposure, or dose, to an intervention after a certain

amount of time. In evaluation, this principle is usually employed to determine how frequently individuals need to participate in a programme and over what length of time in order for intended programme effects to be at their strongest.

The literature reveals varied dose effect relationships for humane education programmes. Some interventions are delivered in a one-off session lasting less than an hour (Coleman et al., 2011). The majority of programmes, however, opt for 40-60 minute weekly sessions that are implemented for approximately 10 or 11 weeks (Aguirre & Orihuela, 2010; Sprinkle, 2008). Other programmes are implemented for greater amounts of time during each week, about two hours, but last for only four weeks (Arbour et al., 2009; Vaughan et al., 2003). The strongest dose response relationship evident in the literature is that of Ascione and Weber (1996) who ran a 40-hour year-long humane education intervention the effects of which were maintained a year later. Due to the fact that these programmes vary in their effectiveness in achieving attitude change, a comparison between the programmes and their dose response relationships is problematic. Hence, recommending an optimal dose response relationship is difficult. Yet, since most of the literature comprises programmes that are implemented for at least 60 minutes a week with the most sustainable effects evident for year-long programmes, this would seem to be the dose response relationship that holds the most promise in delivering intended programme effects.

Activities and materials.

This implementation consideration details the predominant activities utilised in humane education instruction as well as the necessary material for their implementation. In general, the literature supports materials and activities that are incorporated into the normal education curriculum (Antonicic, 2003). Such material should be designed to be used as a part of regular educational instruction in language, mathematical, social and natural science subjects (Ascione, 1992). Moreover, these materials can be used more often and more intensively by teachers than material that may have been developed by educators external to the programme. Material should be student-centred and interactive with a focus on the transmission of factual information as well as empathic and pro-social messages toward animals (Nicoll et al., 2008). For example, when setting mathematics homework for students, instead of referring to numbers of trucks and cars, for

example, teachers could instead refer to numbers of cats and dogs that have been sterilised. A diversity of teaching techniques can be employed to impart these concepts including activities like role playing, storytelling, decision making, and creative writing. In order for teachers to be familiar with these techniques as well as how to integrate examples into their teaching, it may be useful for them to attend some form of training (Ascione, 1992). A further point of importance relates to the fact that materials and activities should be adapted to be appropriate for both grade and age level since cognitive development differs widely during childhood. Finally, cross-cultural research has highlighted the value in ensuring all activities and materials are designed or adapted for relevance in the local context in order to facilitate the learning processes for children (Aguirre & Orihuela, 2010).

One of the most emphasised ideas within the literature surrounding classroom activities is that of animal inclusion. It has been proposed that programmes incorporating direct contact with live animals are optimal for the promotion of empathy and therefore most effective in the transference of humane education concepts (Ascione, 1992; Thompson & Gullone, 2003). This is because children have been found to possess a curiosity and fascination for other species. Therefore, the inclusion of live animals may retain children's attention and increase motivation which may aid in the learning process. Furthermore, the use of live animals in a school-based programme facilitates the opportunity for increased interaction and practical activities (Sprinkle, 2008).

Finally, there is a small amount of evidence pointing toward the fact that children are not only able to learn and retain information related to humane education in a school environment, they are also able to transfer this information to their parents (Vaughan et al., 2003). This research demonstrates that homework activities acted as a platform through which children and their parents were able to acquire and communicate knowledge that had been learnt in the classroom. Homework activities included reading from a colouring book with parents whilst colouring in as well as the completion of a questionnaire worksheet with parents for which the answers could be found in the colouring book. In this instance, the reading and colouring in activities were related to animal welfare issues such as the fact that animals should always have ready access to fresh water and food in order to maintain health. In turn, the questionnaire then tested children on these concepts of animal welfare learnt whilst reading and colouring in. Therefore, this demonstrates

that humane education instruction holds value in the ability for this information to be transmitted, learned and retained by the parents of children within these programmes.

Humane education programme theory.

On the basis of the literature presented above, the following programme theory is proposed as a generic framework for the implementation of a humane education programme by the Swartland SPCA. As presented in Figure 2, the framework provides a variable-oriented insight into the proposed mechanisms of change in the humane education component. The framework incorporates the theory of change inherent in both the humane education as well as theory of planned behaviour. In the framework, classroom-based activities and humane education-related homework activities are expected to lead to the learning of knowledge-based education on animal care and welfare issues. Knowledge generation is subsequently expected to result in improved behavioural beliefs as well as an increase in the positive evaluations of the behavioural outcomes associated with humane treatment of animals as short term outcomes. In turn, short term outcomes are expected to lead to the achievement of the medium term outcome of improved attitudes toward the treatment of animals.

Based on the literature presented in Chapter 1, it is clear that, in the case of humane education, there is no direct link between attitudes and behaviours. Yet, given the fact that the humane education programme component will be implemented in conjunction with additional components, it is anticipated that its inclusion in a multifaceted framework may bring about an increased likelihood for the development of animal welfare as a long term outcome. Finally, this long term outcome is expected to result in an increased likelihood of animal welfare. Medium and long term outcomes are linked by means of dashed lines to indicate the fact that, in isolation, humane education is unlikely to demonstrate causal links between attitudes, intentions and behaviours.

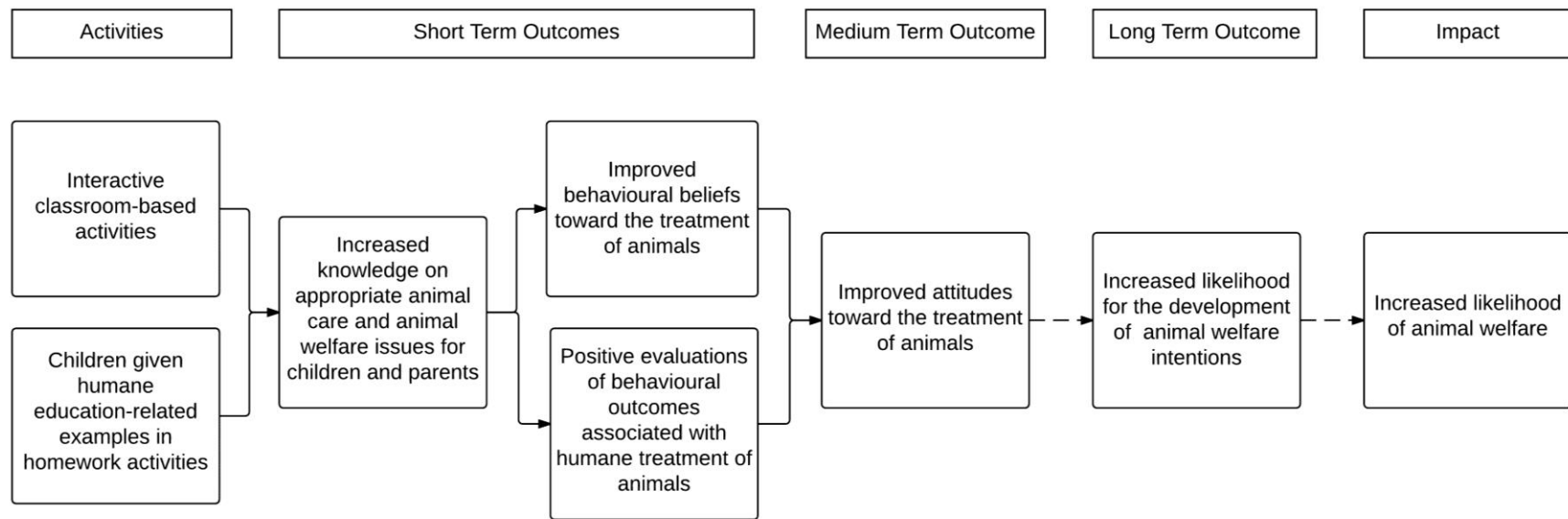


Figure 2. Humane education programme theory framework.

Violence Prevention

Increasingly, research has begun to demonstrate that there is some kind of association between interpersonal violence and animal abuse (Antoncic, 2003; Flynn, 2000; Gullone & Clarke, 2008). In addition, there is a growing amount of literature emphasising the fact that in order to target and reduce animal abuse, interventions ought to respond to the occurrence of interpersonal violence prevalent in situational contexts rather than simply animal abuse alone (Ascione, 1997; McPhedran, 2008). It is apparent that humane education's bottom-up rationale of teaching children to be kind to animals in the hope that this will generalise toward humans is ineffective (Arkow, 2006). Therefore, the evaluator proposes that targeting this problem from a top-down approach may be a more efficient way of reducing animal abuse. That is to say, directing an intervention at an interpersonal level may facilitate altered attitudes and behaviours toward violence to eventually permeate toward violence against animals. As such, violence prevention was selected as the second component of this broad-based framework.

Thus far, research has demonstrated that there is no single factor that is able to provide an explanation for the occurrence of violence (WHO, 2004). Instead, evidence points to the fact that violence is the result of a complex interplay of individual, family, peer, social, cultural, community and environmental factors (Cunningham & Henggeler, 2001; WHO, 2002). Considering the multifaceted nature of violence together with the complexity that surrounds its root causes, violence prevention programmes manifest themselves in a diversity of forms. Nonetheless, a commonality between many programmes is their utilisation of social ecological models in an attempt to understand the multifaceted nature of violence, the causes of violence, and the complex interactions between these causes (WHO, 2004).

As seen in Figure 3, social ecological models focus on the relationship between individuals and their environment and comprise four levels: 1) individual; 2) relationship; 3) community; and 4) societal (UNICEF, 2014; WHO, 2002). The individual level considers the way in which a person's biological and personal history factors affect behaviour and how these factors may contribute toward the person either being a victim of violence or committing an act of violence. The second level of the model looks at how close social relationships may increase or decrease the risk for violence exposure; close relations often have the ability to shape behaviour and experience (WHO, 2004). The third level of the ecological model considers the

community context in which social relationships are rooted such as neighbourhoods, schools or workplaces. This level of the model attempts to identify the particular features of these settings that are connected with violence. Finally, the fourth level of the model looks at the influence of larger social dynamics that may have an influence on violence. These include cultural, economic and social factors.

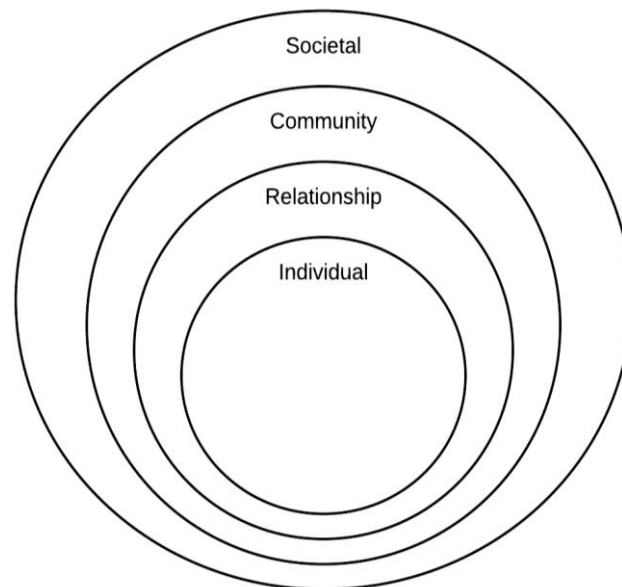


Figure 3. Social ecological model.

Since there is a clear link between violence and its interaction with all four levels of this model, it has been argued that interventions should be developed to address the multifaceted nature of violence by targeting all levels of the social ecological model in order to prevent violence utilising a collective approach (Cunningham & Henggeler, 2001). Indeed, the social ecological model lends itself to this as it allows for the conceptualisation of each level as a point of intervention that can be dealt with collectively or in isolation. Accordingly, programmes designed to intervene at these levels may assume a singular or multiple focus with overlap between differing levels of influence (WHO, 2004). Multifocal approaches are not only thought to have more robust effects on reducing violence, but may also be more likely to sustain intervention efforts due to the fact they target a multitude of factors associated with the occurrence of violence (Park-Higgerson, Perumean-Chaney, Bartolucci, Grimley, & Singh, 2008).

Although there is an emphasis on the utilisation of multifaceted violence prevention programmes, these are often assembled from single-approach interventions designed to target each of the four levels of the social ecological model. Individual level approaches focus on the alteration of beliefs and behaviours and are often designed in the form of educational or social development programmes that aim to teach children specific skills thought to aid in the prevention of violence later in life (WHO, 2004). Approaches directed toward to the second level of the model aim to influence the types of relationships individuals engage in with people whom they are in contact regularly. This approach is frequently implemented through home visitation, parent training and mentoring programmes. Community-based efforts, on the other hand, endeavour to increase public awareness about violence with the expectation that this will stimulate community action to address this problem. These programmes may be carried out in the form of community media or educational school-based campaigns (WHO, 2002). Finally, societal approaches focus on the cultural, social and economic factors associated with violence in an attempt to alter legislation, policies and the larger social environment in order to decrease the risk of violence in numerous settings and communities.

Underlying theory or rationale.

Together with social ecological models, the majority of current empirical and theoretical literature supports a social cognitive learning approach to violent behaviour (McMahon & Washburn, 2003; Orpinas et al., 2000). In the context of violence prevention, social cognitive learning theory provides a valuable framework for the systematisation of risk and protective factors associated with violence prevention. Whilst originating from social learning theory, the social cognitive learning approach still includes social learning via behavioural modelling, however, the theory expands on this by postulating that behaviour is shaped by both internal-personal and environmental factors as well as the continuous interaction between these (Bandura, 1989). The interaction between individuals and their environments produces certain behaviours, or in this instance, the occurrence of violent acts.

Moreover, the theory also emphasises the importance of an individual's personal internal cognitive processing in the ability to respond correctly to a social situation in the environment. As such, an important consideration of violence prevention programmes is the development of social cognitive skills since these

relate to internal personal factors that allow individuals to respond to violence in the correct manner according to the situation at hand. In this way, individual behaviour, the individual themselves and their environment are all key factors that influence a reciprocal triadic relationship as seen in Figure 4. As such, in order to target the behavioural domain of social learning theory (i.e. the occurrence of violent behaviour), interventions are frequently designed to influence factors associated with both the internal-personal and environmental domains (Farrell, Meyer, Kung, & Sullivan, 2001; Orpinas et al., 2000).

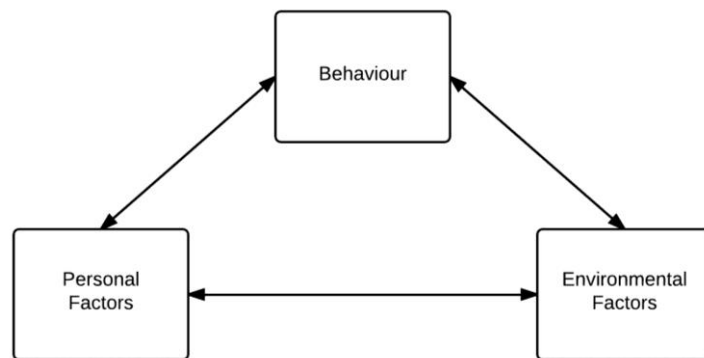


Figure 4. Social cognitive learning theory model.

There are a number of broad-based outcomes that can be expected from violence prevention programmes, however, these are largely dependent on the specific content chosen for each programme. Violence prevention programmes vary widely in their design, yet are predominantly directed toward: 1) increasing knowledge about violence, the consequences thereof and prevention skills; 2) reducing violent, aggressive and impulsive behaviours whilst increasing prosocial and empathetic behaviour; and 3) fostering individual and community norms against violence and aggression (Cooper, Lutembacher, & Faccia, 2000; Orpinas et al., 2000; McMahon & Washburn, 2003). Since there has been little research into and evaluation of which specific programmatic components are successful for violence prevention efforts, there is an insufficiency of data to inform programme design regarding which strategies may work best with which populations (Farrell et al., 2001). Despite this, however, four primary factors in the implementation of violence prevention programmes have been identified as important in the literature and will be detailed in the following section.

Implementation considerations.

In order for a violence prevention programme to be effective in achieving its intended outcomes, the following factors must be taken into account during the intervention's implementation, namely, target audience, setting and method of delivery, activities and content.

Target audience.

The target audience of violence prevention programmes is most commonly stratified by age, level of risk with regard to violence exposure and type of violence. Evidence suggests that aggression in early childhood is a strong predictor of violence in later in life (Orpinas et al., 2000). As such, most violence prevention programmes are aimed at younger children. A number of studies have argued in favour of this noting that programmes focused on children aged nine years old or younger may have stronger and more effective results in reducing violence than programmes targeted at adolescents or adults (Park-Higgerson et al., 2008; UNICEF, 2014). Despite this, some interventions are still targeted at older children between the ages of 11 and 14 years of age (Cooper et al., 2000; McMahon & Washburn, 2003). Research has pointed to the fact that the likelihood of violence occurring in adolescents can be predicted in children as young as seven years old. As such, it is argued that violence prevention programmes should begin within the primary grades and should also be reinforced across all grade levels as children progress through the educational system (Dusenbury, Falcon, Lake, Brannigan, & Bosworth, 1997). The age of the target audience is an important implementation consideration in the context of violence prevention programmes as different developmental stages necessitate the communication of different kinds of knowledge and skills. For example, individuals develop emotional regulation skills in early childhood which are shaped largely from interactions between the child and their parents (Farrell et al., 2001). As such, early intervention violence prevention programmes usually include a significant amount of parental involvement.

Aside from age, violence prevention programmes are also targeted at varying groups of individuals according to their level of risk with regard to violence exposure. Accordingly, three levels of classification exist with regard to this criterion. Firstly, universal interventions target all individuals of a population regardless of the risk they present in terms of exposure to violence (WHO, 2004). Such interventions are usually

implemented to address the problem of violence through the teaching of basic interpersonal skills that are thought to benefit the entire population. On the other hand, selective interventions target only subgroups of a population that are identified as possessing an enhanced risk for violence exposure, engagement in violent behaviour or both (Farrell et al., 2001). Such interventions are often designed for individuals living in low-income settings with high rates of community violence. Finally, indicated interventions target individuals who have already been exposed to or engaged in violence in order to reduce re-victimisation or repeat offending (WHO, 2004).

It is important that programme developers have a clear understanding of the types of violence they are attempting to target as violence comprises a diverse number of risk factors and developmental pathways (Farrell et al., 2001). Usually, school-based violence prevention programmes focus on targeting situational and interpersonal violence since these types of violence manifest themselves most frequently in school setting and have been shown to be most responsive to change. Situational violence is predominantly influenced by sociological dynamics such as community norms, poverty, and substance abuse whereas interpersonal violence occurs after disagreements between individuals in an ongoing relationship and is the outcome of environmental, psychological and developmental factors (WHO, 2002).

Setting and method of delivery.

Literature indicates that the majority of violence prevention programmes directed at children are deployed within a school-based setting. Evidence in favour of utilising a school-based approach argues that schools provide a natural space for the communication of content focused on reducing violence (Farrell et al., 2001). Moreover, it is argued that educational institutions exist as principal contexts for social development and offer natural opportunities for interventions aimed at the promotion of conflict resolution. Additionally, utilising a school environment is an efficient way of reaching a large number of children whilst minimising logistical complications. A school environment may also enhance the likelihood of programme continuation since educational institutions are stable environments with relatively permanent staff. Despite this, it should be noted that school programmes alone are unlikely to have long-term effects on violence prevention unless they are

implemented in combination with broader interventions that incorporate community involvement.

Interventions implemented in school-based settings tend to rely on classroom teaching of specific knowledge and skills associated with violence prevention as a method of delivering programme content (Cooper et al., 2000). In this way, teachers operate as the primary mediators of school-based prevention efforts and lessons can be delivered via the employment of many teaching techniques including simple instruction, demonstration, practice and reinforcement (Fagan & Mihalic, 2003). Many programmes utilise school curricula as a means of integrating violence prevention material into lesson plans from grade one. This curriculum is then extended and enhanced through subsequent grades (Farrell et al., 2001). Orpinas et al. (2000) highlight the importance of engaging with teachers during this process. It is necessary for the subject matter to be accepted by teachers so that they are able to effectively combine violence prevention material into the school curriculum. This ensures the curriculum is both culturally relevant and appropriate. Accordingly, programme endorsement by school teachers is essential for implementation fidelity.

In addition, successful programme implementation often requires the provision of extensive training for teachers by organisations specialising in the implementation of violence prevention programmes (Dusenbury et al., 1997). This is expected to increase the likelihood that programme content is implemented accurately and in so doing the achievement of intended outcomes. It is important to note that attaining support for violence prevention efforts from teachers can often be difficult. Despite attendance at training workshops, teachers may not deliver lessons as intended or may resent the inconvenience of added effort from interventions that are combined with the curriculum (Park-Higgerson et al., 2008).

Activities and content.

Violence prevention programmes vary widely in terms of the programme activities and content within interventions. Generally, most programmes focus on teaching and enhancing specific social skills that may assist in the reduction of antisocial, violent and aggressive behaviour (WHO, 2004). This may include skills such as social cognitive problem solving, conflict resolution, anger management, emotional regulation, and empathy development (Cooper et al., 2000; Farrell et al., 2001; Orpinas et al., 2000; WHO, 2002). Literature suggests that interactive

techniques are most effective to facilitate the development of personal and social skills. Therefore classroom activities may incorporate techniques such as group work, role plays and cooperative learning (Dusenbury et al., 1997).

For example, the Second Step violence prevention programme uses knowledge-based techniques to teach students to view violence as a societal problem and empathy as a basis for prosocial behaviour (McMahon & Washburn, 2003). Subsequently, students are introduced to behavioural techniques that can be utilised to deal with anger or aggression in a prosocial manner. Students are then given the opportunity to practice problem-solving strategies and are then asked to apply the knowledge and skills they have learn to specific situations using role-plays.

Other research also points to the inclusion of developmentally appropriate extracurricular activities within violence prevention programmes as these allow children the opportunity to participate in constructive group activities such as sports, art, music, drama, or writing (WHO, 2002). Such after school activities may function as safe spaces outside of school hours that students can utilise to practice and advance the skills learnt during classroom engagement. In accordance with the social ecological model approach to violence prevention, additional activities outside of the school environment may assist in targeting a number of spaces which may hold potential for the occurrence of violence. For example, during sports matches children are taught how to react to certain situations that may involve conflict or anger both through instruction and behavioural modelling. Participation in future matches may then afford children the opportunity to rehearse these newly acquired skills.

Furthermore, school-based interventions frequently embark on a home-school partnership that strives to promote parental involvement in violence prevention via the knowledge and skills learnt by children during school (WHO, 2004). This additional programme component also seeks to educate parents in positive conflict resolution tactics, the reduction of violent behavioural modelling, discipline of aggressive behaviour and increasing aggressive or violent behaviour monitoring (Orpinas et al., 2000). This activity may be supported by homework tasks given to children that include violence prevention material and involve parental supervision as well as parental training workshops on violence prevention strategies.

Link to theory of planned behaviour.

In accordance with the theory of planned behaviour, violence prevention programmes tie in with the attitude and subjective norm components of the theory. The teaching of knowledge and skills linked to behavioural strategies for violence prevention relates to the attitude component. This educational element supports the targeting of behavioural beliefs as well as individual evaluations of the behavioural outcomes associated with the performance of violence prevention behaviours. If a child's behavioural beliefs about the prevention of violent behaviours are enhanced and he or she is able to better understand the positive behavioural outcomes associated with the avoidance of violent and aggressive behaviour and the promotion of prosocial behaviour, this may result in the improvement of attitudes toward violence prevention efforts.

Furthermore, the employment of teachers as agents of delivery combined with the engagement of parents in the intervention links to the subjective norm component of the theory of planned behaviour. If valued and important individuals endorse and promote the message of violence prevention within a school-based setting, this may assist children in recognising that the normative belief of violence prevention is an appropriate and suitable belief to hold. Furthermore, if teachers and parents are able to encourage high levels of motivation for children to comply with their beliefs, they may be able to strengthen their intention to actually perform behaviours associated with violence prevention.

Violence prevention programme theory.

Based on the above information, the evaluator proposes the following programme theory as a generic violence prevention framework for the Swartland SPCA. As seen in Figure 5, the framework details the proposed causal links between activities, the subsequent short, medium and long term outcomes as well as anticipated programme impact. The framework attempts to engage both the individual and the relationship level of the social ecological model through the incorporation of knowledge-based information and skills as well as parental involvement. In so doing the framework also aims to target two key elements of the theory of planned behaviour in order to maximise the likelihood for behavioural change.

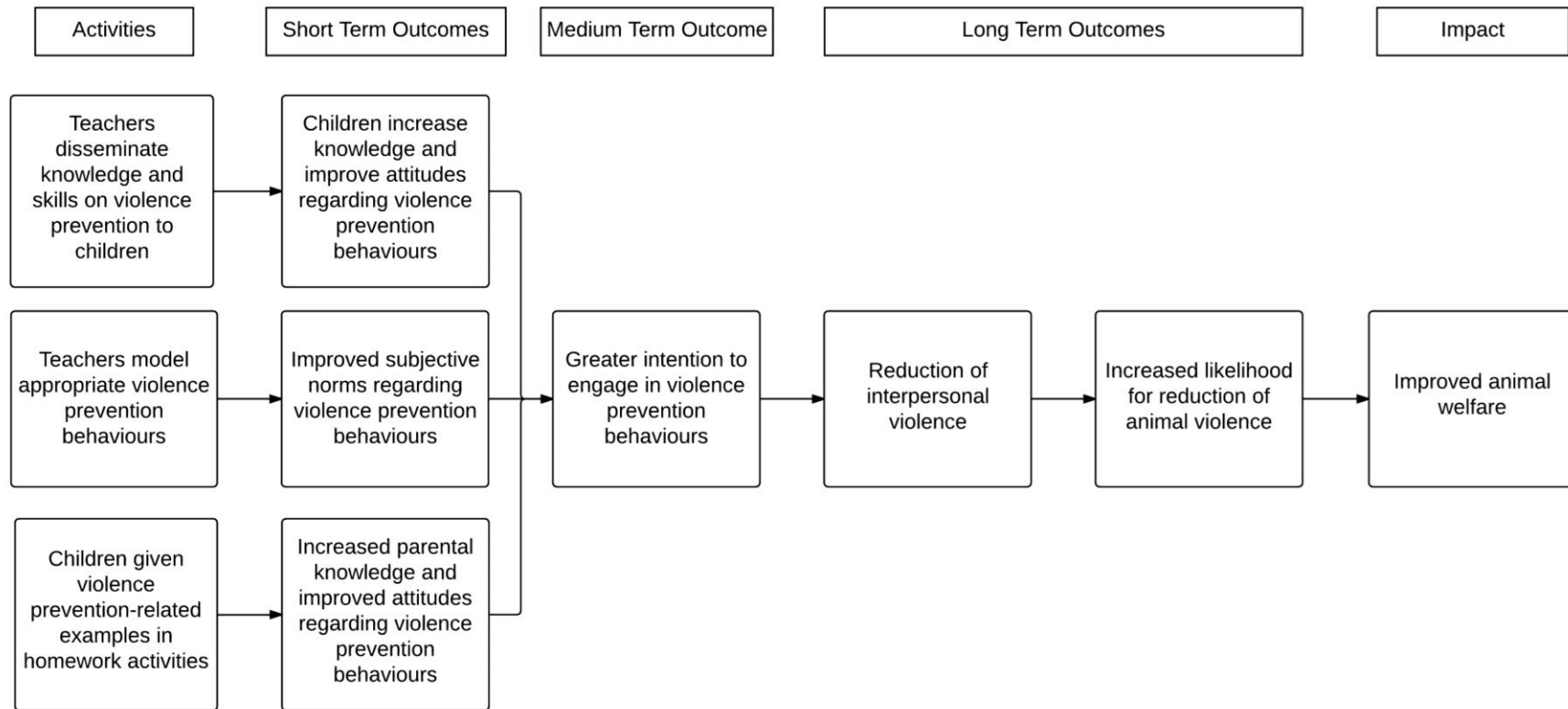


Figure 5. Violence prevention programme theory framework.

The framework comprises three predominant activities: 1) the dissemination of knowledge-based information and skills on violence prevention; 2) the modelling of appropriate violence prevention behaviours and; 3) the provision of violence-prevention related examples in homework activities. Each activity is anticipated to lead to a short-term outcome which corresponds to different tenets of the theory of planned behaviour. The combination of these short-term outcomes is expected to bring about the achievement of the mid-term outcome related to greater behavioural intentions to engage in violence prevention behaviours. Finally, the mid-term outcome is expected to lead to the long-term outcomes and anticipated impact of the programme regarding a reduction of violence.

Although it is recommended that violence prevention programmes should be developed to address the multifaceted nature of violence by targeting all levels of the social ecological model, the scope and type of programme design in this instance only permits a response to the first three levels of this model. Whilst the proposed programme theory incorporates and responds to the individual and relationship levels of the model, the community level is discussed later in Chapter 5. Although targeting the fourth societal level of the model is largely beyond the scope of this programme design, this is also hindered by the fact that there is little legislation or policy surrounding acts of animal abuse.

Adaption to South Africa and SPCA.

The two abovementioned components have detailed the ideal programme theory frameworks and implementation considerations with regard to humane education and violence prevention. Within these two components, there is overlap in terms of intended target audience, method of delivery and setting, activities, and dose. Accordingly, literature suggests that these programmes should: 1) target children in their last year of preschool or their first grade of foundational education; 2) be delivered by trained teachers during specifically allocated times during class; 3) include age appropriate, student-centred, interactive activities presented utilising a number of educational; 4) include at least 60 minutes of instruction during class time per week and ought to continue over the course of an entire year; and 5) include homework activities in order to involve and engage parents on humane education and violence prevention content.

Initially, it was envisioned that these best practice theory-based humane education and violence prevention programmes could be implemented into the life skills subject in Grade R within the South African schooling system. However, upon review, it was found that the Department of Basic Education (DBE) predetermines the content for this compulsory subject. The focus of the life skills curriculum is already specified to include content areas such as creative arts, physical education and personal/social wellbeing. As such, it may prove difficult to implement specific lessons on humane education and violence prevention into the rigidity of lesson plans already provided by the DBE. Therefore, as it stands, the South African education system and resulting curriculum does not lend itself to the incorporation of dedicated humane education or violence prevention lessons. As such, these two components pose similar difficulties in terms of their implementation considerations.

Given that implementation of humane education and violence prevention programmes appears to be problematic, it is envisioned and recommended that in the long term animal welfare organisations form a collaborative partnership in order to urge the DBE to include humane education and violence prevention content and lessons into the South African school curriculum. The high rates of interpersonal violence, animal abuse and neglect within South Africa could be employed as a strong evidence base to facilitate the lobbying of support from the DBE.

In the interim, whilst animal welfare organisations attempt to lobby for the inclusion of humane education and violence prevention lessons into the school curriculum, two possible solutions have been identified to overcome these implementation difficulties. Possible solutions include: 1) slowly integrating this content into the schooling system via already existing lesson plans; and 2) implementing a voluntary extracurricular humane education and violence prevention programme.

Incorporation of concepts in teaching methods.

Firstly, instead of including dedicated lessons for the teaching of humane education and violence prevention, an initial solution may be to begin incorporating these concepts into already existing lesson plans within life skills content areas as well as other subjects such as mathematics, natural science and languages in Grade R. In other words, teachers should be encouraged to include humane education and violence prevention issues into their teaching methods. The incorporation of content

may, for example, include the replacement of activities, examples or discussions that usually focus on human content with concepts related humane education or violence prevention. For instance, reading materials could be altered to include books with a focus on humane education or violence prevention messages. Furthermore, children could learn to draw or paint a scene involving the humane treatment of animals or children appropriately resolving a conflict in the arts and crafts component of the life skills subject. Lastly, homework activities that include reference to or examples of humane education or violence prevention content should be developed and utilised in order to incorporate parental involvement and encourage learning. The combination of these strategies not only facilitates the inclusion of this content into learning processes, they also assist in resolving the difficulties associated with implementing dedicated humane education and violence prevention lessons.

In addition, it may also be advantageous for pre-schools to mirror this process of incorporation in order to target younger children before they enter formalised schooling systems. If resources and capacity permit, it is further advised that all primary school teachers from Grade R through to grade seven begin to incorporate humane education and violence prevention examples into teaching methods. In so doing, this will allow for humane education and violence prevention concepts to be reinforced across grade levels as children progress through the educational system into higher grades. Since the literature points to the fact that longer programmes are generally considered to be more effective in their achievement of attitude change, incorporating humane education and violence prevention examples throughout all primary school grades may assist in maximising and extending the length of time that children are exposed to these concepts.

Extracurricular programmes.

A second solution involves the implementation of a voluntary extracurricular humane education and violence prevention programme for learners from primary school grades. It is advisable for the SPCA to work collaboratively with staff from interested schools to devise and implement developmentally appropriate extracurricular activities that will allow children to participate in group activities to learn, practice and advance humane education and violence prevention skills. As such, it is suggested that this additional programme component is run once a week for approximately 30 to 45 minutes after school. Content should alternate between

the teaching of humane education and violence prevention on a weekly basis. Considering that this will represent an initial investigation into the effectiveness and feasibility of these kinds of interventions in a particular South African context, it would be satisfactory for initial implementation to occur over the duration of one school term.

Humane education lessons should include student-centred and interactive activities that focus on the transmission of factual information as well as empathic and pro-social messages toward animals. Activities may include role playing, storytelling, decision making, and creative writing. Furthermore, the SPCA may choose to offer visits to their premises where children have the opportunity to interact with animals and in so doing learn about appropriate animal care and treatment practices in order to address humane education issues.

Violence prevention lesson plans should include activities thought to be most appropriate to respond to the needs of the Darling community based on the occurrence of violence. These comprise activities that may teach and enhance specific social skills which assist in the reduction of antisocial, violent and aggressive behaviour including skills such as social cognitive problem solving, conflict resolution, anger management, emotional regulation, and empathy development. Additionally, a variety of sports activities, such as soccer or netball matches for example, could be included into this aspect of the extracurricular programme. The use of sports matches may provide additional opportunities for children to learn and rehearse skills thought to support violence prevention. For example, anger management and emotional regulation skills could be learnt and practiced in situations where children find themselves on the losing team at the end of a match.

These extracurricular activities may function as safe spaces outside of school hours that can be used to facilitate, practice and advance concepts related to humane education and violence prevention. After attendance at and completion of this programme, it is suggested that some recognition in the form of a certificate, for example, is awarded as a means of acknowledging those learners who have voluntarily completed the programme.

Participation in the humane education and violence prevention programmes will require teachers to undergo a significant amount of training outside of teaching hours. The adaption and incorporation of new teaching methods will also require additional work as well as a large amount of commitment. Considering that this is a

significant addition to their normal responsibilities, it is recommended that teachers receive some form of recognition for programme involvement. One suggestion may be to award teachers with a certificate for their participation in and completion of the humane education and violence prevention training courses. Additionally, the SPCA could hold an end of term staff lunch that may be utilised as a platform to acknowledge and thank all teachers who participated in the programme.

Further recommendations.

To facilitate the incorporation of humane education and violence prevention concepts into teaching methods as well as the implementation of extracurricular programmes, the Swartland SPCA will need to establish a good working relationship with selected schools within the area. The SPCA has indicated that there are five pre-schools and three primary schools in the Darling area. It is suggested that the SPCA base their decision on which schools to partner with by determining which schools would be interested in participating in an intervention of this kind and whether collaborating with these institutions on a project of this kind is feasible. In order for the extracurricular programme to be successful, buy-in and commitment from both the school and the teachers who will be involved is essential since this endorsement will enhance implementation fidelity.

Whilst it is recommended that all school teachers receive some form of training on approaches that can be used to incorporate humane education examples and discussions into their teaching methods from the SPCA, it is recognised that violence prevention is not necessarily subject matter that the organisation is familiar with. As such, the SPCA should consider partnering with another NGO or community-based organisation that offers and is informed on the implementation of violence prevention programmes. It is important that a clear definition of the kind of violence the extracurricular programme aims to target is determined. It is suggested that the kinds of violence prevalent in the Darling community are examined so as to ensure that the intervention is able to respond to the situational context of violence occurring within the community.

Together, the SPCA should work collaboratively with the chosen NGO or community-based organisation in order to train teachers on humane education and violence prevention content and should also assist them to develop strategies for the incorporation of this material into teaching methods. During this developmental

process, it is recommended that the content produced is applicable to the local context. In so doing, this will serve to ensure that teachers are familiar with this content and are well-equipped to instruct students on these topics. It is further recommended that the SPCA works in partnership with the selected NGO or community-based organisation to train teachers involved in the implementation of the extracurricular programme activities on the delivery of programme content. This will not only allow for greater programme integration within the school setting, it may also ensure accurate programme implementation and support the sustainability of the programme.

In combination, these recommendations not only facilitate the inclusion of content into learning processes, they also ensure that via teacher training, implementation fidelity is achieved.

Peer Education / Role Modelling

Peer education is an intervention approach whereby certain individuals from a specified target group provide information, training and resources to other demographically similar individuals on a range of social issues (USAID, 2010). A peer is recognised as any individual who is of shared social status, or who is a member of the same societal group on the basis of age, gender, language, education or ethnicity (Parkin & McKeganey, 2000; Shiner, 1999). Although peer education is frequently utilised to affect change on an individual level by attempting to alter knowledge, attitudes, beliefs, or behaviours, it can also be employed to affect change at a group or communal level through the alteration of norms and the generation of collective action. Whilst peer education only gained prominence in the 1960s, it is now viewed as an effective strategy to affect behaviour change on a number of social issues (Shiner, 1999).

The concept of peer education is derived from the assumption that peers are able to exert a strong influence on individual behaviour (Medley, Kennedy, O'Reilly, and Sweat, 2009). Moreover, peers are viewed as credible sources for the successful transference of information. The basic theory of peer education asserts that peer educators able are to disseminate new information to a group of individuals whilst acting as models of this behaviour at the same time. The theory therefore argues that since educators and peers share commonalities in experience, it is easier for educators to inspire and encourage their peers to change their behaviours in favour

of the modelled behaviour of the educator (UNODC, 2014). This underlying logic is the prominent theory of change in all forms of peer education programmes, of which there is a large variety. To date, peer education has predominantly been used to address public health issues such as HIV prevention, sexual health promotion, substance misuse and nutrition (Parkin & McKeganey, 2000; Turner & Shepherd, 1999). Some of these programmes are geared toward altering knowledge and attitudes, whilst others are oriented toward the modification of behaviours.

Underlying theory or rationale.

From a review of the literature, it is evident that peer education programmes differ substantially in terms of their design. As such, it is difficult to apply a generic programme theory or underlying logic to this varying range of interventions. Many peer education programmes are therefore not grounded in a specific programme theory, but rather make reference to myriad approaches that are dependent on the type of programme, the target audience and the context in which they are implemented (Campbell & MacPhail, 2002; Parkin & McKeganey, 2000; Shiner, 1999). Although there are a number of social psychological theories that have been employed to explain how these programmes function, peer education appears to be an approach seeking a theory rather than the operation of a theory in practice (Turner & Shepherd, 1999).

Despite the variety of theories on which peer education is based, the theory most suited for application within a community-based animal welfare context is that of social learning theory (Bandura, 1977). This theory is also most prevalent within the landscape of peer education programmes. Put simply, this theory asserts that behavioural learning can occur in a social context via observation or direct instruction and, therefore, behavioural modelling is an imperative factor in the social learning process (Bandura, 1977). Since individuals possess the ability to observe enacted behaviour, the theory suggests that it is possible for individuals to then adopt similar behaviours after such an observation. Yet, social learning theory also contends that the degree to which individuals are affected by such modelled behaviour is largely dependent on the characteristics of the models. Accordingly, some individuals are capable of eliciting behaviour change in other individuals based on their value and interpretation system (Bandura, 1986). Hence, the observation of behaviour performed by an influential model increases the possibility for the occurrence of

behavioural change if the observing individual shares a similar set of values and understanding.

Peer education has both incorporated and expanded on the assertions of social learning theory with regard to its own theory of change by contending that selecting individuals that are influential, respected and highly-valued within a social group as peer educators may allow for the exertion of greater influence on other individuals and therefore facilitate greater success in the achievement of behavioural change (Turner & Shepherd, 1999). Furthermore, it is argued that behaviour is highly influenced by an individual's perception of their peers' thoughts and behaviours. For example, if respected individuals in the community regard animal welfare as a highly important behaviour and are able to successfully model this, it is likely that other community members' behaviour will be influenced by this. Holding a respected individual's behaviours as important also facilitates the creation of high levels of motivation to actually perform these behaviours.

Reinforcement of socially learned behaviours is another key tenet of this theory since it provides opportunity to strengthen learning via the ongoing contact educators have with their peers (Turner & Shepherd, 1999). Reinforced messages through repeated contact between educators and peers are more likely to be effective in achieving behaviour change than singular meetings with a less influential individual like a teacher or parent. Coupled with reinforcement, behavioural modelling is subsequently anticipated to influence community norms.

A final component of social learning theory is that of self-efficacy. This refers to an individual's belief in their ability to implement the necessary behaviour (USAID, 2010). The training and promotion of skills that lead to confidence in behavioural performance enhances self-efficacy and may allow individuals to overcome barriers to behavioural performance. Peer educators can assist in reducing these perceived barriers through support, correction of misinformation, incentives and assistance. Programmes grounded in social learning theory utilise information and attitudinal change to enhance individual motivation and, in turn, self-efficacy. Thus, in the design of a peer education component for an animal welfare programme it is important that a) activities encompass a social element so learning can take place; b) role models are chosen on a basis of value and respect in the community; c) activities occur often to encourage reinforcement; and lastly d) peer educators are trained on how to stimulate self-efficacy in the target population.

There are a number of broad outcomes that can be expected from peer education programmes that, with time, may develop into demonstrable social change. Immediate outcomes from peer education programmes include an increased knowledge-base, improved individual or community norms and greater perceived behavioural control beliefs. Following the theory of planned behaviour's underlying logic, these changes should jointly bring about greater intention to perform intended behavioural outcomes and eventually the actual performance of these behaviours themselves.

Link to theory of planned behaviour.

The peer education model possesses strong links to the theory of planned behaviour. The transference of information from educators to peers ties in well with the attitude component of the theory. This dissemination of knowledge surrounding animal welfare behaviours aims to target behavioural beliefs about animal welfare as well as an individual's evaluation of the behavioural outcomes. In this way, if peer educators can enhance behavioural beliefs and create positive evaluations of behavioural outcomes, then attitudes toward animal welfare are likely to improve.

Furthermore, the use of community members as peer educators links to the subjective norm component of Ajzen's theory of planned behaviour. If valued and important individuals who endorse the promotion of animal welfare within a community facilitate a normative belief that animal welfare is an appropriate and suitable belief to hold, this may result in the strengthening of other individuals' normative beliefs on animal welfare within the community. Furthermore, if these individuals are then able to facilitate high levels of motivation for community members to comply with their beliefs, they may be able to strengthen the community's intention to actually perform animal welfare behaviours. Therefore, the generation of normative beliefs associated with behaviours leading to animal welfare coupled with greater motivation to comply increases the likelihood for behaviour change.

Finally the fact that peer educators ought to be trained in self-efficacy relates directly to the perceived behavioural control aspect inherent to the theory of planned behaviour. Since intention to perform a behaviour is only expressed when the behaviour is thought to be under volitional control, it is important for programmes to devise a strategy that minimises barriers yet optimises resources and opportunities for behavioural control. Peer educators can influence control beliefs through the

provision of assistance, information, motivation and encouragement. In so doing, peer education targets perceived behavioural control in an attempt to maximise behavioural intentions which may then result in enhanced achievement behavioural performance in relation to animal welfare.

Implementation considerations.

In order for a peer education programme to be successful in achieving these specified outcomes, four primary factors in the implementation of such a programme have been identified in the literature. These factors centre on the type of programme as well as the selection, training, supervision and retention of peer educators.

Type of programme.

Considering that peer education programmes are applied to a number of topics, it is understandable that these programmes have been deployed in a wide range of settings. Whilst operating within formalised structures such as schools, youth centres, and workshops, peer education programmes are also utilised within existing informal community settings (Turner & Shepherd, 1999). Formal peer education programmes are usually structured and include particular selection criteria, training and supervision whereas informal programmes usually include narrow selection criteria, basic training, no supervision and unstructured one on one discussions (Walker & Avis, 1999). The aim of informal peer education programmes is to utilise natural social networks of peer influence and existing roles in order to disseminate information. Although the literature does not provide evidence to suggest that one type of programme is more successful than the other, it does suggest that particular external situational characteristics may render a certain approach more effective than the other.

Selection of peer educators.

The correct selection of peer educators is integral to programme success since these kinds of interventions are dependent on the individuals chosen. Research has highlighted three areas that are fundamental for selection of peer educators: person-based credibility, message based credibility and experience-based credibility (Shiner & Newburn, 1996). Person-based credibility suggests that individuals who hold educator positions should possess as many similar social

characteristics as possible to other individuals with whom they will be interacting. For example, educators should speak the same language, should share cultural norms and values, and should be of a similar age gender and ethnicity to those who they intend to educate. Message-based credibility refers to the way in which educators communicate the information they are attempting to disseminate. In this case, traits such as sensitivity, open-mindedness and tolerance are important. Educators should also possess good listening and communication skills. Finally, experience-based credibility refers to the fact that educators ought to share similar experiences to those they are educating. This is an essential selection criterion since these individuals will be positioned as role models within the community.

Training, supervision and retention of peer educators.

It is important for educators of any kind to have an overall knowledge base of the subject matter on which they intend to educate others. Research has shown that the success of a programme is often dependent on the training provided to the role models (Medley et al., 2009). Although peer educators should have some training prior to the commencement of their role, they do not need to be experts on the subject on which they are trained. Peer educators should, however, be made aware of where more information and support can be accessed as they cannot be expected to be knowledgeable on all subject matter or how to deal with every situation that may arise (UNAIDS, 1999). Moreover, repeated interactive knowledge-based training sessions with educators throughout programme implementation as opposed to just a one-off session is often most beneficial (UNODC, 2014). This may assist in maintaining programme participation and endorsement from the educators and may also support continued skills development. Due to the fact that the peer educators are often required to interact with various groups of people and may also need to provide guidance and support to community members, it is important to incorporate group facilitation and counselling skills into the training of these individuals.

Ongoing supervision of peer educators is important as it not only allows implementing organisations to monitor the progress of educators, it also facilitates a space in which peer educators can access support from supervisors and other educators (Walker & Avis, 1999). In turn, this may contribute to maintaining the quality of the programme. The retention of trained educators is vital for programme

effectiveness as well as sustainability (Medley et al., 2009). As such, implementing organisations often devise strategies for the motivation and retention of educators. One such strategy is the provision of compensation for educators in both financial and non-monetary terms (UNODC, 2014). Financial compensation may include things such as compensation for expenses, whereas non-monetary compensation could include branded clothing, access to materials, or unique opportunities.

Adaption to animal welfare.

Taking the abovementioned implementation considerations into account, the subsequent section will detail how these considerations can be adapted to an animal welfare setting in South Africa.

Type of programme.

It is suggested that the SPCA adopt a semi-formal programme. The primary impetus for the adoption of this type of programme is that whilst the maintenance of programme structure is important, peer educators should not feel as if their roles compare to that of a job in which they carry out day to day responsibilities as this is unlikely to result in programme buy-in or retention. Instead, it is suggested that the SPCA provide peer educators with a rough guideline detailing how often to engage with other community members as well as what attitudes and behaviours need to be observed, noted and reported. Peer educators should be advised they do not need to abide by a formalised meeting plan and that they need only organise meetings with community members subsequent to the observation of an animal welfare issue that ought to be dealt with further. For the most part, it is anticipated that this kind of structure may work best in the setting of a rural community like that of Darling.

Selection.

Given the fact that Darling is an impoverished community, it is likely that there are a number of racial and cultural dynamics at play. Therefore, to reduce obstructions to programme effectiveness, peer educators should be carefully selected and matched with the individuals whom they will be working. Research points to the fact that programmes are often more effective when individuals are nominated by the community as this facilitates collective understanding and trust (UNAIDS, 1999). However, even though individuals chosen by community may have a better standing

with their peers, they may be less motivated or skilled than educators chosen by programme staff (Medley et al., 2009). Therefore, it is suggested that the Swartland SPCA looks towards utilising the following strategy for the selection and appointment of peer educators. Initially, it may be beneficial for the SPCA to shortlist certain individuals from the community whom they believe are suited as peer educators based on two of the three areas of credibility suggested in the literature above, namely experience- and message-based credibility. In this instance, experience-based credibility refers to the fact that peer educators will need to demonstrate that they are responsible pet owners and are able uphold the concepts of animal welfare as determined by the SPCA. In order to establish message-based credibility, peer educators will need to demonstrate that they are effective communicators and will need to possess the majority of the traits suggested by the literature above. Following this, community members should then be given the opportunity to vote for the peer educators from the shortlisted individuals. This will allow the community to assist in the fulfilment of the person-based component of the credibility areas. In this way, the SPCA will be able to ensure that peer educators have the desired characteristics and the community are involved in their selection. In combination, this selection strategy allows for the utilisation of two important implementation considerations so as to optimise programme success.

Training, supervision and retention.

The content of these training sessions will be determined by the Swartland SPCA but should, however, relate to the animal welfare outcomes agreed upon from the outset of the programme. Essentially, the content of the training should remain similar to content developed for the humane education programme component so as to ensure continuity in the communication of information on animal welfare. In line with the literature, the SPCA should bear in mind that peer educators need not be specialists in animal welfare. As such, it is suggested that the SPCA should focus on ensuring peer educators have a strong knowledge base and should also, more importantly, ensure educators are all aware of the resources available to them that are able to provide more support. For example, if an instance arose where an educator was to observe that an animal was being abused or neglected, the educator should receive training with regard to who to alert in order to report the incident.

Moreover, training that incorporates group facilitation and counselling skills is recommended. In order for training to be beneficial, the Swartland SPCA will need to implement continuous and interactive training sessions with peer educators throughout the execution of the programme. For example, the first few training sessions might deal with the dissemination of knowledge surrounding humane education and animal welfare issues. The length of these initial sessions will depend on what content is chosen. Subsequently, the next sessions may involve the development and rehearsal of counselling and group facilitation skills. In relation to this, educators should also be trained on how to impart information on and facilitate the promotion of self-efficacy so as to enable the achievement of animal welfare outcomes in their peers.

The provision of ongoing supervision for peer educators is recommended so as to facilitate a space for discussion and the sharing of information. It is likely that educators may experience difficulties in attaining community buy-in to the programme and may also encounter certain complications when attempting to alter attitudes and behaviours toward animal welfare. Therefore, supervision is important because it enables the creation of a supportive environment amongst the group of peer educators in which experiences can be communicated and solutions to problems discussed. Additionally, it is recommended that peer educators report back to the SPCA on a monthly basis so that progress can be monitored and assessed.

The SPCA should make certain that peer educators are allocated a manageable number of households to oversee so as to ensure that educators are not overwhelmed by the amount of time needed to perform their roles adequately as this may result in their withdrawal from the programme. It is recommended that the SPCA attempt to appoint as many suitable peer educators as possible as this will assist in distributing work and time pressures.

The retention of trained peer educators is fundamental for programme success. As such, it is recommended that a strategy for both the motivation and retention of educators is devised. One aspect of this strategy may include providing peer educators with some form of compensation that is tailored to the needs and wants of individuals in the Darling community. This may, for example, include free food or vaccinations for the animals of peer educators. Moreover, the provision of compensatory strategies in this form is aligned with the fourth component of Ajzen's theory of planned behaviour, access. This component states that environmental

factors must be absent in order for an individual to access the possibility of performing a behaviour. In the case of animal welfare, environmental factors may include an inability to access food, water or resources to construct an appropriate shelter for animals. Therefore, by providing peer educators with greater access to these resources via compensation, this may increase the likelihood that these individuals will achieve animal welfare behaviours. In turn, this perpetuates their ability to role model these behaviours correctly thereby influencing the behaviour of other individuals in the community.

Furthermore, it is suggested that the SPCA devises a system for the awarding of resources to community members in Darling so as to incorporate the access aspect of the theory of planned behaviour into this programme component where possible. As an example, the SPCA could reward pet owners who exhibit good animal welfare practices but do not have the resources to achieve these behaviours to their fullest extent with such resources. Peer educators could be responsible for rewarding community members who are making an improved and visible effort to alter animal welfare behaviours. This would require a partnership with a local pet food manufacturer, or rely on frequent donation drives held quarterly so as to ensure these resources are available to the SPCA for distribution.

Peer education / role modelling programme theory.

Based on the above information, the evaluator proposes the following programme theory as a generic framework for the Swartland SPCA¹. The framework, as seen in Figure 6, integrates both general peer education and social learning theories in order to target three key elements of the theory of planned behaviour and as such maximise the likelihood for behavioural change. Figure 6 depicts the programme activities for the peer education / role modelling component and the proposed causal links between these activities, the subsequent short, medium and long term outcomes and the anticipated impact of the programme regarding improved animal welfare (see below). Community implementation of these programme components is a mediating factor for programme success.

¹ Whilst the evaluator was conducting research on the proposed programme components, the Swartland SPCA designed an Animal Ambassador Club intervention based on role modelling theory. This intervention is aligned with the research found and detailed above. It is suggested that the SPCA ensure that the proposed programme design of the Animal Ambassador Club is aligned with what has been proposed in this research.

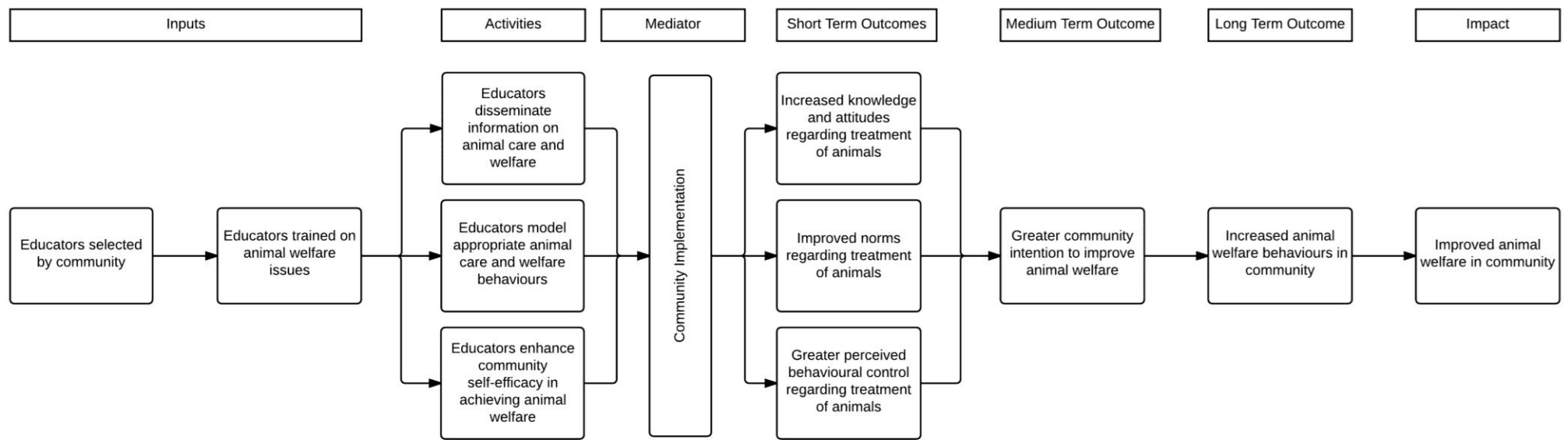


Figure 6. Peer education / role modelling programme theory framework.

Chapter 5: Discussion, Recommendations, Limitations and Final Thoughts

The following chapter will present and describe the proposed broad-based multi-component programme design to address the problem of animal welfare in the Darling community. Based on this, a number of generic indicators that could be used to monitor the outcomes of each programme component are specified. The chapter will then provide an explanation of how the programme framework integrates and responds to the four key tenets of the theory of planned behaviour. Subsequently, an outstanding yet imperative implementation considering involving community engagement and empowerment will be considered. Lastly, the chapter will conclude with limitations, recommendations and final thoughts.

Broad-Based Multi-Component Programme Design

Taking into account the three components that have been proposed, the broad-based multi-component programme design is presented in Figure 7. This holistic framework intends to respond to the multitude of intersecting factors associated to the enactment of abusive behaviour toward animals in order to promote and sustain animal welfare in the Darling community. Each of the programme components was designed to target the following six possible reasons for the incidence of animal abuse in Darling: 1) a lack of knowledge regarding the correct treatment of animals; 2) negative attitudes toward the promotion and maintenance of animal welfare; 3) inaccurate normative beliefs about animal welfare; 4) a perceived lack of skills and abilities necessary to attain animal welfare; 5) a lack of or the inability to access resources that enable the achievement of animal welfare; and/or 6) situational factors (e.g. exposure to violent environments).

As a result, it is reasoned that a multidimensional approach possesses greater promise in successfully preventing and resolving this ongoing problem by disrupting the cycle of violence within which animal abuse and interpersonal violence appear to be located. Since the environment in which animal abuse occurs has been shown to be a key factor that contributes to the development of violent and abusive behaviour toward both animals and other individuals, this framework aims to intervene on a number of contextual levels so as to target the underlying motivations, complex factors as well as the progressive nature of animal abuse (McPhedran, 2008). Furthermore, the use of a multi-component programme design is anticipated to result

in a stronger link between attitudes and behaviours and therefore more robust alterations in behaviour change with regard to the treatment of animals.

The framework presented below includes the humane education, violence prevention and peer education / role modelling components and provides a variable-oriented insight into the proposed mechanisms of change. Figure 7 details the theoretical causal links thought to exist between the specified activities and their subsequent short, medium and long term outcomes as well as overall programme impact. The framework is closely modelled on the four tenets of Ajzen's theory of planned behaviour with short term outcomes anticipated to work in combination in order to increase intentions and resultant behaviour. It is envisioned that this framework be used by the programme stakeholders of the SPCA to decide on intended outcomes, select the programme activities, and further adapt the design details thereof rather than as a programme theory in and of itself.

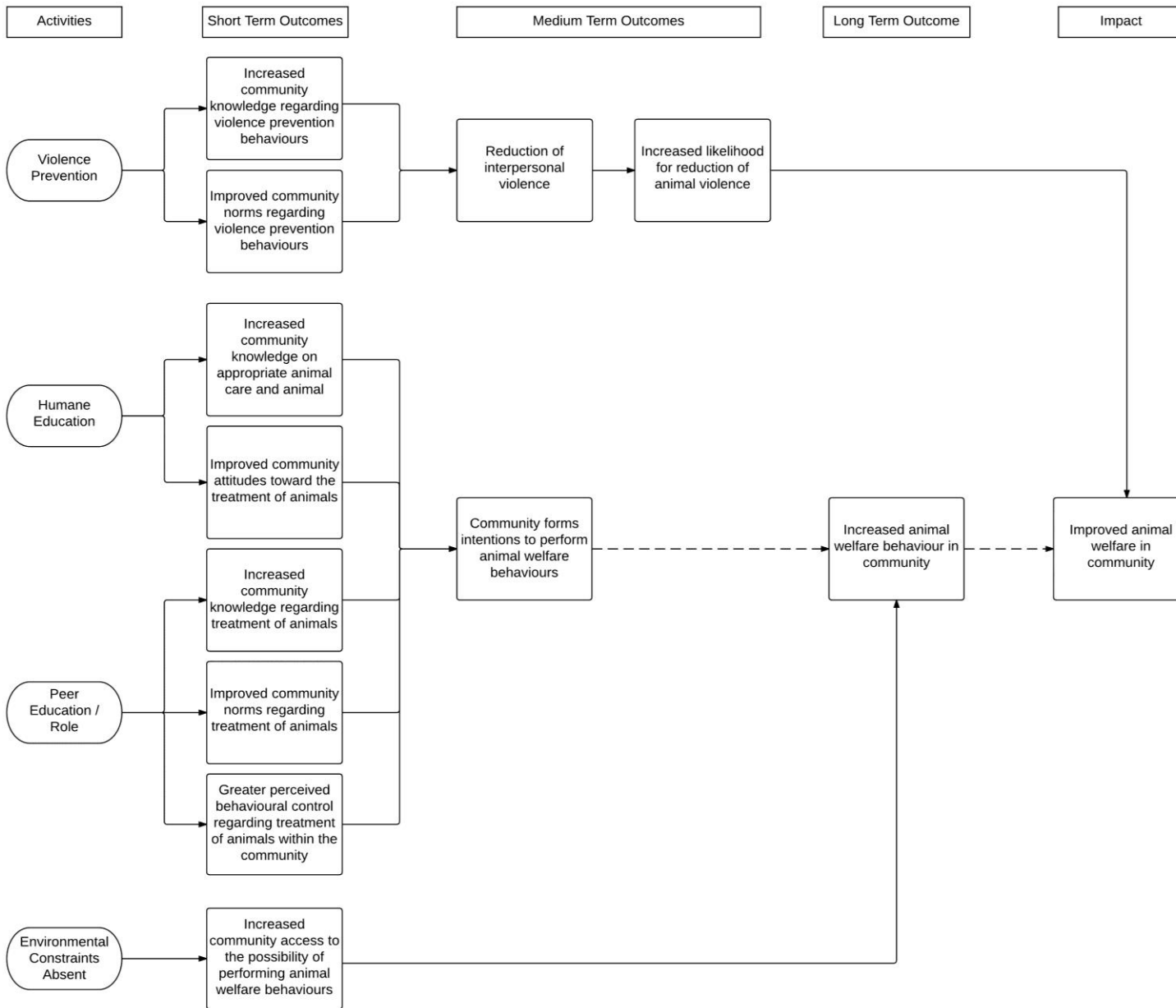


Figure 7. Broad-based multi-component programme theory framework.

Broad-based indicators.

Given the fact that the proposed design comprises a broad-based framework, there are a number of generic indicators that could be used to monitor the short, medium and long term outcomes of each programme component.

All three programme components include short term outcomes relating to increases in knowledge. The humane and peer education components anticipate increased knowledge on animal care, welfare and treatment whilst the violence prevention component is expected to result in increased knowledge on violence prevention behaviours. In order to monitor these outcomes, tests need to be designed to measure these different content areas. These tests should be administered to the target audience of each component before (pre-test), during, and after (post-test) the intervention. The scores on these tests could function as indicators of the target audiences' knowledge acquisition in these two domains.

Another short term outcome of the humane education component is improved attitudes toward the treatment of animals. It is suggested that the SPCA administer a scale as a pre-test and post-test measure of attitudes towards animals. Two possible scales for this purpose include the Animal Attitude Scale or the Primary / Intermediate Attitude Scale. The change in scores from pre-test to post-test would be indicative of attitudinal change, with higher post-test scores being an indicator of enhanced positive attitudes towards animals.

Both violence prevention and peer education components are expected to alter community norms regarding violence prevention behaviours and the treatment of animals respectively. Again, questionnaires or surveys designed specifically to measure differences in community norms for violence prevention and treatment of animals could be utilised as indicators to monitor these short term outcomes. Similarly, this method of measurement could also be utilised to assess alterations in the peer education component's short term outcomes relating to perceived behavioural control over the treatment of animals. Due to the fact that all of the components are context specific, the SPCA would need to design a questionnaire for this purpose. Again here, both pre- and post-test data collection would be required in order for the SPCA to assess differences in norms and behavioural control.

The violence prevention component's medium term outcome is a reduction in interpersonal violence. This may be measured in two ways. Firstly, parental and teacher reports of violent or aggressive behaviour of children could be collected

before, during and after the implementation of the intervention. Secondly, violence and crime rate statistics within the Darling community could be analysed.

Whilst indicators for the overall medium term outcome (increased community intentions to perform animal welfare behaviours) may be difficult to measure, there are a number of indicators to consider when assessing whether the long term outcome of animal welfare has been achieved. The use of observations designed to determine animal conditions such as, ready access to fresh water, suitable food sources, appropriate shelters, and access to veterinary care could be used to assess change regarding this outcome. Baseline observations should be collected prior to the programme implementation, and the SPCA should decide how often these observations are to take place. Improved conditions would indicate achievement of the long term programme outcome of animal welfare.

Integration of Programme Design and Theory of Planned Behaviour

Since behaviour change is a key outcome in an animal welfare programme, the proposed programme was designed in accordance with Ajzen's theory. The tenets in this theory have been merged into the design of the intervention with each programme component anticipated to respond to one or more of the proposed triggers for intention so as to increase the likelihood of the link between attitudes, intention formation and subsequent behavioural performance. The theory deals with three major behavioural determinants which include attitude, subjective norm and perceived behavioural control. Maximising attitude, subjective norm and perceived behavioural control facilitates stronger intentions to perform behaviour (Ajzen, 2002). Intentions are thought to denote the motivational factors that influence behaviours with stronger intentions resulting in an increased likelihood of behavioural performance.

Attitude.

All three programme components attempt to develop favourable individual attitudes toward the reduction of animal abuse as well as the promotion of animal welfare and violence prevention. Favourable attitudes are formed as a result of positive behavioural beliefs and the perception of desirable behavioural outcomes with more favourable attitudes likely to create stronger intentions which in turn contribute to an increased possibility of actual behavioural performance. The

provision of educational instruction within the humane education and violence prevention components coupled with the dissemination of information within the peer education / role modelling programme is expected to increase individual knowledge surrounding animal welfare and violence prevention which should then lead to an increase in positive behavioural beliefs regarding these concepts. Moreover, the dissemination of knowledge in these three programmes is also expected to improve individual evaluations of behaviour associated with animal welfare and violence prevention. Together, positive behavioural beliefs and favourable behavioural evaluations are likely to result in improved attitudes toward the treatment of both animals and other individuals. Finally, favourable attitudes should then increase individual intentions to uphold animal welfare and violence prevention behaviours which may eventually result in the actual performance of these behaviours.

Subjective norm.

The utilisation of teachers, parents and peer educators as agents of delivery in all three programme components provides a strong link to the subjective norm component of the theory of planned behaviour. Since these valued and important individuals are both endorsing and promoting the message of animal welfare and violence prevention within school-based and community settings, this may assist in greater acceptance of animal welfare and violence prevention normative beliefs as appropriate and suitable. If teachers, parents and peer educators are able to encourage high levels of motivation for individuals to comply with these beliefs, they may be able to strengthen individual intention to actually perform behaviours associated with animal welfare and violence prevention.

Perceived behavioural control.

Although only the peer education component is specifically designed to target this aspect of the theory of planned behaviour through the provision of guidance, support, motivation and the sharing of information, it is anticipated that both teachers and parents may also be able to influence control beliefs and promote self-efficacy through the provision of informal assistance, information, and encouragement to children and other members of the community. By minimising barriers and optimising resources and opportunities for behavioural control, behavioural intentions are

maximised which may then result in enhanced achievement of behavioural performance in relation to animal welfare and violence prevention.

Access.

Thus far, only one element of the proposed programme framework (peer education) accounts for or includes specific detail on access, the fourth and final component of Ajzen's theory of planned behaviour. This component refers to the fact that environmental factors must be absent in order for an individual to access the possibility of performing a behaviour. At times, behavioural performance may depend on non-motivational environmental factors like time or resources that may influence an individual's ability to execute a behaviour despite the formation of intentions to do so. Considering the high rates of poverty in South Africa as well as the rural setting in which Darling is located, it is possible that individuals in this community lack or are unable to access resources that facilitate the achievement of animal welfare and violence prevention behaviours. This may include material resources such as food for animals. It is recommended that the SPCA seek sponsorship and make provision for fundraising opportunities such as food drives, for example, in order to support the creation and acquisition of these resources as they are likely to play a significant role in enabling the achievement of behaviours geared toward the promotion of animal welfare.

Community Engagement and Empowerment

Although the development of a multi-component framework grounded in the theory of planned behaviour is anticipated to assist in addressing the problem of animal welfare, this is a largely theoretical basis for the prediction of behaviour change. Accordingly, a final and overarching implementation consideration that cannot be ignored involves the engagement and empowerment of the Darling community.

Although the proposed programme design focuses predominantly on the utilisation of school-based programmes, it should be noted that in isolation these components are unlikely to have long-term effects on identified outcomes unless they are implemented in combination with broader interventions that incorporate community involvement (Farrell et al., 2001). Whilst the peer education / role modelling component inherently involves community members as peer educators,

greater community engagement is needed in order to attain programme endorsement from the wider community as this is vital for programme success. This has highlighted the need for the development and incorporation of effective community-based strategies that involve teachers, parents, and community leaders into the proposed programme components.

The importance of community involvement in the design, planning and implementation of social programmes should not be underestimated. Community engagement can increase the likelihood of programme effectiveness and may ensure the sustainability of programmes (UNODC, 2014). Moreover, community involvement not only facilitates enhanced community buy-in, but may also assist in the production of a programme that is sensitive to the local context. Since social interventions often involve complex social processes, they usually rely heavily on engagement from all individuals within the community. As such, the development of strategies and the provision of resources for community empowerment is an important part of programme planning and design. Before programme planning can commence, however, the social factors leading to community disempowerment, such as poverty or crime, for example, need to be identified and either this programme or an alternative community intervention ought to be established to respond to these problems. If these social factors are not addressed they are likely to obstruct efforts aimed at community change (Cornish & Campbell, 2009). As such, it is recommended that the SPCA conduct an investigation into the social context in which this framework will be implemented so as to ascertain what existing factors may support the implementation of this programme and what factors may hinder this process. Strategies to expand supportive factors and ameliorate factors that obstruct programme implementation should be developed.

Thereafter, it is essential that community members are actively involved during the initial design phase of the programme as this is likely to increase the production of a programme that is both sensitive to local context and one that retains community commitment. This allows the community the opportunity to increase their control over organisational processes and affords them the opportunity influence programme decisions. Moreover, community involvement facilitates the creation of social conditions that support the intervention and increase the agency of the community which together promote a more effective and sustainable intervention. Finally, overall community involvement may also alter, develop and improve social norms which may

result in the greater acceptance of animal welfare and violence prevention behaviours.

Strategies for community involvement may include an initial information session used to introduce the community to the programme concept; provide an explanation of each component in more detail; and discuss what the programme as a whole hopes to achieve. In order to receive community input on determining the direction, scope and design of the programme, workshop sessions or focus groups could be offered as a space to facilitate discussion and participation amongst all programme stakeholders. These sessions would enable the SPCA to obtain suggestions for each component as well as outcomes regarded as important from the community's perspective. To initially engage community members prior to programme rollout, it may be beneficial for the SPCA to host some kind of event that signals the launch of the programme within the community. The event may include food stalls, entertainment provided by members of the community, games for children, planned activities linked to the promotion of animal welfare and violence prevention as well as prizes for event participation. The event should be aimed at sparking community curiosity and creating excitement about the programme in order to begin the progress of enhancing community interest, engagement and commitment. Additionally, the event should also be utilised as a platform to begin community dialogue on central issues of animal welfare and violence prevention.

In order to address the necessity of community involvement in each of the components, the provision of a dedicated community centre focusing on all factors thought to contribute to the occurrence of animal abuse and interpersonal violence is highly recommended for the implementation of specific community-based programme activities. As such, similar activities to those suggested in the three programme components presented in previous chapter could be disseminated to a wider target audience through community centres. Two community centres, the Darling Fokus Gemeenskap Sentrum and the Darling Outreach Foundation have been identified as possible sites for the implementation of community-based programme activities. Considering that a number of the factors related to animal abuse and interpersonal violence are interrelated, the community centre may act as a long term solution in dealing with these problems through the implementation of multifaceted programme activities. In addition to this, it is recommended that the SPCA look towards developing a working partnership with this centre so as to collectively develop

strategies for the delivery of programme content as this will not only allow for greater programme integration within the community, it may also support the sustainability of the programme.

It is further suggested that a toll-free anonymous violence hotline is situated within the community centre. It is anticipated that this could function as a supportive aid allowing community members to report incidents of animal abuse as well as interpersonal violence. Furthermore, the hotline may also provide information, assistance and counselling to community members. The provision of this service allows for greater access to resources and could also be utilised as monitoring tool by using data relating to the number of calls as an indicator of how effectively the programme is functioning.

Limitations

According to the literature, an inability to subject all three programme components to rigorous evaluation is one of the primary limitations of the employment of these interventions within this evaluation (Parkin & McKeganey, 2000). A heavy reliance on self-reported change in terms of both attitudes and behaviours has been identified as further limitation of these components. This stems from the fact that most measurement tools attempting to gauge behaviour change may be subject to social desirability bias in which respondents answer questions in a manner that will be viewed as socially acceptable by others rather than responding accurately. As such, it is recommended that the SPCA attempts to utilise measurement tools designed to counter the occurrence of social desirability biases. For example, questionnaires administered could be phrased to ask participants about the animal welfare intentions and violence behaviours of others in the community. In so doing, the individual is not reporting on their own attitudes and behaviours, but rather their perspective of the community. This questionnaire design strategy is thought to eliminate social desirability bias and produce more accurate data.

Since the programme design focuses solely on theory from the literature, it should be noted that this research is based almost exclusively on theoretical concepts as well as international examples of humane education, violence prevention and peer education / role modelling programmes thought to affect behaviour change. As a result, little information on the implementation of these kinds of programmes within a South African context is included as documented programmes in social

science or evaluation journals do not appear to exist. Despite this, it hoped that this evaluation will provide a solid basis for future development, documentation and evaluation of these programmes.

Owing to the fact that the design of this programme framework is still in a conceptual phase, the evaluation was unable to produce a detailed budget for the programme. The Swartland SPCA should now decide on what programme elements will be included in the final programme design based on intended outcomes. After the various design elements of the programme have been finalised, there are likely to be a number of cost implications involved in the implementation of this animal welfare programme. These may, for example, include the purchase of psychological tests, measurement instruments, questionnaires, the organisation of a launch event, the establishment of a toll-free hotline, the rewarding of responsible pet owners and peer educators, the compensation of peer educators and teachers. Therefore, it is important to note that the successful launch of this programme depends on a substantial amount of funding.

Recommendations

Although the Swartland SPCA requested the evaluator to produce a programme framework detailing a number of components that could be used to affect the problem of animal welfare, the organisation was largely unclear on intended outcomes, proposed activities and funding parameters for programme implementation. Although the proposed framework along with its broad-based indicators attempts to provide a solution to this, the evaluator's knowledge of contextual implementation factors in the Darling area is limited. As such, the Swartland SPCA will now need to harness their knowledge of the targeted community in order to: 1) formulate clear, well-defined, relevant, and measurable short, medium and long term outcomes, indicators and measures for each programme component; and 2) specify the more complex details of the framework based on desired outcomes, contextual implementation factors and available funding. Whilst the SPCA may choose to adapt certain aspects of the proposed framework in order to suit the implementation context, it is recommended that they attempt to maintain the core underlying causal links within and between programme components so as to ensure the programme is able to bring about its intended outcomes.

It is suggested that the SPCA circulate the proposed programme framework with other South African animal welfare organisations and host a meeting in order to obtain feedback and input from these organisations. During these meetings discussions could be held regarding the feasibility of implementing certain components and their specific activities in different contexts. In addition, any anticipated implementation difficulties and possible solutions to these could be established.

Since it was important to ground this programme design in a theory of behaviour change and considering that the theory of planned behaviour has not yet been applied to the context of animal welfare, it is imperative that a first attempt is made to determine whether it is effective in bringing about behaviour change with regard to animal welfare outcomes. As such, it is vital that the SPCA monitor whether this kind of behaviour change model is able to function satisfactorily in an animal welfare programme in a rural South African setting. In so doing, it will be important for future evaluations to investigate the effectiveness of the programme on behavioural performance. This will assist in determining whether the theory of planned behaviour is a suitable behaviour change model to employ in this setting.

Finally, based on the proposed programme design, the implementing organisation may require an evaluator to assess whether the programme has been successful in achieving its intended outcomes at a later stage. This highlights the need for a monitoring and evaluation framework. Monitoring is a continuous function that provides an indication of the extent of progress and of the achievement of objectives via the systematic collection of data on specific indicators. Evaluation, on the other hand, assesses a programme in order to determine the fulfilment of objectives, effectiveness and impact (Kusek & Rist, 2004). A Monitoring and Evaluation (M&E) framework, therefore, is a plan that outlines the steps to be taken with regard to how a programme will be tracked via specified indicators as well as how the achievement of outcomes will be assessed via evaluation (Rossi et al., 2004). The development of an M&E framework for a new programme is particularly important as it will not only enable clear programme tracking, it will also assist in preparing the programme for eventual evaluation. The process detailed above with regard to the specification of outcomes and the more complex details of the programme will not only assist in the development of a monitoring system, it will also assist in the collection of usable data for the eventual evaluation of the programme.

As such, it is recommended that the SPCA ensure that they continue to work alongside an evaluator to ensure that subsequent design, implementation and evaluation processes are successfully achieved.

Conclusion

Owing to the fact that the maltreatment of animals in Darling is of concern to the SPCA, it is evident that the community needs some form of intervention to respond to this social problem. Since no local or international animal welfare programmes have been published that could be adapted for the South African context, the SPCA contracted a student evaluator to assist with the design of an intervention to address the challenge of animal welfare. An extensive review of various kinds of interventions was undertaken and documented which enabled the development of a broad based multi-component programme design.

The programme components respond to a number of possible reasons which underlie the occurrence of animal abuse in the community. Due to the fact that animal welfare is a behavioural outcome, it was decided that the programme design ought to be linked to a theory of behavioural change. As such, each proposed programme component aligns with the theory of planned behaviour. Through this, the programme framework is anticipated to increase the likelihood of achieving the link between attitudinal and behavioural change.

Significant adjustments to the proposed design would, however, affect the causal logic of the programme. Therefore, while the programme includes three distinct components, it is vital that all three components are implemented concurrently and with fidelity. Although the programme component theories are deemed plausible, the effectiveness of the overarching programme in this context will need to be evaluated in future. It is suggested that the Swartland SPCA establish a working relationship with evaluators in order to ensure that the programme is implemented according to the suggested plan.

The proposed programme framework is the first multi-component intervention designed for implementation in the South African context to respond to the problem of animal maltreatment. Through the successful implementation of this programme and the achievement of animal welfare in Darling, it is hoped that similar programmes will be implemented to affect changes in animal welfare across South Africa. Further, the implicit value of this programme lies not only in the prospect for improved animal

welfare, but also in the possibility it holds for enhanced interpersonal relations within communities which may promote a morally conscious, just and healthy South African society.

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Appendices

Appendix 1: Ascione's Dimensions of Animal Abuse

1. Severity: the degree of intentional pain/injury caused.
2. Frequency: the number of separate acts.
3. Duration: the period of time over which abuse occurred.
4. Recency: the most current acts.
5. Diversity across and within categories: number of types and number of animals within a type that were abused.
6. Animal sentience level: invertebrate, cold blooded vertebrate, warm blooded vertebrate.
7. Covert: related to attempts to conceal abuse.
8. Isolate: individual versus group abuse.
9. Empathy: indications of remorse or concern for the injured animal.