Study of Strays in Malta and the way they are perceived by the Maltese Society

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Abstract

This dissertation’s aim was to study the perception that the Maltese society had of the stray animal population in the Islands of Malta. The method of research that was chosen for this study, was in the form of a quantitative survey that was distributed in 3 central cities in Malta; Valletta, Sliema, as well as Birkirkara. The data from the survey was collected from 100 Maltese citizens. And through these surveys, results were found that most of the Maltese population seem to be very tolerant to the stray animals of Malta, however, they were aware of the fact that the Maltese Islands face an issue when it comes to the subject of the feral animal population, and they also show signs of concern as well as knowledge as to what solutions could be contributed to the Maltese society with regards to the control, or even the reduction of the feral animal populace that is existent in the Islands of Malta. Other results that were determined from this research project show that more education should be given to the citizens of Malta with regards to the stray animal and the diseases that can be contracted from it; and also, awareness should be increased further on the notion that a stray animal population can be a hinder to the industry of Tourism.
Statement of Authenticity

I, Charlotte Munro, declare that all the material that was found in this dissertation, the research carried out as well as the ultimate outcomes is the result of my own investigation. Any text cited from other sources is acknowledged accordingly.

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Chapter 1: Introduction
1.1 General Introduction

The concept of ‘anthrozoology’, which means the relationship between humans and other non-human animals, has always been existent in the history of the human race (Podberscek et.al, 2000). Humans have always been known to keep some form of companion animal close to them even before the introduction of civilisation, and many different countries and cultures in the past can be seen to have almost a sacred view of these animals. For example, ancient Egyptians revered cats and considered them to be a deity and where mummified upon their death, this is due to the fact that the goddess of joy, dance, love and music; Bastet was actually a cat. In fact, the emotional bonds that a human has with his companion animals is often seen to be a strong as the attachment that one human has for another.

The Maltese people are also known to consider their companion animals as part of the family, however, although the Maltese people place a large value over their pets, there is still a major problem in the Maltese Islands as many stray animals can be seen roaming the streets and public areas throughout the whole county. Malta has always been known as a country with a high rate of stray animals, and in spite of the fact that this animal population seems to be gradually decreasing when compared to only a few decades ago, it is still a concerning issue. If a stray animal population is not controlled properly and is instead ignored it will continue to grow rapidly and with the growth of the feral animal population, other major difficulties will arise; difficulties such as lack of hygiene, escalation of disease, the destruction of other forms of species due to the animals’ hunting abilities, and even can go so far as to affect the tourism industry of a country. Animal shelters as well as sanctuaries which have been built in Maltese Islands all face a colossal problem as all of them have reached the maximum capacity with an estimation that each shelter houses about 500 stray animals (Spiteri, 2009).

1.2 Area of Research

The area of research that this dissertation project will seek to focus on is the study of stray animals in Malta, in the way they are viewed by the Maltese society. This is due to the fact that although the Maltese people are perceived to be kind towards their animals, not much information as well as education seems to be provided to the Maltese citizens regarding their
roles and responsibilities towards the feral animal population. Therefore, the people may not be thoroughly educated on the subject, which means that awareness to find solutions to the feral animals is not high, that can lead to the continuation of negligence towards these animals as well as misunderstandings that might arise from the people.

The reason for why this research topic was chosen for this dissertation, is due to the fact that if unmonitored; a stray animal population can reproduce freely with the result that the population would be able to increase in a rapid manner. If this happens, then Malta would be flooded by the vision of stray dogs and cats in the streets, which would bring about quite a number of different issues. In fact, it appears that in the Maltese Islands, unlike other countries, the number of abandoned animals does not look to be a seasonal affair where a pattern can be distinguished, but the abandonment of these animals can be seen to be a constant concern throughout the whole year (Caruana, 2007). The lack of concern that the Maltese people show on this issue can be a large risk to the well being of these animals as well as the Islands of Malta, and this is the main reason for why this topic was chosen for this research project.

1.3 Aims and Objectives

The aim for this type of research is to be able to determine how much the people of Malta as well as Gozo know about the issue of stray animals in the Maltese Islands and whether or not they show any forms of concern towards this subject. It would be interesting to determine whether the Maltese citizens have received enough education on this matter and if so, whether they have any knowledge on any methods that can be a solution to maintaining control over or reducing the number of feral animals that flood the Maltese Islands.

1.4 Dissertation Structure

This dissertation that is being conducted will be distributed into five different chapters. The first chapter will be focusing on the brief introduction into this research project, along with
the aims, as well as the objectives of this study. The second chapter will consist of the literature review, which will show various publications and secondary data that will have relevance to the study which is being conducted. Chapter three will focus on the research methodology as well as the data that was collected for this study, while chapter four will show the analysis of the data collected as well as the results that emerged from the study, with a further discussion on the results that were found; while the fifth and final chapter will serve as a conclusion to the whole dissertation.

1.5 Conclusion

In order to be able to study the level of education as well as the opinions of the Maltese population regarding the stray animal populace, a quantitative questionnaire was distributed throughout many localities in Malta as well as in Gozo. The aim for this questionnaire was to establish the objectives of this dissertation, and people were asked various questions ranging from whether they are aware that the Maltese Islands do in fact, have an issue with an influx with deferral animal population; whether they believe that stray animals can affect the economy of Malta by reducing the prospect of tourists, and also what their opinions are regarding the subject of stray animals and if they are able to spread any forms of diseases. By conducting this survey, answers could be given on whether or not the Maltese population truly does know the issues that Malta is facing regarding stray animals and whether or not concern is shown as to how this population could be controlled or even reduced.
Chapter 2: Literature Review
2.1 Introduction

The concept of companion animals is considered to be very common throughout the globe and in many countries and cultures are revered for their positive effect on their human counterparts. The domestication of companion animals starts with the relationship between humans and dogs which is believed to date back to approximately fourteen thousand years, when the dog’s ancestor the wolf started to live in close proximity to humans in order to have easy access to food. The cat’s domestication, on the other hand, can be seen as quite recent when compared to that of the canine race. It is dated to about six thousand years ago, and felines were primarily useful for their role in controlling the problem of rodent population. Although both the feline and canine species have been domesticated and kept close to humans through time, the breeding of these non-human animals has been far less controlled by man throughout the generations. It is quite unfortunate to find out therefore, that out of the estimated five hundred million dogs that exist worldwide today, seventy-five percent of these dogs are thought to be feral or stray, and a similar percentage goes for the cats. The problems which are arising nowadays concerning the stray animals are quite significant; with complications such as health issues for humans like injuries from bites and other types of diseases such as rabies or zoonotic conditions. There are also several serious welfare issues for the animals involved; issues like starvation, disease, poor living conditions as well as possible aggressive interactions with both humans and other animals. Due to these issues being quite visible to the human populace, the stray animal population in Malta as well as in other countries is often a constant concern for governments, animal welfare groups, as well as local societies.

2.2 The Feral Cat and its Issues

It is important to note that the problem of the companion animal stray population has not only surfaced recently, but has been growing and increasing as time passes by. In fact, it is quite clear that the human animal relationship within an urban landscape is becoming increasingly more complex as the process of urbanisation continues to

1 http://www.wspa-international.org/wspaswork/dogs/strayanimals/stray-animals.aspx
develop (Aguilar and Farnworth, 2013). This is in spite of the fact that soma animal populations have been known to increase in number due to the same urbanisation system (Van Rensburg et al. 2009). One example of a species that has increased with the urbanisation process is the *Felis Catus*, or in a more simplified term, the domesticated cat. As human populations increase in civilisation as well as urbanisation, so does the population of the domestic cat. The most probable reason for this increase in population could be that humans may believe that cats are a lesser challenge to keep as a companion animal than dogs (Gelson, 2010).

In a study done by Aguilar and Farnworth in 2013 that concerned the ‘Distribution characteristics of unmanaged cat colonies over a 20 year period in Auckland, New Zealand’, it is shown that the most popular form of companion animal in New Zealand is the cat, with its population thought to be estimated at around 1.4 million. Although in Auckland, New Zealand, the number of cats which are sterilised is high, there is still a persisting problem as many of these pets are let out to roam freely with no requirement for micro-chipping or any form of licensing. Due to this reason, there is a huge problem as the cat’s nature is that of a predator, which means that the hunting instinct of a cat may be perilous to the local fauna. For example, in Australia, the free roaming domestic cat is considered a serious problem as it has been the source in driving 28 mammal species to extinction (Pickrell, 2013). A rare ground parrot species in Australia known as the *Pezoporus Wallicus Flaviventris* is on the verge of extinction due to feral cats, with a report that approximately only a hundred of these animals remain in the wild (Laurie, 2012). Another example shows that in New Zealand, a single cat has been solely responsible for killing 558 animals in the span of 17 years (Aguilar and Farnworth, 2013).

Apart from the predatory nature of a cat, other complications exist. The feral cat population in New Zealand as well as throughout the globe keeps persisting as many of the unwanted cats which are abandoned are unsterilized and therefore the fast reproduction rates of these animals are fuelling and increasing the number of cat colonies throughout the nations as an unneutered female cat alone could easily be the source of the production of 420,000 cats over the span of seven years (Calleja, 2011). A cat colony can be seen to be, ‘A group of three or more sexually mature animals
living and feeding in close proximity’ (Slater, 2005). The problem of these colonies keeps increasing as it is very difficult to manage, especially if these feral cat colonies find easy access to food and are located in suitable environments (Aguilar and Farnworth, 2013).

These cat colonies can also prove to be a threat to both humans, as well as other non human animals. This is mainly because feral cats that live in these colonies are susceptible to many different types of diseases due to not having proper medical attention; and these diseases, can in turn, be passed and transmitted to domestic cats which are let out by their human owners to roam freely (Aguilar and Farnworth, 2013). However, the danger of transmitted diseases from these feral cats is not only limited to other non human animals, but also, the risk can be transmitted to humans themselves. In Kashan, Iran for example, a study was conducted on 113 cats in order to check for any gastrointestinal parasites. Out of the 113 cats studied, 95.6% have been found to be infected with at least one of several types of parasites, and some of these parasites could be transmitted to humans (Mohsen and Hossein, 2009). Another study in the United States of America shows that a number of hospitals discharge an estimation of 750 paediatric patients that have been contaminated with cat-scratch disease (Sanguinetti-Morelli et.al 2011). Apart from parasites and the cat-scratch disease, these colonies of feral cats can also be responsible for certain zoonotic diseases which are contagious to other felines. These diseases can range from feline immunodeficiency virus, which is a slow virus, which is a slow virus within the same retrovirus family as the feline leukaemia, to feline calcivirus, which is a virus that causes upper respiratory infections in cats (Aguilar and Farnworth, 2013). Usually, these zoonotic diseases are usually transmitted to other cats by the form of biting.

2.3 The Feral Dog and its Issues

Although the stray cat is responsible for many different types of problems throughout many societies around the world, these problems are not limited to only the feline species. Feral dogs are also known to be protagonists to several issues that concern many countries throughout the globe. Stray dogs, similar to their feline counterparts,
have been known to form packs, just like their ancestor species the wolf. The most prominent reason for doing so is believed that these canines find it easier to be able to hunt when they are in pack form rather than when they hunt alone; therefore, by increasing in numbers, they have a higher probability of survival (Spiteri, 2009). Apart from the fact that packs increase that rate of survival of any individual dog, the canine species is known to be a social non human animal and therefore relies on its pack members not only for hunting, but also for rearing its young and for other forms of everyday routines that these animals might have.

The main problem for this formation of canine packs, however, is that they mainly hunt for weaker animals (Spiteri, 2009). This usually results in weaker, smaller dogs as well as cats; which bear a high probability of being free roaming companion animals, making them a nuisance to many societies. Due to this reason, the existence of stray dogs is considered dangerous to many humans. Apart from that fact, in several countries throughout the globe, the interaction between feral dogs and humans is generally met with aggression. In Kashmir, a study was conducted in order to evaluate the number of dog bites that affect the Kashmiri population (Sideeq et.al, 2014). The results of this study show that in a 3 year period starting from 2010 to 2013, a number of 13,852 patients went to the hospital seeking medical attention in order to treat dog bites; where 96% of these bites were reported to be from stray dogs (Sideeq et.al, 2014). In addition to those numbers, 8 deaths were further reported during the three year time frame. The deaths were a result from rabies which was transmitted by these dog bites. Rabies is basically a type of disease that causes an inflammation of the brain and can be contracted by warm bloodied animals including humans. This disease is generally spread by a bite or also a scratch. It is shown that dog bites are very frequent in Kashmir, and the people are starting to show concern as the stray dog population is radically increasing (Sideeq et.al, 2014). India is in fact, most commonly known to be the country that has the highest risk of rabies with an estimation of 20,000 human deaths annually (Sekar et.al, 2011).

The problem of dog bites can alter as well as produce a very dangerous situation. An example of this would be an article from the Los Angeles Times which shows that in the country of Romania, a law was passed that allowed people to exterminate any stray
dog that has been captured and remained unclaimed for the maximum of two weeks, this is due to the fact that this political campaign was influenced highly by several tragedies in the past; like the death of a four year old boy who was attacked by a pack in a city park; a Japanese tourist who was mauled in 2006, and a woman from Bucharest who was attacked in a hospital courtyard(Williams, 2013). A press report was shown to be later released and gave the information that the stray animal population in Bucharest is approximately 64,000 in number and a further estimated 10,000 people were treated for dog bites in 2013 (Williams, 2013).

A similar problem to that in Kashmir and Romania is located in the Qom province of the country of Iran where research was conducted and showed that in the span of six years starting from 2007 to 2012, an approximated 7,246 people were bitten by animals; with the majority of the animals being stray dogs at a rate of 61.7% (Saghafipour et.al, 2012). Iran is a highly affected country from rabies, but rabies can be healed with the use of a post exposure prophylaxis vaccination (Shayam et.al, 2006). However, if untreated, rabies will result in death. It is a concern therefore in Iran, that although the PEP vaccination is available as well as affordable, deaths by the cause of rabies are still frequent (Farahaj et.al, 2014).

It is true that rabies may be considered the most common as well as serious form of transmitted disease that stray dogs pass to humans. However, although rabies is given the most importance, there are many other forms of diseases which can be transmitted from dogs to humans and can also be a perilous risk to a human’s health. An example of these diseases is Leishmaniasis, which is a zoonotic infection that is caused by Leishmania parasites that are transmitted to the dogs by the bite of an infected phlebotomine sand fly. This type of disease was thought to be limited to only the Mediterranean basin as the general climate of the area is seen most suitable for the phlebotomine sand fly to flourish. However, there were other reports of this disease which came from other countries where this infection was thought to be nonexistent. Some of the known affected countries are Switzerland, the Netherlands as well as south and Central America. An example that shows the danger of Leishmaniasis being passed from the canine species to humans, is found in Brazil, where dire measures were taken in order to try and take control of Leishmaniasis in urban areas, with one of
these measures being the culling of stray dogs which are known to be the reservoir for this disease, and it was noted that the dog euthanasia rate indeed had a connection with the reduction of the visceral Leishmaniasis infection in humans in the two years of study (Nunes et.al, 2010). Another study which was conducted in the city of Tbilisi in Georgia shows that out of 4,250 children that were tested, 310 were infected with visceral Leishmaniasis and a further 235 were seen to contract the disease within a year of the study and it was also shown that the children that were most affected came from areas where stray dogs were very much clustered (Giorgobiani et.al, 2011).

2.4 Animal Waste

Another risk that needs to be considered is the problem of animal waste, which is not only a form of pollution when left exposed in public areas, but can also be an endangerment to the health of both human as well as non human animals. Quite a number of different studies show that stray dogs are very often infected with many types of parasites, the most common being Toxocara canis. When dog faeces are left in public areas, parasite transmission can be done from one dog to another, as the faeces of a dog can carry Toxocara eggs. These eggs in turn, can definitely infect a human and although the condition is not considered fatal, it is still quite a large risk. A study which was conducted on dogs in the North of Greece shows that out of 281 samples of faeces tested, eleven species of parasites were identified (Papazahariadou et.al, 2007).

2.5 The Stray Animal in an Outbreak

An additional threat has risen when it comes to stray animals, as many people fear that stray dogs or cats may be potential carriers for other, more dangerous diseases that have the possibility to grow into an epidemic. A study that was carried out in China strived to discover whether feral dogs were actually infected with the Avian Influenza due to their proximity to many live poultry markets, and the results showed that out of 2,357 dogs that were tested, only 93 were proven to be infected with the Avian
Influenza (Su et.al, 2014). Although it is true that out of the amount of dogs tested, only a small percentage resulted infected with the influenza, this is still a serious situation as a disease like this can easily be passed and transmitted to other animals as well as humans, thus, resulting in a perilous threat to everyone that may be involved. A different and older study was conducted for a journal in 2005 in order to see the position of stray dogs and cats during an epidemic of the West Nile Virus infection in humans (Kile et.al, 2005). The West Nile Virus is seen as a very contagious disease that is mainly caused by a bite of an infected mosquito. This disease was first thought to be found only in tropical or temperate climates, however, the West Nile Virus soon started to spread throughout the whole globe in many different countries. Results from the previous study concluded that out of 442 dogs tested, 26% were found positive for the disease and when it came to cats, 9% out of the 138 were also infected (Kile et.al, 2005). It is of utmost importance therefore, that various measures should be taken in order to reduce or at least control stray animal populations throughout the world, as this can in turn contribute in keeping serious health situations at bay.

As different journals and information sources are studied, it is a very notable fact that although the problem of disease and aggressive interaction with feral dogs and cats is existent throughout the world, the most prominent cases for hostile communication as well as diseases that may emerge from these animals tends to emerge mostly from developing countries. Some reasons for this statement could be that the lack of hygiene in these developing countries contributes to the growth and the spreading of diseases and also, as a number of people from these areas lack the knowledge on how to properly handle these animals, aggressive interactions will continue to take place. However, the main probable reason on why developing countries seem to be the most prominent when it comes to the problem of stray animals, is that due to the fact of the population’s lack of concern, the breeding of these animals continues to increase without any signs of monitoring and control. This therefore, will result in a constant and rapid increase in these animals’ population, and in turn, the chances of disease and more aggressive behaviour will increase.
Reducing the number of stray animals from the streets can be seen as very essential, however, this cannot be done easily as it is a task that takes patience as well as time and many things have to be taken into consideration. Although the existence of animal shelters and sanctuaries is mostly seen to be of great assistance in trying to control the populations of stray animals, it is not enough. This is due to the fact that the shelters seem to become full of stray animals almost instantly, and the problem cannot be solved by building more sanctuaries, as more strays would be brought in and the same problem would resurface all over again with the sanctuaries reaching their maximum capacity (Spiteri, 2009). Apart from that fact, it is a common notion to consider that a vast number of animal shelters as well as sanctuaries that are open to the public throughout many countries, mainly run on public donations, meaning that not enough funding may result in poor living conditions for these animals. This therefore shows that there must be other solutions in order to try and control the problem of stray animals. Some solutions, however, may not be ethical, but are still used in order to try and take control of the growing populations of stray animals around the world. Out of all the solutions, euthanasia seems to be one of the least ethical but also one of the most popular. It is stated that in the United States of America, euthanasia was seen to reach its peak in 1970, where 23.4 million animals were put down, and although the numbers of euthanized animals decreased significantly by time, it is still commonly used as a means of controlling the stray animal population (Harkness, 2013). In fact, from approximately 6 to 8 million stray animals that enter the shelters each year, 40 to 50% of them end up euthanized (Turner et.al, 2012). A report that was conducted by Dogs Trust shows that in 2009, a number of 9,000 stray dogs were euthanized in the United Kingdom out of the 107,228 that were taken in (Voslarva and Passantino, 2012). Another study was conducted in Queensland, Australia, with its aim being to study the rates of euthanasia in stray cats that were admitted to the RSPCA (Alberthsan et.al, 2013). The results of the study concluded that in the span of three years, 65% of the 33,736 cats that were admitted to the shelter, were euthanized (Alberthsan et.al, 2013). In the country of Taiwan, 40 public shelters were studied in order to try to analyse the stray dog population that entered; it was noted in the study conducted, that although adoption rates were seen to improve, euthanasia was still a frequent and was still the main procedure that was used in order to decrease the
number of stray dogs in many of the shelters (Jen-Lung Peng et.al, 2012). Although euthanasia may be seen as unethical or cruel in many countries, it is still widely in use and is considered to be one of the most effective methods in controlling or reducing the populations of feral animals. This is mainly believed to be due to the fact that this method makes things easier for governments and politicians throughout the globe as they have no need to educate their people on responsible ownership of pets and of treating animals with respect (Voslarva and Passantino, 2012).

Another form of controlling the stray animal population that seems to be viewed as a very popular choice is the Trap-Neuter-Release programme. The Trap-Neuter-Release procedure is done by collecting stray animals that are found roaming around freely; neutering or spaying them as this will limit their ability to keep producing more offspring; and finally, release the animals back to the areas from where they were collected in the first place. By limiting their ability to reproduce, the populations of these feral animals are guaranteed to have a decline. In spite of the fact that this process is slower than other forms of control, this method has been found to be very effective in controlling the populations of these animals in a more gradual way, and it is noted that many animal welfare organisations regard TNR schemes as the most favourable way in controlling feral animal populations as well as maintaining their welfare. A study was conducted in 2006 on sterilised cats from around many parts of the United States of America; results show that it was estimated that out of 103,643 cats that were sterilised, approximately 204,224 kittens were prevented from being born in only one breeding season (Wallace and Levy, 2006). However, although many believe that this solution is considered to be the best option for both humans as well as the non human animals; there are others who do not agree with this method of control. Quite a number of wildlife conservationists believe that although Trap-Neuter-Release programmes keep these animal populations levelled, they do not keep feral animals, especially cats, from hunting and destroying wildlife; thus, most of these wildlife conservationists as well as some animal rights advocates favour euthanasia over Trap-Neuter-Release (Appleby et.al, 2014). Apart from the fact that stray animals can be the result in a decline of certain species of wildlife, many people oppose Trap-Neuter-Release programmes due to the fact that they consider it to be more cruel and unethical than euthanasia itself. The reason for why many people believe that euthanasia is a kinder option for these animals is that generally, stray animals tend to
have much shorter lives than owned pets. It is estimated that an average lifespan of a feral cat is that of 2 years (Appleby et.al, 2014). And the reason for such a short life span is due to general poor living conditions, which in turn will result in diseases, a high risk for parasites as well as poor health in general (Lepczyk et.al, 2009). In fact, an interesting observation was done by Lepczyk et.al in 2009 where they considered that the method of Trap-Neuter-Release is basically a form of cat hoarding without walls. The reason behind this idea is because who adopt Trap-Neuter-Release schemes usually care for more animals than they possibly can. This usually results in inhumane living conditions for these animals.

Although some may seriously believe that euthanasia is sincerely a better as well as a kinder option for these animals rather than Trap-Neuter-Release programmes, there is still the question of moral values at risk. This is mainly due to the fact that most humans from all around the world are raised since birth with the belief that all living things are sacred and that no life should be taken as it is valuable no matter what species it is. If applied in the correct manner by professional veterinarians, euthanasia is considered to be painless; however, there is still basically the concern on whether or not humans have the right to take away the lives of any living being, let alone the thousands of lives of stray animals. Apart from that notion, there is also the apprehension of depriving an animal from having a longer life and whether or not that life would have been responsibly satisfactory for them (Appleby et.al, 2014, p157).

However, when looking at this subject in terms of the value of life, wildlife conservationists bring up the same argument with a different point of view. To these conservationists who are in favour of euthanasia over Trap-Neuter-Release, argue that by saving a single life of a feral cat; this can in turn result in the demise of several other types of species due to the hunting instinct that a cat is imprinted with. Actually, by releasing cats into the wild and by being in favour of TNR methods, people are in fact supporting the notion of feral cat colonies, which is in fact, a violation of the ‘Migratory Bird Treaty’ act as well as the ‘Endangered Species’ act (Winter, 2003).

Adoption seems to be the most popular method amongst people that is existent in order to try to control or reduce stray animals from the streets. However, although this method would ideally be considered to be the best option for the problem of the stray
animal population, adoptions of stray animals is not as frequent as it is wished to be. Some reasons for this fact could be that many people prefer purchasing pure breed companion animals rather than adopt a stray cat or dog. This may be due that many people might believe that pets that are provided by breeders are superior and more reliable than an adopted pet from a shelter, and also there is a common notion that a specific kind of pet with its specific traits can be obtained only from a breeder. Another reason that seems to be very common is that people generally tend to prioritise puppies or kittens rather than full grown animals, and health as well as body size seems to be a key factor in securing an adoption. Also, facts show that many of the people that do adopt a stray animal end up returning the animal back to the shelter due to reasons like not getting along with children or other animals in the household, or for noticing a different behaviour in the animal after the adoption process has taken place. In an article by Bianca Caruana (2012) it is stated that in the Maltese Islands, it is not unusual that previously adopted dogs or cats are returned back to the shelters by their owners as they might find it difficult to care for the companion animal and also, many of these previously adopted animals are found tied to the gates of these sanctuaries and are left there to be discovered by voluntary workers. Unfortunately, it is part of many shelter procedures that any animal which has surpassed a specific amount of time in a shelter without any signs of adoption, has to be put down in order to reduce and alleviate confined conditions and also so that space could be provided for any prospective intakes of animals. It seems that when it comes to finding a solution to a decline in the feral animal populations, euthanasia keeps resurfacing as the ultimate method in producing real results.

In spite of the fact that mass euthanasia looks to be the most effective way in reducing the vast numbers of stray animals that roam public areas; the real solution that should be attributed to this global problem, is the education that should be given to the human populations regarding their treatment as well as their responsibilities when dealing with both feral as well as companion animals. People from all developed as well as developing countries need to be educated on the fact that apart from their pets, the stray animals are their responsibility as well and measures should be taken in order to alleviate or control the growing numbers. Richmond (2013) states that the English government believes that educating the people is essential in order to be able to reduce problems that have to do with irresponsible dog ownership, thus, it helped by funding
shelters and animal welfare groups in order for them to be able to educate the people in responsible dog ownership. In fact, although law enforcement helps the problem, it is education that can really make a pet owner see the responsibilities that he has towards his pet; this is why it is extremely important that both adults as well as children should be lectured on what is responsible ownership; this should include the education on animal breeding patterns as well as methods that can prevent the reproduction of offspring (Voslarva and Passantino, 2012). Spaying and neutering of pets is the first step in responsible animal ownership, as this will get rid of the chance of any irresponsible breeding, thus, avoiding the chance of abandonment of accidental litters which will in turn, help to contribute to society by controlling the levels of the free roaming animal population. In an article conducted in Malta, it is shown that ‘Happy Paws’, a voluntary organisation founded in 2004, educates people about their pets; and this organisation is also responsible for spaying and neutering an estimation of 8 dogs and 15 cats a day (Calleja, 2011). In a study done in Czech Republic as well as in Italy, results show that the best method in avoiding mass euthanasia of stray animals is by promoting spaying and neutering schemes; which are considered to be a more responsible and humane alternative to resolve the problem of a growing stray population (Voslarva and Passantino, 2012).

Another method that should be taken into consideration regarding responsible pet ownership is the process of licensing or micro-chipping. This process is done in order to try to remove or at least reduce irresponsible pet owners; this is due to the fact that by micro-chipping an animal, information about the animal’s owner is stored in a national database and therefore will help in reducing the rates of animal abandonment. Any abandoned micro-chipped animals that are captured and scanned leads to some form of penalty to the animal’s owner. This form of licensing has become compulsory or is in the process of being mandatory in many developed countries. For example, in 2006, all dogs in New Zealand had to be micro-chipped mandatorily, and England is estimated to have compulsory micro-chipping of all dogs by the year 2016, with an estimation of a 500 sterling fine to those who do not comply with the regulations (BBC, 2013). Although the micro-chipping process is not expected to reduce the number of dogs and cats from the streets instantly, it is believed that it will be of assistance in achieving control on these animals gradually; and therefore, by educating people on the importance of micro-chipping, this can help in raising more awareness
about the topic on the importance of reducing the number of abandoned animals from the streets; and also, by doing this, people are actually helping in reducing other problems unintentionally.

2.7 Strays and Tourism

Many people are unaware of the fact that the vision of stray animals in the streets may also have an impact on the tourism of an area, which is considered to be a major form of income for the economies of many countries distributed around the world. In fact, Tourism was shown to contribute 9.1% of the entire world’s Gross Domestic Product (GDP) in 2011 (World Travel and Tourism Council, 2012). A study conducted by Dianne Webster (2013) showed that over 4,000,000 American travellers gave the indication of a low probability in travelling to the country of Mexico due to the reputation of the country’s massive problem with stray animals; and many others mentioned other holiday destinations apart from Mexico that they refused to travel to due to this issue, with some of these countries being India and Asia. For countries that rely heavily on the industry of tourism, like the Islands of Malta, a problem like this could easily result in catastrophic situations as the economy of the Islands would surely spiral into a depression.

2.8 Conclusion

It is Therefore of utmost importance that the citizens of Malta as well as the world are given the proper education regarding this subject and that legislations are enforced in order to control pet ownerships and thus, in some way, control the stray animal population as well. Free spaying and neutering programmes are an optimal method to the control of stray animals, and should be regularly promoted. In fact, in the year 2008, the Department of Animal Welfare Promotion and Services of Malta launched a national campaign that led to the spaying and neutering of shelter, stray, as well as owned cats and dogs for free, with the result of an estimated 1500 neutered dogs and cats (Spiteri, 2009). By enforcing the education of the people on the issue of feral
animals, one may hope that responsibility is increased which will further help in the reduction of stray animals from the streets and also the avoidance of these animals from the unethical faith of mass euthanasia.
Chapter 3: Research Methodology
3.1 Introduction

The idea behind this research project is to try to understand what the Maltese population believes when it comes to the concept of the stray animals in the Islands of Malta; whether they consider these animals to be pests in the Maltese society or whether they are not considered to be a cause of concern to the Maltese and Gozitan lands. This is due to the fact that not much information is actually given to show how the stray animal populace of Malta is being dealt with, let alone the opinions of the people of Malta about this subject.

Due to this reason, the knowledge of the public as well as their opinions on this matter has been taken in to be analysed. The thoughts and opinions of Maltese citizens were gathered in the form of a quantitative street survey that was distributed around three different central localities across Malta. The quantitative survey was chosen as a means of research due to the fact that it is a better method to produce statistics, and it is statistics which are needed in order to determine the general belief that the Maltese population has on the concept of stray animals in the Maltese Islands.

3.2 Primary Data

In the beginning of April 2014, the quantitative surveys were created, taking into consideration the most common forms of trends that have to do with the methods of control towards the stray animal population. A total of 150 surveys were distributed amongst three different localities throughout Malta that are considered to be central areas to the Maltese population; with the localities being Valletta, as it is a city that constantly flows with people; Birkirkara as it is also a main area of businesses as well as commercial areas; and finally Sliema which is also a central city in Malta. The survey consisted of exactly 20 questions from which the respondent had to give an answer by ticking the response desired.

The survey was written in the English language, however, when it was needed, a translation was provided so that misunderstandings were minimised. The first question of the survey
asked the respondents on whether they believed that the Maltese Islands have a problem when it comes to stray animals; with the responses being either yes, no, or I don’t know. The next question presented, asked the respondents on their personal opinions regarding stray animals. The third question asked whether the respondents believed that stray animals could be a health hazard to a human population, while the fourth was centred on whether the respondents think that the stray animal population affects the Tourism industry in the Islands of Malta. The fifth, sixth, as well as the seventh questions asked about how stray animals are generally treated by the Maltese people and whether they believe them to be in healthy conditions. Question number eight asked the respondents to tick the forms of animal control that they were aware of; with the forms provided being animal shelters, adoption programmes, spaying and neutering, Trap-Neuter-Release programmes and also Trap-Euthanise projects. The ninth and tenth questions were focused on the opinion of spaying/neutering and adoption methods and whether this method is helpful in controlling or reducing the stray animal population.

The second half of the survey continued with questions eleven, twelve, thirteen, and fourteen focusing on the concept of animal shelters and sanctuaries, and the respondents were asked on whether they agree with animal shelters; whether they believed that there are enough animal shelters in the Maltese Islands to house the stray animals that exist; whether animal shelters in Malta have sufficient facilities in order to be able to provide good living conditions for these animals; and also whether shelters are enough in controlling or reducing the stray animal populace of the Maltese Islands. Question fifteen asked the respondents on their preference regarding their choice of pet, whether they preferred to purchase a pet as opposed to adopting one and vice versa; and questions sixteen and seventeen were based on the topic of Trap-Neuter-Release programmes and whether the respondents agreed on these schemes and also whether they believed that TNR is helpful in reducing the number of stray animals by time. Questions eighteen and nineteen proved to be the most controversial out of the entire survey that was conducted. This is due to the fact that these questions were centred on whether the respondents were in favour of Trap-Euthanise schemes and also if they believed that this method was effective in reducing the feral animal populace. And the final question asked the respondents on what methods from those that were mentioned previously were most effective in controlling or reducing the number of stray animals which are located in the Islands of Malta.
3.3 Pilot Study

The pilot study of the original survey that was used for this dissertation was distributed at the final week of March 2014, where the locality of Paola was used as a test run instead of the 3 localities which were used for the actual survey. Paola was chosen to be the sample area due to the fact that despite of its small geographical size, it is still considered as a central area by many locals as there are quite a number of shops as well as other small businesses present.

3.4 Secondary Data

In order for this research project to be conducted, a significant amount of secondary data was used, especially when it came to the chapter of the literature review. The explanation that could be attributed to secondary data would be the information which has already been published (Haralambos and Holborn, 2004). Some examples of this secondary data would be books, journals, articles, as well as websites.

It is unfortunate to notice that works that could be attributed to the topic of stray animal populations have not been as frequent as one would have hoped to be. Therefore, due to this reason, one must bear it in mind that some of the data provided in this dissertation’s literature review will not be very up to date. Apart from that fact, some other journals as well as articles and websites that were used for this research could be considered as predisposed on a certain subject, and therefore, special care was taken when chosen to be used for this dissertation.

3.5 Limitations of the Study

It is important to note that one may face a number of challenges when writing a dissertation. The choice of only 3 localities when compared to the vast amount that exist throughout the Maltese Islands may be considered as inaccurate and also unbalanced. However, one must keep in mind that no matter the number of locations that would be surveyed, it would still be
considered as inaccurate due to the fact that the whole population of the Maltese Islands could not be surveyed, and thus, random methods had to be used in order to be able to provide a sample of the whole population. The 3 localities that were chosen were used due to the reason that these areas are generally visited by different people that come from different localities around the Maltese Islands, and therefore, some form of variety could be in fact contributed.

3.6 Problems That Were Encountered

While circling the streets of the locations which have been chosen to distribute the surveys, some people looked at me in suspicious ways. There were others who actually tried to avoid me at all costs as soon as they saw me trying to approach them in order to be able to give out my survey; and others were even arrogant, going out of their way as to insult me and to advise me not to be a nuisance to people who might be at these localities as a means of leisure. Many people refused to take any part in my surveys, and some that did take part after being told that only a few minutes would be taken from their time responded quite quickly to my questions in order to end the survey in the shortest amount of time necessary. At the end of the study only 100 out of the 150 surveys that were distributed were seen to contain sufficient answers that could be used for this research project. This is due to the fact that 50 respondents that took the survey were not really interested on the subject and therefore answered ‘I don’t Know’ or ‘not concerned’ to every question that was presented in the survey.

3.7 Conclusions

The quantitative surveys that were used for this dissertation were useful in order to be able to provide my research with the data required. These surveys were very helpful in determining what the Maltese people think when it comes to the topic of stray animals in the Islands of Malta, and they were also helpful in the sense that they shed a light on the level of education that the Maltese population possesses with regards to the issues that the stray animal populace can bring with it.
Secondary data was not very easy to locate due to the fact that some sources might not be recent enough to be able to include in this dissertation. However, in spite of the fact that it was a challenge to locate reliable sources of information for this research project; the ones that were located and used proved to be of great assistance to my dissertation.
Chapter 4: Data Analysis and Results
4.1 General Introduction

This chapter will be able to present the results that have been obtained from the data that was distributed and collected. The analysis will be divided into the 20 questions that were asked in the survey; and each question will in turn be analysed in order to be able to produce the results which are needed.

4.2 Survey Analysis

In this section of the data analysis, each question will be studied in detail in order to determine the answers that were given by the respondents and to contract the results which are needed for this dissertation research.

![Question 1](image)

Figure 4.1: ‘Do you believe that Malta has a problem regarding the subject of stray animals?’
In figure 4.1 above, the question asks the respondents on whether they believe the Maltese Islands are facing a problem with the stray animal population. In this question, it was noted that 77% of the respondents believed that Malta and Gozo have an issue with regards to the stray animal population. Another 17%, on the other hand, did not consider stray animals to be much of an issue that needs to raise the alarms of the Maltese Islands; in fact, many of them actually believed that in spite of the fact that Malta used to have a problem regarding the stray animal population, it has decreased in a considerable way that is no longer considered to be of National concern. Only 6% out of the respondents were seen to have no knowledge as to whether stray animals are a problem or not to the Islands of Malta.

Figure 4.2: ‘What are your opinions on the concept of stray animals?’

On figure 4.2 shown above, the people were queried on their personal opinions with regards to the stray animals in general. In this question, 58% of the respondents that participated in the survey replied that they do not consider these animals to be a nuisance to them. These 58% were seen to be the majority out of the other participants, and this makes one consider that the majority of the public may consist of animal lovers and therefore are not bothered by the animals at all. A further 16% of the respondents were reported to show no concern over
this matter. This shows that although these respondents may not care for these animals, they
do not view them in a negative manner. The remaining 26% however, did not have positive
views on the concept regarding these stray animals as these 26% considered the stray animal
population to be pests and an annoyance to the people.

Figure 4.3 represents the third question that was asked to the respondents that participated in
the survey. This question focused on whether stray animals could be a potential health threat
to the human population; and the majority of 58% of the participants did not believe in the
fact that stray animals could be prospective carriers of diseases that could be considered as
contagious towards humans. 38% of the remaining respondents, however, did in fact agree
that stray animals could be a health issue to the human population of the Maltese Islands; and
only a further 4% were not convinced whether disease could be transmitted to humans from
these stray animals or not.
Figure 4.4: 'Do you believe that the stray animal population affects tourism in the Maltese Islands?'

Figure 4.4 show the results from the fourth question, which asked whether the people who took participation in the survey believe that the feral animal populace can in fact, affect the industry of tourism from which the Maltese Islands relies heavily on. The results of this question show that the largest amount of respondents with a 59% rating, do not consider the stray animal population to be as large a force that can be a hinder to the tourism industry of the Islands of Malta. 12% of the further participants responded that they were unsure of their decision on whether or not the stray animal population can affect the tourism of an entire country. However, 29% of the remaining respondents believed in the fact that the vision of stray animals that may not be in typical good living conditions, can in fact, make an impact on tourists with the result that a decline in future tourism could actually be reached.

In figure 4.5 shown below, the question reflects on the idea of free roaming dogs and cats in public areas such as outdoor restaurants or parks, to be considered as pleasing to the eye. Only 26% of the respondents believed that stray animals in public areas could be aesthetically pleasing to the Maltese populace as well as to tourists. This is due to the fact that all of these participants, who chose this answer, believed that the stray animals are in good and healthy conditions in Malta due to people caring for them in a semi ownership method. 14% of the
survey takers were not sure as to whether this concept was pleasing to the people or not. But the remaining 60% of the respondents were in the majority and they did not believe that the people of Malta as well as foreigners would enjoy the sight of stray animals in public areas, due to the fact that many people associate stray animals with the concept of poverty as well as lack of hygiene.

Figure 4.5: ‘Is the vision of free roaming cats and dogs in public areas aesthetically pleasing?’

The figure 4.6 below, focused on the concept of whether stray animals are treated kindly in the Maltese Islands or not. Many of the respondents considered stray animals to be treated kindly by the Maltese populace with a 33% rating. Another 29% of the people believed that although unharmed, the stray animals in Malta and Gozo are treated fairly and not with kindness. A further 25% responded to the idea that these feral animals were mostly ignored by the people, and not cared for at all; and the remaining 13% of the participants answered that the stray animals that live in the Maltese Islands are treated in a very poor manner by the locals.
Figure 4.6: ‘What are your thoughts on the treatment of stray animals in Malta?’

Figure 4.7: ‘Do you believe that stray animals are in good and healthy conditions in Malta?’
In figure 4.7 above, the people were asked whether they consider the stray animals in the Maltese Islands to be in good as well as in healthy living conditions, and the majority of a 46% of the respondents answered the question by ticking ‘No’. The majority of the people who took the survey did not consider the stray cats and dogs in Malta to be in a healthy state. 30% of the participants responded in a positive answer, as they believed that many of these animals are cared for by the locals. In fact, it could be noted that the 30% that ticked ‘Yes’ in this question correlates with the 33% that believed stray animals to be treated kindly in question six. The remaining 24% could not decipher whether the animals are healthy or not. Therefore the answer ‘I don’t know’ was ticked by this percentage.

Figure 4.8: ‘What forms of solution to the stray animal population are you aware of?’

Figure 4.8 shows the main methods of controlling a stray population, and the question aimed for the respondents was to tick any solutions of controlling a stray animal populace that they were aware of. Only 16% of the participants were seen to be aware of all the methods that were provided. The most popular method of control was animal shelters, with a 31% total; 22% were also aware of adoption schemes; 18% knew about the spaying or neutering of these shelter animals; only 10% were aware of the concept of Trap-Neuter-Release and only 1%
knew about the method of trapping and euthanizing. 2% of the respondents were not aware of any forms of control that were provided in the survey.

The figure shown above shows the responses that were given after being asked on the opinions of spaying/neutering and adoption schemes for these stray animals. 57 of the respondents were seen to be strongly in favour of this scheme, while another 32 also agreed with the idea of spaying/neutering and adoption schemes of these stray animals in general. 9 of the people that took part in this survey did not seem to be concerned on the subject and therefore it was shrugged off; but the 2 remaining respondents chose a surprising answer, as they did not believe that the spaying/neutering and adoption methods could actually help in controlling the stray animal populations of Malta. The reason for this choice was not given by the participants involved and therefore there is no explanation as to why this option was chosen and for what reasons they believed so.

The answers to the tenth question in the survey could be seen in figure 4.10 presented below. Here, the respondents were asked whether they believe that spaying/neutering and adoption
programmes could be seen as a form of help in controlling or reducing the stray animal population in Malta and Gozo. In this figure, answers are shown as almost a unanimous vote of 91% believed that spaying/neutering and adoption schemes are beneficial in controlling the feral animal populace. Only 3% did not believe this method to be of any help, and 2 of the 3% can be noticed to be linked to the 2% that disagreed with this scheme in the previous question. The remaining 6% of the respondents of this survey were not entirely convinced on whether this scheme actually works or not.

Figure 4.10: ‘Do you believe that spaying/neutering and adoption of these strays will help in reducing the stray population?’

In figure 4.11 that is presented below, it shows the opinions of the participants when they were asked on their thoughts with regards to animal shelters as well as sanctuaries of the Maltese Islands. In the figure below, it is shown that 63% of the people that were surveyed were strongly in favour of the shelters and sanctuaries. A further 35% can be seen to also agree with the general idea of the topic, and the remaining 2% were seen to have no concern for the matter. However, no respondents were seen to disagree on the subject at hand and therefore, the concept of shelters as well as sanctuaries seem to be deemed favourable by the public of the Islands of Malta.
Figure 4.11: ‘What are your thoughts on animal shelters and sanctuaries?’

Figure 4.12: ‘Do you believe that there are enough animal shelters and sanctuaries in the Maltese Islands?’
On figure 4.12, one can see the answers to question 12 in the survey where the respondents were asked on whether they believed that there is sufficient amount of animal shelters as well as sanctuaries in the Maltese Islands. It was no surprise to see that the vast majority of the respondents with 84% did not think that there are enough shelters and sanctuaries that can house the entire population of stray animals in Malta. In fact, it can be seen in the above figure, that only 4% of the survey takers believed that that the amount of animal shelters and sanctuaries in the Maltese Islands seems to be sufficient. The 12% remainder of the respondents were seen to have no idea whether there are enough shelters in the Maltese Islands or not.

![Question 13](image)

Figure 4.13: ‘Do you think that animal shelters in Malta have the necessary facilities in order to provide proper living conditions for stray animals?’

Figure 4.13 shows the thirteenth question that was asked in the survey that was provided for this dissertation. The respondents were asked in this section as to whether they consider animal shelters and sanctuaries in Malta to have the necessary facilities required in order to be able to provide suitable living conditions for these stray animals. The answers show that 41% of the participants did not believe the fact that animal shelters have enough facilities to be to provide good living conditions for these animals; this result may have something to do with
the question presented before this one. This is due to the fact that the reason why the 41% of the respondents did not believe shelters to have the best facilities, is because they also believed that there are not enough shelters in Malta to be able to care for all of these animals in the first place. Thus, they imagined that these shelters were limited in their resources and therefore could not be of much help. Another 32% of the respondents were seen to choose ‘I don’t know’ as their answer; and the remaining 27% of the people surveyed believed the idea that shelters around the Maltese Islands have enough resources to be able to provide required living conditions for these animals.

Figure 4.14: ‘Are animal shelters and sanctuaries enough to reduce or remove the stray animal population of the Maltese Islands?’

The figure above contains the answers that were given by the respondents when they were asked whether they believed that animal shelters as well as sanctuaries were considered to be enough in order to be able to reduce the feral animal populace of the Maltese Islands. The results from the question show that only a minimal number of respondents with 9%, were shown to agree with the idea that shelters are enough in reducing the animal population; 32% of the respondents were not seen to be sure on whether the statement was true or not; and the
majority of 41% of the respondents were seen to refuse the notion that animal shelters are enough in controlling or reducing the stray populace.

Figure 4.15: ‘Would you prefer adopting a stray rather than purchasing a pet?’

Question 15 could be considered as a bit different when compared to the rest of the questions that were used in this survey. In figure 4.15 above, the participants were questioned as to whether they would prefer to adopt a pet rather than purchasing one. And the results show that the majority of the people with 44% in fact would prefer to adopt a stray rather than buying a companion animal from a breeder, or pet store. However, it was noted that another 32% of the people that took the survey, did not agree on adopting a stray animal and preferred to purchase a pet instead. The remaining 24% did not know what was their preference was, and when asked why, most responded that something like this would depend at the moment in that time.

Figure 4.16 shown below, shows the results that were given by the respondents when they were asked about their opinions with regards to the subject of Trap-Neuter-Release (TNR)
projects. The general amount of the people who participated in the survey were seen to be in favour with the whole concept of the whole subject; with 28% seen to be strongly in favour and a further 32% that were shown to agree with the general idea of the process. Another 25% of the participants were not concerned when it came to the subject of TNR schemes, and when they were asked as to why this decision has been taken, many of them responded that they were conflicted with the idea; as although reproduction rates would in fact decrease, the animals would still be returned to the streets with a poor way of life, as opposed to being collected for adoption or to a shelter. Although the majority were seen to agree with TNR schemes, there was still a small percentage that viewed this means of control in a negative aspect; with 9% of the people disagreeing with the general idea, and another 6% that were strongly against this concept. The reason provided for these respondents’ disagreement, was generally due to the fact that they believed that by releasing one animal, TNR projects would destroy other animals’ lives as they would be hunted by the released animal in the first place.

Figure 4.16: ‘What are your opinions on Trap-Neuter-Release (TNR) projects?’

In figure 4.17, one can see the answers which have been given by the people who took the survey, when they were asked on their thoughts on whether TNR schemes were efficient in
helping to control or reduce the stray animal population of the Maltese Islands. From the answers that were provided, there was a majority of 68% of the participants who claimed to believe that TNR projects were in fact efficient in helping with the control and reduction of the feral animal populace that exists in Malta. Another 25% of the people responded that they do not know whether TNR schemes are helpful enough in controlling the population as they believed that the problem remains with the existing animals roaming the streets in spite of the fact that they cannot reproduce. And the final 7% of the remaining respondents have given their answer in disagreeing with the whole concept of these TNR schemes, as they do not believe that these projects could be of any help in reducing the stray animals from the streets any time soon.

![Question 17](image)

**Question 17**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>68</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
</tr>
<tr>
<td>I don't know</td>
<td>25</td>
</tr>
</tbody>
</table>

Figure 4.17: Do you believe that TNR programmes will help in reducing the stray population?

When it came to question 18 of the survey, there was a kind of controversy amongst the respondents as they were asked to state their opinion on the matter of trapping and euthanizing stray animals from the streets of Malta. It was obvious from before the results were issued in figure 4.18 below, that the majority of the participants were against this process; with 39% of the people showing a great disagreement and a further 16% arguing that they are against the idea of this method. Another 21% of the participants answered this question by saying that they are not concerned; this is due to the fact
that revealed that although euthanasia is commonly considered to be cruel by people, they were still not convinced on the facts as to whether this method is indeed effective or not. The remaining survey participants were in fact, in favour of Trap Euthanise schemes; with 12% strongly agreeing and the further 12% agreeing with the concept in general. When asked as to why their choice was in the affirmative, these respondents explained that this is the only method that would really relieve the Islands of Malta from the feral animal population.

![Question 18](image)

Figure 4.18: ‘What are your thoughts on Trap-Euthanise (TE) schemes?’

In figure 4.19 below, one could see the responses given by the participants when they were asked of their views with regards to their belief on whether TE schemes were considered to be effective in reducing a population of stray animals or not. This question corresponded strongly with question 18 as the respondents were seen to be confused when considering an answer for this inquiry. However, answers differed in this question as the majority of the survey participants with a 45% rate agreed that the TE schemes were indeed very effective in reducing an entire population of stray animals, even in spite of the fact that some of this percentage considered this method to be cruel as well as unethical. The lowest percentage of answers to this question was in the negative, as only 18% believed that this process is not effective whatsoever. When the people were asked as to why they believed this method to not
be effective, many of them responded that although animals are being killed, those animals which have not been trapped will still keep reproducing, thus the population will not decrease. The remaining 37% of the participants responded that they do not know whether this method is effective or not.

Figure 4.19: ‘Do you believe TE schemes are effective in reducing the stray animal population?’

The final figure represents the last question that was presented in this survey. In this question, the people were asked to give their opinion on what they consider to be the most effective methods that can be of help in reducing the numbers of stray animals in a population. The same methods were presented in the question as they were shown in question number eight, with the addition, that the participants had an option in naming other forms of solutions that they could think of. The method that was mostly chosen was the concept of animal shelters, with a rate of 27%. The second most popular solution to the stray animal populace was adoption schemes, with a 26% rating on the subject. Spaying/neutering of animals ranked third in the survey with a 23% rate, and TNR projects ensued with a 12% choice. However, it was not considered to be the least popular choice, as TE schemes were ranked least apart from the choice of ‘others’, with only a 7% rating from the survey participants.
In spite of the fact that only a very small percentage wrote some other forms of solutions which they perceived to be considered as helpful in maintaining, controlling, or even reducing the population of feral animals in the Islands of Malta; these suggestions were actually interesting and relevant in my research topic of feral animal management. A total of 8 respondents out of the 100 that were questioned wrote different suggestions that they wanted to be taken into consideration as a means which could be helpful in the control of the stray animal population. One respondent suggested that awareness should be increased to the public, that pets are not to be seen as toys or gifts, as this will help in the decline of stray animals from the streets since there will be less abandonments from their owners, and thus, reproduction would also be reduced which will help in the avoidance of feral roaming animals which are not destined to be strays in the first place. Another two respondents also voiced their opinions on the importance of educating the Maltese population as this will decrease the rates of lack of concern on the subject of stray animals.
Another participant of the survey wanted to suggest the solution to urge the Maltese local citizens that care for the stray animals that roam their streets in a semi ownership method, to research for any forms of free spaying/neutering schemes that might be offered by local vets at the time. This respondent continued by saying that these locals should spay/neuter as many cats as well as dogs that are located on their streets; and argues that by urging these local carers for these animals to be spayed/neutered, more animals would be involved in TNR procedures and this will in turn serve to control the animal populations and reduce them by the process of time.

The fifth respondent believed that an effective method that could be of assistance in keeping control over stray animals, could be achieved by the compulsory registration of each pet in the Islands of Malta, as well as a curfew should be determined where pets would not be allowed to roam outside. The participant explained further by saying that if these rules are enforced, then there would be a much smaller probability of any form of abandonment of a companion animal. In fact, another two of the eight respondents also stressed on the importance of the process of micro chipping as they also believed that this form of licensing would be able to reduce the amount of animal abandonments that the Islands face every year.

It was interesting to see the information that the 8th respondent explained in the survey with his/her opinions as to what would be helpful to maintain a healthy stray animal population. The opinions of this participant did not focus on solutions to reduce the stray animal population, but rather, he/she produced methods that could help in keeping the stray animal population healthy. The respondent expressed concern on the lack of awareness that there is on animal health, and contributed by arguing that besides spaying/neutering of these animals, vaccines and anti parasite treatments should be administered to dogs and cats that reside in animal shelters as well as those which are in TNR projects. The aim of this suggestion is that by having a healthy stray animal population, less health hazards could affect the human populace.
4.3 Results

The results of this study show that the people of the Maltese islands can be considered to be very aware of what is around them with regards to the stray animal population, and also, many of these Maltese citizens can be seen to be educated enough on the methods that are of assistance in controlling or even reducing the populace of feral animals. Voslarva and Passantino (2012) stress on the importance of educating the people not only on the importance of responsible pet ownership, but also on the responsibility that people have with regards to a stray animal population that surrounds them.

The majority of the participants that took part in the conducted survey knew about the fact that animal shelters in Malta and Gozo are spread too thin and that most of them, if not all, have reached their maximum capacity with not enough funding to be able to provide suitable conditions for these animals (Spiteri, 2009).

When the subject of tourism was approached in this dissertation, the majority of people did not believe that the feral animal populace of a country could do any damage to the industry of tourism. However, more awareness should be encouraged on this subject as according to Webster (2013), many tourists do in fact consider the stray population of a country before contemplating to travel to it.

Another result that was noticed was the fact that many of the participants of this survey did not really believe in the notion that stray animals, if in unhealthy living conditions, could be reservoirs for diseases that could be contracted by the human population. A case study that would be beneficial to re-mention, would be the research done in Tbilisi, Georgia on the visceral Leishmaniasis that was transmitted to a number of children from the stray dog population (Giorgobiani et.al, 2011).

The debate between the morals and facts of Trap-Euthanise was also analysed in this study, and results determine that in spite of the fact that a majority of the respondents recognised
euthanasia to be one of the most effective methods in reducing populations, only a very small number of the participants was actually in favour of the method, as many of the people considered the method as cruel and against their values as human beings in depriving a living creature from having a longer life (Appleby et.al, 2014).
Chapter 5: Conclusions and Recommendations
5.1 General Conclusions

This dissertation can be concluded with the fact that the objectives were reached throughout the research of the study, as it was determined that the Maltese population is in fact, aware of the situation. That is, that the Maltese Islands actually do have a problem with the issue of the stray animal population that is existent.

Also, a general consensus can be considered to be reached with regards to whether the people of Malta are concerned with the problem of the stray animal populace, and apart from that fact, one can also notice that the citizens of the Maltese Islands could be seen as responsible pet owners and are educated enough on the subject of the treatment of animals, and also of what solutions are existent in order to be able to control or reduce a stray animal population.

However, this dissertation research also came with the conclusion that the Maltese citizens need to be educated further on the subject of zoonotic diseases that can be carried by the feral animal population and can be transmitted to the humans themselves. Further concern should also in turn, be raised in order to be able to educate the population on the threats that a stray animal populace could pose on the Tourism industry of the Maltese Islands, which is considered to be essential in its growth.

5.2 Recommendations for further research

This research was mostly centred on the Maltese society’s perception of the stray animal population and solutions that could be considered in controlling it. However, further research could be elaborated on this subject, increasing the work in order to be able to conduct the study at a larger scale.

Further research can also be done in order to evaluate if the stray animal population can in fact, make an impact on the industry of Tourism and if so, in what ways. Another topic that
could be considered as a dissertation study for the future can focus on the aspect of zoonotic diseases that can be attributed to animals, and also the topic of animal cruelty could be broadened.

Another interesting subject that could be a base for a future dissertation could focus on the concept of euthanasia, and how it can be viewed as a means of efficiency as opposed to the moral values that a human possesses.
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Appendix
Dear respondent,

My name is Charlotte Munro and I am currently trying to achieve a Bachelor of Arts Degree in Geography at the University of Malta. As part of my final year requirements for my Degree, I am currently conducting a study in order for me to be able to evaluate the way that stray animals are perceived in Maltese societies. For the purpose of my research, I need to conduct a survey amongst localities in the Maltese Islands. Your contribution would be greatly appreciated as it will help me in my study.

1. Do you believe that Malta has a problem regarding the subject of stray animals?
   - Yes
   - No
   - I Don’t Know

2. What are your opinions on the concept of stray animals?
   - They are not a bother to me
   - Not interested on the subject
   - They are pests

3. Do you think that stray animals are a health hazard to people?
   - Yes
   - No
   - I Don’t Know

4. Do you believe that the stray animal population affects tourism in the Maltese Islands?
   - Yes
   - No
   - I Don’t Know
5. Is the vision of free roaming cats and dogs in public areas aesthetically pleasing?
   - Yes
   - No
   - I Don’t Know

6. What are your thoughts on the treatment of stray animals in Malta?
   - They are treated well as locals feed them as well as care for them
   - They are treated fairly, not cared for but unharmed
   - They are mostly ignored
   - They are treated rather poorly

7. Do you believe that stray animals are in good and healthy conditions in Malta?
   - Yes
   - No
   - I Don’t Know

8. What forms of solution to the stray animal population are you aware of?
   - Animal Shelters
   - Adoption Schemes
   - Spaying/neutering
   - Trap-Neuter-Release (TNR) Projects
   - Trap Euthanise (TE) Programmes
   - All of the above
   - None of the above
9. What are your thoughts on spaying/neutering and adoption schemes for these strays?
   - Strongly agree
   - Agree
   - Not concerned
   - Disagree
   - Strongly disagree

10. Do you believe that spaying/neutering and adoption of these strays will help in reducing the stray population?
    - Yes
    - No
    - I Don’t Know

11. What are your thoughts on animal shelters and sanctuaries?
    - Strongly agree
    - Agree
    - Not concerned
    - Disagree
    - Strongly disagree

12. Do you believe that there are enough animal shelters and sanctuaries in the Maltese Islands?
    - Yes
    - No
    - I Don’t Know
13. Do you think that animal shelters in Malta have the necessary facilities in order to provide proper living conditions for stray animals?
- Yes
- No
- I Don’t Know

14. Are animal shelters and sanctuaries enough to reduce or remove the stray animal population of the Maltese Islands?
- Yes
- No
- I Don’t Know

15. Would you prefer adopting a stray rather than purchasing a pet?
- Yes
- No
- I Don’t Know

16. What are your opinions on Trap-Neuter-Release (TNR) projects?
- Strongly agree
- Agree
- Not concerned
- Disagree
- Strongly disagree
17. Do you believe that TNR programmes will help in reducing the stray population?
   ☐ Yes
   ☐ No
   ☐ I Don’t Know

18. What are your thoughts on Trap-Euthanise (TE) schemes?
   ☐ Strongly agree
   ☐ Agree
   ☐ Not concerned
   ☐ Disagree
   ☐ Strongly disagree

19. Do you believe TE schemes are effective in reducing the stray animal population?
   ☐ Yes
   ☐ No
   ☐ I Don’t Know

20. What method is most effective in your opinion in order to make a decline in the stray animal population?
   ☐ Spaying/Neutering
   ☐ TNR
   ☐ TE
   ☐ Adoption Schemes
   ☐ Animal shelters
   ☐ Other  ___________________________________________